

# **Department of Energy**

## **FY 2027**

### **Congressional Justification**



**National Nuclear Security Administration**  
**Federal Salaries and Expenses**  
**Weapons Activities**  
**Defense Nuclear Nonproliferation**  
**Naval Reactors**

# **Department of Energy**

## **FY 2026 Congressional Justification**



### **National Nuclear Security Administration Federal Salaries and Expenses Weapons Activities Defense Nuclear Nonproliferation Naval Reactors**



# **FY 2027 Congressional Justification**

## **Volume 1**

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**DEPARTMENT OF ENERGY**  
**Appropriation Summary**  
**FY 2027**  
**(\$K)**

|                                                                   | FY 2025<br>Enacted <sup>1</sup> | FY 2026<br>Enacted <sup>2,3</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|-------------------------------------------------------------------|---------------------------------|-----------------------------------|--------------------|---------------------------------------|-------------|
|                                                                   |                                 |                                   |                    | \$                                    | %           |
| Department of Energy Budget by Appropriation                      |                                 |                                   |                    |                                       |             |
| Critical Minerals and Energy Innovation                           | 3,098,341                       | 1,883,250                         | 1,121,742          | -761,508                              | -40 %       |
| Electricity                                                       | 339,750                         | 259,750                           | 203,477            | -56,273                               | -22 %       |
| Baseload Power <sup>4</sup>                                       | —                               | —                                 | 3,500,000          | +3,500,000                            | N/A         |
| Cybersecurity, Energy Security and<br>Emergency Response          | 200,000                         | 190,000                           | 160,173            | -29,827                               | -16%        |
| Nuclear Energy (270)                                              | 1,525,000                       | 1,525,000                         | 1,373,735          | -151,265                              | -10%        |
| Hydrocarbons and Geothermal Energy<br>Office                      | 1,226,909                       | 647,000                           | 676,042            | +29,042                               | +4%         |
| Strategic Petroleum Reserve                                       | 213,390                         | 206,325                           | 295,102            | +88,777                               | +43%        |
| Naval Petroleum and Oil Shale Reserves                            | 13,010                          | 13,000                            | 13,000             | —                                     | —           |
| SPR Petroleum Account                                             | 100                             | 100                               | 100                | —                                     | —           |
| Northeast Home Heating Oil Reserve                                | 7,150                           | 7,150                             | 3,575              | -3,575                                | -50%        |
| <b>Total, Petroleum Reserve Accounts</b>                          | <b>233,650</b>                  | <b>226,575</b>                    | <b>311,777</b>     | <b>+85,202</b>                        | <b>+38%</b> |
| Uranium Enrichment Decontamination and<br>Decommissioning (UED&D) | 855,000                         | 865,000                           | 854,583            | -10,417                               | -1%         |
| Energy Information Administration                                 | 135,000                         | 135,000                           | 135,370            | +370                                  | —           |
| Non-Defense Environmental Cleanup                                 | 342,000                         | 322,371                           | 338,490            | +16,119                               | +5 %        |
| Science                                                           | 8,240,000                       | 8,250,000                         | 7,138,815          | -1,111,185                            | -13 %       |
| Artificial Intelligence and Quantum <sup>5</sup>                  | —                               | —                                 | 1,200,000          | +1,200,000                            | N/A         |
| Office of Fusion                                                  | —                               | —                                 | 10,000             | +10,000                               | N/A         |
| Office of Technology Commercialization                            | 20,000                          | —                                 | 26,555             | +26,555                               | N/A         |
| Office of Clean Energy Demonstrations                             | 50,000                          | —                                 | —                  | —                                     | N/A         |
| Advanced Research Projects Agency -<br>Energy                     | 460,000                         | 350,000                           | 200,292            | -149,708                              | -43%        |
| Nuclear Waste Disposal Fund                                       | 12,040                          | 12,040                            | 12,040             | —                                     | —           |
| Departmental Administration                                       | 286,500                         | 200,000                           | 288,889            | +88,889                               | +44%        |
| Indian Energy Policy and Programs                                 | 70,000                          | 75,000                            | 50,038             | -24,962                               | -33%        |
| Inspector General                                                 | 86,000                          | 90,000                            | 77,400             | -12,600                               | -14%        |

<sup>1</sup> Funding does not reflect the mandated transfer of \$92.8 million in FY 2025 to the Office of Nuclear Energy for operation of the Advanced Test Reactor. Comparisons throughout the document also exclude the mandated transfer.

<sup>2</sup> Funding does not reflect the mandated transfer of \$96.7 million in FY 2026 to the Office Nuclear Energy for operation of the Advanced Test Reactor. Comparisons throughout the document also exclude the mandated transfer.

<sup>3</sup> Funding does not reflect the estimated \$20 million in FY 2026 collections to the American Energy Independence Fund. Comparisons throughout the document also exclude these collections.

<sup>4</sup> The FY 2027 Request for Baseload Power repurposes prior year unobligated IIJA funding.

<sup>5</sup> The FY 2027 Request for AIQ repurposes prior year unobligated IIJA funding.



|                                                                            | (\$K)                           |                                   |                    |                                       |              |
|----------------------------------------------------------------------------|---------------------------------|-----------------------------------|--------------------|---------------------------------------|--------------|
|                                                                            | FY 2025<br>Enacted <sup>1</sup> | FY 2026<br>Enacted <sup>2,3</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |              |
|                                                                            |                                 |                                   |                    | \$                                    | %            |
| Title 17 Innovative Technology Loan<br>Guarantee Program                   | -29,140                         | -56,753                           | 179,588            | +236,341                              | +416%        |
| Advanced Technology Vehicles<br>Manufacturing Loan Program                 | 13,000                          | 9,500                             | 9,500              | —                                     | —            |
| Tribal Energy Loan Guarantee Program                                       | 6,300                           | 6,300                             | 2,000              | -4,300                                | -68%         |
| <b>Total, Energy Dominance Financing</b>                                   | <b>-9,840</b>                   | <b>-40,953</b>                    | <b>191,088</b>     | <b>+232,041</b>                       | <b>+567%</b> |
| Energy Projects                                                            | —                               | 97,557                            | —                  | -97,557                               | -100 %       |
| Office of Strategy & Technology<br>Roadmaps                                | —                               | —                                 | 3,000              | +3,000                                | N/A          |
| <b>Total, Energy Programs</b>                                              | <b>17,170,350</b>               | <b>15,087,590</b>                 | <b>17,873,506</b>  | <b>+2,785,916</b>                     | <b>+18%</b>  |
| Weapons Activities <sup>1</sup>                                            | 19,293,000                      | 20,378,000                        | 27,441,159         | +7,063,159                            | +35 %        |
| Defense Nuclear Nonproliferation                                           | 2,396,000                       | 2,367,000                         | 2,389,595          | +22,595                               | +1 %         |
| Naval Reactors                                                             | 1,946,000                       | 2,134,000                         | 2,393,692          | +259,692                              | +12 %        |
| Federal Salaries and Expenses                                              | 500,000                         | 525,000                           | 577,097            | +52,097                               | +10 %        |
| <b>Total, National Nuclear Security<br/>Administration</b>                 | <b>24,135,000</b>               | <b>25,404,000</b>                 | <b>32,801,543</b>  | <b>+7,397,543</b>                     | <b>+29%</b>  |
| Defense Environmental Cleanup                                              | 7,285,000                       | 7,375,000                         | 6,983,318          | -391,682                              | -5 %         |
| Other Defense Activities                                                   | 1,107,000                       | 1,170,000                         | 1,184,721          | +14,721                               | +1 %         |
| Defense Uranium Enrichment D&D                                             | 285,000                         | —                                 | 253,000            | +253,000                              | N/A          |
| <b>Total, Environmental and Other Defense<br/>Activities</b>               | <b>8,677,000</b>                | <b>8,545,000</b>                  | <b>8,421,039</b>   | <b>-123,961</b>                       | <b>-1%</b>   |
| Nuclear Energy (050)                                                       | 160,000                         | 160,000                           | 160,000            | —                                     | —            |
| <b>Total, Atomic Energy Defense Activities</b>                             | <b>32,972,000</b>               | <b>34,109,000</b>                 | <b>41,382,582</b>  | <b>+7,273,582</b>                     | <b>+21%</b>  |
| Southeastern Power Administration                                          | —                               | —                                 | —                  | —                                     | N/A          |
| Southwestern Power Administration                                          | 11,440                          | 10,400                            | 10,400             | —                                     | —            |
| Western Area Power Administration                                          | 99,872                          | 63,372                            | 63,388             | +16                                   | —            |
| Falcon and Amistad Operating and<br>Maintenance Fund                       | 228                             | 228                               | 228                | —                                     | —            |
| <b>Total, Power Marketing Administrations</b>                              | <b>111,540</b>                  | <b>74,000</b>                     | <b>74,016</b>      | <b>+16</b>                            | <b>—</b>     |
| Federal Energy Regulatory Commission                                       | —                               | —                                 | —                  | —                                     | N/A          |
| <b>Total, Energy and Water Development and<br/>Related Agencies</b>        | <b>50,253,890</b>               | <b>49,270,590</b>                 | <b>59,330,104</b>  | <b>+10,059,514</b>                    | <b>+20%</b>  |
| Excess Fees and Recoveries, FERC                                           | -9,000                          | -9,000                            | -9,000             | —                                     | —            |
| Title XVII Loan Guar. Prog Section 1703<br>Negative Credit Subsidy Receipt | -15,739                         | -157,063                          | -355,127           | -198,064                              | -126%        |
| UED&D Fund Offset                                                          | -285,000                        | —                                 | -253,000           | -253,000                              | N/A          |
| Sale of Northeast Home Heating Oil<br>Reserve                              | —                               | —                                 | -100,000           | -100,000                              | N/A          |
| <i>Repurposed IIJA Funding</i>                                             | —                               | —                                 | -4,700,000         | -4,700,000                            | N/A          |
| <b>Total Funding by Appropriation</b>                                      | <b>49,944,151</b>               | <b>49,104,527</b>                 | <b>53,912,977</b>  | <b>+4,808,450</b>                     | <b>+10%</b>  |
| <i>Total Discretionary Funding</i>                                         | <i>49,944,151</i>               | <i>49,104,527</i>                 | <i>53,912,977</i>  | <i>+4,808,450</i>                     | <i>+10 %</i> |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 in funding to DOE/NNSA.

(\$K)

| FY 2025<br>Enacted <sup>1</sup> | FY 2026<br>Enacted <sup>2,3</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |   |
|---------------------------------|-----------------------------------|--------------------|---------------------------------------|---|
|                                 |                                   |                    | \$                                    | % |

|                              |                   |                   |                   |                   |             |
|------------------------------|-------------------|-------------------|-------------------|-------------------|-------------|
| <b>DOE Budget Function</b>   | <b>49,944,151</b> | <b>49,104,527</b> | <b>53,912,977</b> | <b>+4,808,450</b> | <b>+10%</b> |
| NNSA Defense (050) Total     | 24,135,000        | 25,404,000        | 32,801,543        | +7,397,543        | +29 %       |
| Non-NNSA Defense (050) Total | 8,837,000         | 8,705,000         | 8,581,039         | -123,961          | -1 %        |
| <b>Defense (050)</b>         | <b>32,972,000</b> | <b>34,109,000</b> | <b>41,382,582</b> | <b>+7,273,582</b> | <b>+21%</b> |
| Science (250)                | 8,240,000         | 8,250,000         | 8,348,815         | +98,815           | +1 %        |
| Energy (270)                 | 8,732,151         | 6,745,527         | 4,181,580         | -2,563,947        | -38 %       |
| <b>Non-Defense (Non-050)</b> | <b>16,972,151</b> | <b>14,995,527</b> | <b>12,530,395</b> | <b>-2,465,132</b> | <b>-16%</b> |

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# National Nuclear Security Administration Overview

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**National Nuclear Security Administration  
Overview (\$K)**

|                                  | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding <sup>2</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |            |
|----------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|------------|
|                                  |                    |                    |                              |                    | \$                                    | %          |
| Federal Salaries and Expenses    | 500,000            | 525,000            | -                            | 577,097            | +52,097                               | 10%        |
| Weapons Activities               | 19,293,000         | 20,378,000         | 3,885,000                    | 27,441,159         | +7,063,159                            | 35%        |
| Defense Nuclear Nonproliferation | 2,396,000          | 2,367,000          | -                            | 2,389,595          | +22,595                               | 1%         |
| Naval Reactors <sup>1</sup>      | 1,946,000          | 2,134,000          | -                            | 2,393,692          | +259,692                              | 12%        |
| <b>Total, NNSA</b>               | <b>24,135,000</b>  | <b>25,404,000</b>  | <b>3,885,000</b>             | <b>32,801,543</b>  | <b>+7,397,543</b>                     | <b>29%</b> |

The National Nuclear Security Administration (NNSA) Fiscal Year (FY) 2027 Request is \$32,801,543,000, an increase in discretionary funding of \$7,397,543 (29 percent) above the FY 2026 Enacted Level to support the security and safety of the Nation. The Working Families Tax Cut Act also provided \$3,885,000,000, most of which will be obligated in FY 2026. NNSA's FY 2027 Budget Request pursues five major national security endeavors: (1) maintain a safe, secure, and effective nuclear weapons stockpile; (2) reduce global nuclear threats and keep nuclear and radiological materials or expertise out of the hands of terrorists and adversaries; (3) provide safe and effective integrated nuclear propulsion systems for the United States (U.S.) Navy to ensure it remains an unmatched fighting force; (4) strengthen key science, technology and engineering capabilities to support all missions; and (5) modernize the Department of Energy (DOE)'s weapons production enterprise. Key to all these efforts is providing effective Federal oversight for growing mission requirements. NNSA has pursued a disciplined process to meet nuclear security and nonproliferation policy goals and requirements, support the Navy, and support a highly skilled federal workforce. The FY 2027 Budget request for NNSA includes full support for modernizing all three legs of the nuclear triad and utilizing all aspects of the nation's deterrence capability, including nonproliferation efforts, nuclear safeguards, and nuclear counterterrorism and counterproliferation measures. The FY 2027 Budget Request will provide the resources necessary to maintain and certify the effectiveness of the nation's nuclear deterrent, supporting NNSA's cutting-edge science and technology program.

**National Nuclear Security Administration  
Outyear Funding (\$K)**

|                                  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|
| Federal Salaries and Expenses    | 588,639            | 600,412            | 612,421            | 624,668            |
| Weapons Activities               | 27,985,787         | 28,543,176         | 29,111,281         | 29,693,608         |
| Defense Nuclear Nonproliferation | 2,437,387          | 2,486,135          | 2,535,858          | 2,586,575          |
| Naval Reactors                   | 2,446,001          | 2,497,367          | 2,549,812          | 2,600,808          |
| <b>Total, NNSA</b>               | <b>33,457,814</b>  | <b>34,127,090</b>  | <b>34,809,372</b>  | <b>35,505,659</b>  |

<sup>1</sup> Funding does not reflect the mandated transfer of \$92.8 million in FY 2025 and \$96.7 million in FY 2026 to the Office of Nuclear Energy for operation of the Advanced Test Reactor. Comparisons throughout the document also exclude the mandated transfer.

<sup>2</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3.885B in funding to DOE/NNSA.

**Public Law Authorizations**

- P.L. 119-074, Energy and Water Development; and Interior and Environment Appropriations Act, 2026
- P.L. 119-21 Working Families Tax Cut Act
- P.L. 119-4, Full-Year Continuing Appropriations and Extensions Act, 2025

**Appropriation Summary by Program  
(\$K)**

|  | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |   |
|--|--------------------|--------------------|-----------------|--------------------|---------------------------------------|---|
|  |                    |                    |                 |                    | \$                                    | % |

**NNSA Summary by  
Appropriation / GPRA Unit**

|                                                    |                   |                   |                              |                   |                   |             |
|----------------------------------------------------|-------------------|-------------------|------------------------------|-------------------|-------------------|-------------|
| Program Direction                                  | 500,000           | 525,000           | -                            | 577,097           | +52,097           | +10%        |
| <b>Total, Federal Salaries and Expenses</b>        | <b>500,000</b>    | <b>525,000</b>    | <b>-</b>                     | <b>577,097</b>    | <b>+52,097</b>    | <b>+10%</b> |
| Stockpile Management                               | 5,197,886         | 5,906,301         | 400,000                      | 6,457,550         | +551,249          | +9%         |
| Production Modernization                           | 5,378,692         | 5,327,213         | 2,507,000                    | 8,786,039         | +3,458,826        | +65%        |
| Stockpile Research, Technology, and Engineering    | 3,197,776         | 3,310,090         | 368,000                      | 4,567,475         | +1,257,385        | +38%        |
| Academic Programs                                  | 115,000           | 100,000           | -                            | -                 | -100,000          | -100%       |
| Infrastructure and Operations                      | 3,354,466         | 3,348,093         | 600,000                      | 4,761,362         | +1,413,269        | +42%        |
| Secure Transportation Asset                        | 354,216           | 448,785           | -                            | 587,071           | +138,286          | +31%        |
| Defense Nuclear Security                           | 1,084,085         | 1,245,418         | -                            | 1,305,793         | +60,375           | +5%         |
| Information Technology and Cybersecurity           | 598,379           | 688,000           | -                            | 935,000           | +247,000          | +36%        |
| Legacy Contractor Pensions and Settlement Payments | 12,500            | 4,100             | -                            | 40,869            | +36,769           | +897%       |
| Subtotal, Weapons Activities                       | 19,293,000        | 20,378,000        | 3,885,000                    | 27,441,159        | +7,063,159        | +35%        |
| <b>Total, Weapons Activities</b>                   | <b>19,293,000</b> | <b>20,378,000</b> | <b>3,885,000<sup>1</sup></b> | <b>27,441,159</b> | <b>+7,063,159</b> | <b>+35%</b> |

<sup>1</sup> The \$10 million appropriated under WFTCA Section 20008(b)(8) “for evaluation of spent fuel reprocessing technology” is unallocated in the table. DOE/NNSA is determining the correct execution method consistent with congressional intent.

|                                                              | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding              | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|--------------------------------------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|-------------|
|                                                              |                    |                    |                              |                    | \$                                    | %           |
| <i>Material Management and Minimization</i>                  | 328,097            | 327,970            | -                            | 265,804            | -62,166                               | -22%        |
| <i>Global Material Security</i>                              | 492,048            | 525,308            | -                            | 390,574            | -134,734                              | -26%        |
| <i>Nonproliferation and Arms Control</i>                     | 227,008            | 212,000            | -                            | 214,494            | +2,494                                | +1%         |
| <i>Defense Nuclear Nonproliferation R&amp;D</i>              | 777,850            | 808,759            | -                            | 819,000            | +10,241                               | +1%         |
| <i>Nonproliferation Construction</i>                         | 40,000             | 10,000             | -                            | -                  | -10,000                               | -100%       |
| Subtotal, Defense Nuclear Nonproliferation Programs          | 1,865,003          | 1,884,037          | -                            | 1,689,872          | -194,165                              | -10%        |
| Nuclear Counterterrorism and Incident Response Program       | 530,897            | 531,459            | -                            | 685,595            | +154,136                              | +29%        |
| Legacy Contractor Pensions and Settlement Payments           | 100                | 500                | -                            | 14,128             | +13,628                               | +2726%      |
| Subtotal, Defense Nuclear Nonproliferation Appropriation     | 2,396,000          | 2,415,996          | -                            | 2,389,595          | -26,401                               | -1%         |
| Use of Prior Year Balances                                   | -                  | -48,996            | -                            | -                  | +48,996                               | -100%       |
| <b>Total, Defense Nuclear Nonproliferation Appropriation</b> | <b>2,396,000</b>   | <b>2,367,000</b>   | <b>-</b>                     | <b>2,389,595</b>   | <b>+22,595</b>                        | <b>+1%</b>  |
| Naval Reactors Programs                                      | 1,946,000          | 2,134,000          | -                            | 2,395,368          | +261,368                              | +12%        |
| Use of Prior Year Balances                                   | -                  | -                  | -                            | -1,676             | -1,676                                | N/A         |
| <b>Total, Naval Reactors Appropriation</b>                   | <b>1,946,000</b>   | <b>2,134,000</b>   | <b>-</b>                     | <b>2,393,692</b>   | <b>+259,692</b>                       | <b>+12%</b> |
| <b>Total, National Nuclear Security Administration</b>       | <b>24,135,000</b>  | <b>25,404,000</b>  | <b>3,885,000<sup>1</sup></b> | <b>32,801,543</b>  | <b>+7,397,543</b>                     | <b>+29%</b> |

**Appropriation Summary by Program  
Outyear Funding (\$K)**

|                                                              | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <b>NNSA Summary by Appropriation / GPRA Unit</b>             |                            |                            |                            |                            |
| Program Direction                                            | 588,639                    | 600,412                    | 612,421                    | 624,668                    |
| <b>Total, Federal Salaries and Expenses</b>                  | <b>588,639</b>             | <b>600,412</b>             | <b>612,421</b>             | <b>624,668</b>             |
| Stockpile Management                                         | 6,662,002                  | 6,795,243                  | 6,931,146                  | 7,069,771                  |
| Production Modernization                                     | 9,039,899                  | 9,149,392                  | 9,563,599                  | 9,842,591                  |
| Stockpile Research, Technology, and Engineering              | 4,432,105                  | 4,479,273                  | 4,468,178                  | 4,558,861                  |
| Academic Programs                                            | 26,000                     | 46,000                     | 66,000                     | 66,000                     |
| Infrastructure and Operations                                | 4,902,272                  | 5,087,261                  | 5,055,729                  | 5,103,841                  |
| Secure Transportation Asset                                  | 572,665                    | 606,588                    | 617,640                    | 595,234                    |
| Defense Nuclear Security                                     | 1,331,909                  | 1,358,547                  | 1,385,718                  | 1,413,432                  |
| Information Technology and Cybersecurity                     | 983,700                    | 987,774                    | 992,229                    | 1,012,074                  |
| Legacy Contractor Pensions and Settlement Payments           | 35,235                     | 33,098                     | 31,042                     | 31,804                     |
| Subtotal, Weapons Activities                                 | 27,985,787                 | 28,543,176                 | 29,111,281                 | 29,693,608                 |
| <b>Total, Weapons Activities</b>                             | <b>27,985,787</b>          | <b>28,543,176</b>          | <b>29,111,281</b>          | <b>29,693,608</b>          |
| <i>Material Management and Minimization</i>                  | 260,632                    | 265,845                    | 271,162                    | 276,586                    |
| <i>Global Material Security</i>                              | 398,385                    | 406,353                    | 414,480                    | 422,769                    |
| <i>Nonproliferation and Arms Control</i>                     | 229,272                    | 233,858                    | 238,535                    | 243,305                    |
| <i>Defense Nuclear Nonproliferation R&amp;D</i>              | 835,380                    | 852,087                    | 869,129                    | 886,512                    |
| <i>Nonproliferation Construction</i>                         | -                          | -                          | -                          | -                          |
| Subtotal, Defense Nuclear Nonproliferation Programs          | 1,723,669                  | 1,758,143                  | 1,793,306                  | 1,829,172                  |
| Nuclear Counterterrorism and Incident Response Program       | 699,307                    | 713,293                    | 727,559                    | 742,110                    |
| Legacy Contractor Pensions and Settlement Payments           | 14,411                     | 14,699                     | 14,993                     | 15,293                     |
| Subtotal, Defense Nuclear Nonproliferation Appropriation     | 2,437,387                  | 2,486,135                  | 2,535,858                  | 2,586,575                  |
| <b>Total, Defense Nuclear Nonproliferation Appropriation</b> | <b>2,437,387</b>           | <b>2,486,135</b>           | <b>2,535,858</b>           | <b>2,586,575</b>           |
| Naval Reactors Programs                                      | 2,446,001                  | 2,497,367                  | 2,549,812                  | 2,600,808                  |
| <b>Total, Naval Reactors Appropriation</b>                   | <b>2,446,001</b>           | <b>2,497,367</b>           | <b>2,549,812</b>           | <b>2,600,808</b>           |
| <b>Total, National Nuclear Security Administration</b>       | <b>33,457,814</b>          | <b>34,127,090</b>          | <b>34,809,372</b>          | <b>35,505,659</b>          |



## Overview

The FY 2027 Request for **Weapons Activities (WA)** is \$27,441,159,000 a \$7,063,159,000 (34.7 percent) increase above the FY 2026 Enacted Level, considering only discretionary funding. The Working Families Tax Cut Act also provided \$3,885,000,000, most of which will be obligated in FY 2026.

Programs funded in the WA appropriation support the Nation's current and future nuclear weapons stockpile, along with the nationwide infrastructure of science, technology, engineering, and production capabilities required to maintain confidence in the nuclear deterrent. WA provides for the maintenance, modernization, and production of nuclear weapons to ensure their safety, security, and military effectiveness; investment in scientific, engineering, and manufacturing capabilities to certify the stockpile; and manufacture of weapon components and materials. WA also provides maintenance and investment to enhance the responsiveness and resilience of the NNSA scientific and production infrastructure.

NNSA's Management and Operating (M&Os) contractors employ approximately 60,000 workers across the Nuclear Security Enterprise (NSE), predominantly at eight laboratories, plants, and sites, including Lawrence Livermore National Laboratory (LLNL), Sandia National Laboratories (SNL), Los Alamos National Laboratory (LANL), Nevada National Security Site (NNSS), Pantex Plant (PX), Y-12 National Security Complex (Y-12), Kansas City National Security Campus (KCNSC), and Savannah River Site (SRS). NNSA M&O partners are managed by a Federal workforce composed of civilian and military staff.

The FY 2027 Budget Request will allow NNSA to execute seven simultaneous warhead modernization programs, including the B61-13 variant and the warhead for the nuclear-armed sea-launched cruise missile (W80-5 Warhead), while coordinating with Department of War (DoW) to plan for future systems; continue restoring and refurbishing NNSA's weapons, component, and materials production capability, including the capability to produce no fewer than 80 pits per year (ppy) as close to 2030 as possible; and enhance Stockpile Research, Technology, and Engineering (SRT&E) capabilities, including design, certification, and assessment infrastructure, that are used every day to execute NNSA's national security missions.

The FY 2027 Request for **Defense Nuclear Nonproliferation (DNN)** is \$2,389,595,000, a \$22,595,000 (1.0 percent) increase above the FY 2026 Enacted Level. The budget provides increased funding in the areas that are most vital to keeping America strong, safe, and prosperous in an extremely dangerous global security environment. This includes teams ready to deploy on short notice to remove weapons-usable nuclear material from foreign countries, development of capabilities to detect and characterize foreign nuclear detonations, securing industrial supply chains, planning for weapons of mass destruction contingencies, nuclear incident response, and nuclear threat science.

The FY 2027 Request for **Naval Reactors (NR)** is \$2,393,692,000, a \$259,692,000 (12.2 percent) increase from the FY 2026 Enacted Level. The request supports continued safe and reliable operation of the Navy's nuclear-powered fleet (66 submarines, 11 aircraft carriers, and 3 research, development, and training platforms). The Program's development work invests in advanced technologies to ensure the U.S. Navy's current and future nuclear propulsion plants are more efficient, effective, and capable of maintaining America's global maritime dominance.

The FY 2027 Request for NNSA **Federal Salaries and Expenses (FSE)** is \$577,097,000 (9.9 percent) increase above the FY 2026 Enacted level in overall planned spending in the FSE account.

## Highlights and Major Changes in the FY 2027 Request

### Weapons Activities

#### Stockpile Management

The mission of the Stockpile Management program office is to modernize, maintain, and manage a safe, secure, reliable, and effective nuclear weapons stockpile and to operate the production activities required for the stockpile. Through five major subprograms, NNSA program managers provide assurance that U.S. forces can deliver militarily effective weapons to deter the nation's adversaries and assure our allies. As part of this mission, NNSA is modernizing the existing nuclear stockpile, fielding new capabilities, and ensuring America's strategic deterrent remains unrivaled.

Stockpile Modernization will continue with B61-13 Phase 6.6 (*Full Scale Production*) activities and support all required deliveries to the DoW; obtain Phase 6.5 (*First Production*) authorization and achieve warhead First Production Unit (FPU) for the W80-4 Life Extension Program (LEP); continue Phase 6.3 (*Development Engineering*) activities for the W87-1 Modification Program; continue Phase 6.3 (*Development Engineering*) for the W80-5 Modification Program (using WFTCA carryover); and commence Phase 3 (*Development Engineering*) for the W93. The B61-12 LEP and W88 Alteration (ALT) 370 completed transitions to Stockpile Operations in FY 2026. In FY 2027 Stockpile Modernization is planning to authorize new future concept programs for Phase 2/6.2.

Stockpile Operations will execute the activities necessary to maintain and manage a safe, secure, reliable, and effective stockpile. The Office of Stockpile Operations was formerly called the Office of Stockpile Sustainment; the duties and responsibilities remain the same, and the change in title more accurately reflects the scope of the office. Stockpile Operations will support planning, provisioning, and Limited Life Component (LLC) production activities, including continued expanded activities for service life extensions, acceleration of W88 ALT 376 activities, support for the B61-12 and W88 Alt 370 transitions to Stockpile Operations, and W76-1/2 Mk4B production. Stockpile Operations will improve digital product realization capabilities, sustain Integrated Surety Architecture (ISA) capabilities, and develop then deploy the next generation Code Management System (CMS).

Weapons Dismantlement and Disposition (WDD) will recover critical components and materials to support existing weapon programs, NR, and other national priority missions. The program manages the technical analysis necessary to safely store and securely dismantle nuclear weapons, then dispositions of legacy components to improve NNSA efficiency via removal of excess materials and components from constrained storage areas across the complex.

Production Operations (PO) will provide site-specific, production-enabling capabilities that are required for weapons production activities across the NSE. PO ensures the necessary weapons production capabilities, which include equipment, trained workforce, and tools, are available, maintained, and qualified. Specific capabilities include war reserve component manufacturing, weapon assembly and disassembly, equipment maintenance, production data management, process improvements, and production calibration services. PO also maintains a breadth of tools and modeling capabilities to assess future production requirements and support risk reduction across stockpile services.

Nuclear Enterprise Assurance (NEA) will prevent, detect, and mitigate potential consequences of subversion, both to the stockpile and to the associated capabilities to design, produce, and test nuclear weapons. NEA will apply a System Security Engineering (SSE) approach that will address current and evolving adversarial threats and risks to nuclear weapons that enable responsible adoption of leading-edge technologies.

## **Production Modernization**

The Production Modernization program is responsible for modernizing the facilities, infrastructure, and equipment that produce materials and components to meet stockpile requirements and maintain the Nation's nuclear deterrent. The program encompasses six major subprograms that sustain and modernize the base production capabilities for the Nation's nuclear weapons stockpile.

Significant changes in the FY 2027 Request include:

1. Primary Capability Modernization's increase supports pit production capability modernization in accordance with DoW requirements. In addition, supports procures energetic material to meet the production needs of the B61-13, W80-4, W87-1, and W93.
2. The Secondary Capability Modernization increase reflects additional investment in mitigating continued risk areas at Y-12 to meet future mission demand and prevent near-term failures or bottlenecks in production. One major focus is reestablishing the High Purity Depleted Uranium (HPDU) supply chain required to support depleted uranium needs ahead of existing inventory exhaustion which requires a significant uplift in funding requirements. The program is also entering the production phase of its enriched uranium purification scope and is establishing a radiography capability at Y-12 to prevent a known production bottleneck in the near future. This budget also reflects the evolving lithium strategy, which includes leveraging partnerships with commercial industry, and pursuing more cost-effective approaches to construction.
3. The Tritium and Defense Fuels increase reflects additional investments to support SRS Tritium Extraction Facility, recycle and recovery projects, and strengthen the supply delivery of purified tritium for national security needs. The Defense Fuels funding also substantially expands the pursuit of enrichment technologies and demonstration efforts to help ensure future defense fuels inventories for tritium and naval reactor production. In addition, supports completion of conceptual design, submittal of an NRC license application, and advancement of manufacturing readiness to Manufacturing Readiness Level (MRL) 5 for the Domestic Uranium Enrichment Centrifuge Experiment (DUECE) pilot plant.
4. The Non-Nuclear Capability Modernization (NNCM) increase reflects supports completion of one project of the Kansas City Short Term Expansion Plan (KCSTEP) and supports procuring equipment for the Kansas City Non-Nuclear Expansion Transformation (KCNEXT).
5. Capability Based Investments (CBI) funding modernizes sub-critical testing capabilities used for stockpile assessment, NEP design, and weapon certification activities to support planned sub-critical testing schedules.
6. The Warhead Assembly Modernization (WAM) increase reflects implementing equipment solutions to support increased build-ahead lead times for weapon modernization components.

## **Stockpile Research, Technology, and Engineering (SRT&E)**

NNSA's SRT&E conducts weapons design, certification, and assessment activities in support of the nuclear stockpile. SRT&E provides the foundation for science-based stockpile decisions; delivers advanced capabilities to support DoW requirements and counter emerging threats; and innovates across the NSE to improve productivity, efficiency, and responsiveness. These activities ensure confidence in the nuclear stockpile of today and tomorrow.

A key activity supported by SRT&E includes the annual assessment and report to the President and Congress regarding the reliability of the U.S. nuclear weapons stockpile. This assessment represents a significant effort leveraging the experimental facilities, weapons modeling codes and high-performance computational hardware, and the NNSA's subject matter expertise to deliver a comprehensive, engineering-based determination on the safety, security, and military effectiveness of the nuclear deterrent.

SRT&E activities are also essential to a responsive enterprise, among them the development and maturation of new materials, physics and engineering models, novel technologies, and processes to modernize nuclear systems and the production complex. Rapid development is essential to provide timely delivery of advanced systems to the DoW to meet emerging requirements or urgent needs. Under NNSA's Rapid and Advanced Capabilities, SRT&E is pursuing design, prototyping, and accelerated testing to deliver integrated and proven system concepts to Stockpile Modernization for acquisition and fielding, as directed by the Nuclear Weapons Council.

The subprograms are:

1. Assessment Science (AS)
2. Engineering
3. Rapid & Advanced Capabilities (RAC)
4. Inertial Confinement Fusion (ICF)
5. Advanced Simulation and Computing (ASC)
6. Weapon Technology and Manufacturing Maturation (WTMM)

### **Infrastructure and Operations (I&O)**

The Infrastructure and Operations program maintains, operates, and modernizes the NNSA infrastructure in a safe, secure, and cost-effective manner to support all NNSA programs. The program also plans, prioritizes, and constructs mission-enabling facilities and infrastructure.

The Operations of Facilities program provides the funding required to operate NNSA facilities in a safe and secure manner. Operations of Facilities is fundamental to achieving NNSA's plutonium, uranium, tritium, lithium, high explosives, and other mission objectives.

The Safety and Environmental Operations program provides funding to support the Department's Nuclear Criticality Safety Program (NCSP) subprogram, Nuclear Safety Research and Development (NSR&D) subprogram, Packaging subprogram, Nuclear Materials Integration (NMI) subprogram, and Environmental Operations (EO) subprogram.

The Maintenance and Repair of Facilities program (Maintenance) provides direct-funded maintenance activities across the NNSA enterprise for the recurring day-to-day work required to sustain and preserve NNSA facilities. These efforts include predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems. The Recapitalization program is key to modernizing NNSA's infrastructure. The Recapitalization program modernizes NNSA infrastructure by prioritizing investments including the acquisition of new facilities or executing discrete projects to improve the condition and extend the life of structures, capabilities, and systems. Recapitalization investments help achieve operational efficiencies and reduce safety, security, environmental, and program risk.

Infrastructure and Operations line-item construction projects are critical to revitalizing the infrastructure. These projects will replace obsolete, unreliable facilities and infrastructure to reduce safety and program risk while improving responsiveness, capacity, and capabilities.

### **Secure Transportation Asset (STA)**

The Secure Transportation Asset (STA) enables the accelerated modernization of the nuclear weapon stockpile by providing safe, secure transport of the Nation's nuclear weapons, weapon non-nuclear components, and special nuclear material throughout the NSE in support of the stockpile and future deterrence needs. Nuclear weapon life-extension programs, limited-life component exchanges, surveillance, dismantlement, nonproliferation activities, and experimental programs rely on STA activities to ensure safe, secure, and on-

schedule transport. The FY 2027 Request supports the transportation infrastructure that enables safety and security to employees, communities and stakeholders. Including mission essential agent equipment, specialized transportation assets, including life extension of the Safeguards Transporter until it is replaced by the Mobile Guardian Transporter; vehicle sustainment; replacement one aircraft, armored tractors, escort, and support vehicles; development, procurement and testing of Counter Uncrewed Aircraft System (CUAS); and continued development and testing of the Mobile Guardian Transporter. The first Mobile Guardian Transporter production unit is planned for completion in FY 2029 and will begin a phased in approach to replace the current Safeguard Transporter. Program Direction resources in this account provide salaries/benefits, travel and expenses for the secure transportation workforce, including Federal Agents, Pilots and CUAS operators. STA continues to implement Federal Agent recruitment and retention initiatives to cultivate a high-quality mission critical workforce capacity to sustain readiness and deployment requirements necessary to execute the nuclear deterrence mission within scheduled requirements.

### **Defense Nuclear Security (DNS)**

The Defense Nuclear Security (DNS) program leads, develops, and implements the NNSA's security program, enabling its NSE missions. DNS protects NNSA personnel, facilities, nuclear weapons, and special nuclear materials from a full spectrum of threats, ranging from minor security incidents to acts of terrorism, at its national laboratories, production plants, processing facilities, NNS, and satellite facilities for federal staff. Employing more than 2,200 Protective Force (PF) officers, DNS secures more than 6,000 buildings and protects more than 60,000 personnel. Today, the program is charting a course of transformative change to ensure DNS's mission-enabling function keeps pace with the expanding work scope across all elements of the NNSA mission in future years.

The Budget Request supports increased security needs from known mission growth across the NSE, including pit production at LANL and the SRS, Kansas City expansion efforts, and Uranium Processing Facility (UPF) testing and transition to operations. The request includes substantial investments in deploying next-generation Counter Unmanned Aircraft Systems (NexGen CUAS) and in comprehensive research, development, testing, and evaluation. In addition, the request continues to support the initiative to replace the aging Argus system with a modern security system (Caerus), as well as continuous improvement initiatives through the Center for Security Technology, Analysis, Response, and Testing system and PSCOE activities, and the capability to adapt to rapidly evolving technologies. This request also includes funding SIRP projects, addressing critical security systems, and related security infrastructure and equipment refresh needs.

### **Information Technology (IT) and Cybersecurity**

The IT and Cybersecurity program supports IT and cybersecurity services and solutions, which include continuous monitoring, cloud-based technologies, and enterprise security technologies (i.e., identity, credential, and access management). The program ensures and enables the availability of a secure infrastructure for mission activities and information sharing for NNSA and its mission partners. The FY 2027 Request enables the development and execution of integrated IT initiatives that provide an effective and secure technology infrastructure across the enterprise.

## **Defense Nuclear Nonproliferation**

### **Material Management and Minimization (M3)**

The M3 program denies terrorists and adversary state actors the materials needed to produce a nuclear weapon by minimizing the need for and presence of weapons-usable nuclear material around the world. The M3 program makes America safer by partnering with DOE/NNSA National Laboratories and U.S. industry to develop innovative technical solutions to minimize the availability of highly enriched uranium (HEU); remove or eliminate at-risk nuclear material; and dispose of excess nuclear material in the U.S. through multiple pathways.

### **Global Material Security (GMS)**

The GMS program directly contributes to U.S. national security by securing and preventing the smuggling of radioactive and nuclear (R/N) materials before they can be used in an attack against the U.S., its interests, or allies. GMS denies terrorists and bad actors access to nuclear and radioactive material and detects and defeats their attempts to smuggle such material. GMS makes America safer and stronger by protecting U.S. communities, preventing threats before they can reach U.S. borders, and advancing U.S. leadership and influence on nuclear security. GMS also helps unleash American Energy Dominance by protecting U.S. international investments from a costly R/N incident, by supporting the competitiveness and exportability of U.S. advanced reactor technology through cooperation on “security by design”, and by encouraging deployment of U.S. technologies and security solutions. GMS executes its mission through eleven national laboratories and a number of U.S. businesses and industry partners.

### **Nonproliferation and Arms Control (NPAC)**

The NPAC program enhances U.S. national security and unleashes U.S. dominance in the civil nuclear sector by reducing global nuclear proliferation threats. NPAC plays a key role in denying and detecting nuclear proliferation and advancing American Energy Dominance. NPAC applies unique technical and analytic expertise to support U.S. nonproliferation and arms control objectives to deny proliferation, support peaceful nuclear uses, and enable verifiable nuclear reductions. NPAC programs protect American international investments and America’s civil nuclear infrastructure and associated, critical supply chains and implement regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. NPAC safeguards America’s emerging technologies (e.g. AI, quantum, semiconductors) and the associated U.S. industrial base from exploitation from international competitors and the global influence of malign and adversarial states. NPAC also strengthens America's global leadership in international nuclear safeguards, export control, and nuclear verification, directly supporting U.S. national security by denying the illegal diversion of dangerous nuclear materials and weapons of mass destruction (WMD) related commodities and technologies to prevent threats before they reach the U.S. border. NPAC plays a leading role in addressing current threats to U.S. national security while also drawing upon its expertise to anticipate emerging nonproliferation challenges and develop technical and analytic approaches and solutions.

### **Defense Nuclear Nonproliferation Research and Development (DNN R&D)**

DNN R&D advances U.S. technical capabilities to detect and characterize foreign nuclear weapons development activities; foreign nuclear warhead stockpiles; the presence, movement, or diversion of special nuclear materials; nuclear threats in the space environment; and nuclear detonations in all environments including in the atmosphere, space, and underground. The program also sustains and develops foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nuclear nonproliferation activities and to anticipate future threats. It develops nuclear forensics technical capabilities for enabling rapid decision-making during and after nuclear or radiological incidents and aid in determining the origin of interdicted materials or nuclear devices. DNN R&D leverages the unique facilities

and scientific skills of the National Laboratories and universities to perform research, conduct technology demonstrations, develop prototypes, and produce and deliver sensors for integration into operational systems.

## **Nuclear Counterterrorism and Incident Response Program (NCTIR)**

### **Counterterrorism and Counterproliferation (CTCP)**

The CTCP subprogram harnesses the Department's unparalleled command of nuclear science to prepare for, counter, and respond to nuclear and radiological threats, incidents, and accidents worldwide. CTCP provides the Nation's technical capability to understand and defeat nuclear devices, including improvised nuclear devices (INDs) and lost or stolen foreign nuclear weapons. This knowledge in turn informs U.S. Government priorities on terrorist and proliferant state nuclear threats and related contingency planning. In support of the CTCP mission, the FY 2027 Budget Request for NCTIR supports programs to manage and deploy the DOE/NNSA NEST, comprised of scientific and technical experts who are trained and equipped to respond rapidly to all manners of nuclear and radiological events. CTCP includes nuclear forensics capabilities that support identifying the origin of nuclear material interdicted outside of regulatory control or used in a nuclear attack. Additionally, CTCP cooperates with select international partners and allies to strengthen their abilities to effectively address radiological or nuclear incidents—with or without U.S. involvement—thereby minimizing risk to U.S. territory, citizens, or interests and keeping America safe and secure. Finally, CTCP integrates DOE/NNSA capabilities, planning, and operations on counterproliferation priorities. This work supports urgent needs and proactively pursues opportunities to prevent nuclear threats, in part through technology development with counterproliferation applications.

### **Emergency Management (EM)**

The EM subprogram provides the structure and processes to support a comprehensive and integrated approach to emergency management and continuity programs. The EM subprogram improves the readiness and effectiveness of the DOE Emergency Management System and the NSE on a programmatic and performance level to address deal with all types of emergencies potentially impacting the DOE/NNSA enterprise or its equities anywhere in the world. This promotes unity of effort and a culture of continuous improvement to safeguard the health and safety of workers and the public and enhance the resilience of the Department and the Nation.

### **Naval Reactors**

The NR appropriation is responsible for the U.S. Navy nuclear propulsion program's lifecycle activities, including reactor plant technology design and development, reactor plant operation and maintenance, and proper final disposition of naval spent nuclear fuel. The Program ensures reactor plants in nuclear-powered submarines and aircraft carriers are safely and reliably operated (constituting over 35 percent of the Navy's major combatants)<sup>1</sup>, and fulfills the Navy's requirements for new nuclear propulsion plants that meet current and future national defense requirements.

The NR mission includes ensuring the safety of reactors and associated naval nuclear propulsion plants, and control of radiation and radioactivity associated with naval nuclear propulsion activities, including prescribing and enforcing standards and regulations for these areas, as they affect the environment, safety and health of workers, operators, and the general public. NR maintains oversight in areas such as security, nuclear safeguards and transportation, radiological controls, public information, procurement, logistics, and fiscal management.

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<sup>1</sup> Major combatants, in this instance, include aircraft carriers, submarines, and surface combatants based on the "Active in Commission" column from the Naval Vessel Register.

As part of the NNSA, NR provides the U.S. Navy with nuclear propulsion plants that are capable of responding to the challenges of the 21st-century security environment.

### **NNSA Federal Salaries and Expenses**

FSE provides the specialized Federal workforce that is responsive to the dynamic geopolitical environment providing programmatic direction, leadership, and oversight for development and delivery of a modernized nuclear deterrent, nonproliferation and counterterrorism programs, foundational science capabilities, and recapitalization of the NSE infrastructure. It does not include funding for the federal staff supporting the WA Secure Transportation Asset program or the NR account which are supported by separate Program Direction accounts.

The FY 2027 Request is for a federal staff of 1,992 FTEs providing appropriate oversight to ensure NNSA can meet growing mission requirements and commitments. NNSA will re-shape its workforce consistent with the principles of the Executive Order on Implementing the President’s “Department of Government Efficiency” Workforce Optimization Initiative and subsequent guidance from the Office of Personnel Management. NNSA will use attrition, reductions, and streamlined mission support to allow for limited, targeted growth in its federal staffing to support nuclear modernization programs.

NNSA staff is located throughout the U.S., reflecting NNSA’s work with the NSE. The staff is geographically located in Washington, DC; Germantown, Maryland; Albuquerque, New Mexico; and at eight federal field offices: Kansas City Field Office (Missouri); Livermore Field Office (California); Los Alamos Field Office (New Mexico); Nevada Field Office (Nevada); Pantex Field Office (Texas); Y-12 Field Office (Tennessee); Sandia Field Office (New Mexico); and Savannah River Field Office (South Carolina).

NNSA also manages the DOE’s Overseas Presence business line in the DOE Working Capital Fund (WCF), including 34 Full-time Equivalents (FTEs); 32 DOE FTEs in 21 diplomatic missions and 2 at DOE Headquarters for transition to and from overseas locations. This supports both federal employees and locally employed staff and reimburses the Department of State for International Cooperative Administrative Support Services and Capital Security Cost Sharing charges.

### **DOE Working Capital Fund (WCF) Support**

NNSA’s Total FY 2027 Request includes \$102,014,000 for NNSA’s projected support to the DOE WCF. Of this amount, \$49,310,000 will be paid out of FSE; \$48,488,000 out of WA; \$4,216,000 out of DNN; and \$3,770,000 out of NR. This funding covers selected shared enterprise activities including managing enterprise-wide systems and data, telecommunications, and supporting the integrated acquisition environment.

### **Legacy Contractor Pensions and Settlement Payments**

These budget lines included in the WA and DNN accounts include DOE/NNSA’s annual reimbursement made to the University of California Retirement Plan (UCRP) for former UC employees and annuitants who worked at the LLNL and LANL. The annual reimbursement is based on the actuarial valuation report and an annual assessment provided by UC and is covered by the terms described in the contracts. The Request includes a total of \$54,997,000.



**Site Estimates  
(\$K)**

| Site                                           | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027 Request |                   |                  |                  |                   |
|------------------------------------------------|--------------------|--------------------|-----------------|-------------------|------------------|------------------|-------------------|
|                                                |                    |                    | FSE             | WA                | DNN              | NR               | Total             |
| Argonne National Laboratory                    | 69,963             | 58,154             | -               | 22,000            | 47,541           | -                | 69,541            |
| Bettis Atomic Power Laboratory                 | 603,044            | 623,170            | -               | -                 | -                | 611,636          | 611,636           |
| Brookhaven National Laboratory                 | 16,326             | 14,507             | 7               | 500               | 15,135           | -                | 15,642            |
| Carlsbad Area Office                           | 250                | 81                 | 1               | -                 | 196              | -                | 197               |
| Chicago Operations Office                      | 2,000              | 7                  | 7               | -                 | -                | -                | 7                 |
| Fermi National Accelerator Laboratory          | 1,050              | 847                | -               | -                 | 963              | -                | 963               |
| Idaho National Laboratory                      | 202,905            | 161,153            | -               | 3,134             | 72,378           | 98,770           | 174,282           |
| Kansas City Field Office                       | 10,336             | 10,807             | 10,990          | -                 | -                | -                | 10,990            |
| Kansas City National Security Complex          | 1,386,834          | 1,589,509          | -               | 2,094,205         | 81,391           | -                | 2,175,596         |
| Knolls Atomic Power Laboratory                 | 732,607            | 652,043            | -               | -                 | -                | 630,690          | 630,690           |
| Lawrence Berkeley National Laboratory          | 22,141             | 27,011             | -               | 5,513             | 23,042           | -                | 28,555            |
| Lawrence Livermore National Laboratory         | 2,664,986          | 2,547,326          | 1,043           | 2,837,204         | 282,966          | -                | 3,121,213         |
| Livermore Field Office                         | 18,404             | 16,922             | 17,737          | -                 | -                | -                | 17,737            |
| Los Alamos Field Office                        | 21,221             | 18,556             | 20,367          | 25                | -                | -                | 20,392            |
| Los Alamos National Laboratory                 | 4,533,078          | 4,713,578          | -               | 6,033,093         | 345,415          | -                | 6,378,508         |
| Naval Reactors Facility                        | 444,480            | 678,748            | -               | 859               | -                | 957,722          | 958,581           |
| Naval Reactors Laboratory Field Office         | 17,460             | 17,460             | -               | -                 | -                | 20,383           | 20,383            |
| Naval Research Laboratory                      | 2,745              | 2,900              | -               | 3,650             | -                | -                | 3,650             |
| NETL Pittsburgh                                | 110,893            | 49,778             | 695             | 143,184           | 920              | -                | 144,799           |
| Nevada Field Office                            | 21,218             | 18,668             | 17,839          | 1,318             | 455              | -                | 19,612            |
| Nevada National Security Site                  | 848,484            | 787,262            | 3               | 1,210,828         | 113,075          | -                | 1,323,906         |
| NNSA Albuquerque Complex                       | 875,759            | 1,281,133          | 5,900           | 949,996           | 125,930          | -                | 1,081,826         |
| Oak Ridge Institute for Science & Education    | 3,662              | 3,512              | -               | -                 | 4,248            | -                | 4,248             |
| Oak Ridge National Laboratory                  | 236,787            | 268,213            | 7               | 102,097           | 211,431          | -                | 313,535           |
| Office of Scientific & Technical Information   | 579                | 620                | -               | 680               | -                | -                | 680               |
| Pacific Northwest National Laboratory          | 381,704            | 318,610            | -               | 124,145           | 238,832          | -                | 362,977           |
| Pantex Field Office                            | 17,139             | 16,658             | 17,613          | -                 | -                | -                | 17,613            |
| Pantex Plant                                   | 1,131,096          | 1,181,971          | -               | 1,343,674         | 14,728           | -                | 1,358,402         |
| Portsmouth Gaseous Diffusion Plant             | 58,400             | 55,000             | -               | 76,250            | -                | -                | 76,250            |
| Princeton Plasma Physics Laboratory            | 205                | 366                | -               | -                 | 308              | -                | 308               |
| Richland Operations Office                     | 1,887              | 1,802              | 7               | -                 | 2,153            | -                | 2,160             |
| Sandia Field Office                            | 19,831             | 20,672             | 22,074          | -                 | -                | -                | 22,074            |
| Sandia National Laboratories                   | 3,328,580          | 2,995,698          | -               | 3,495,542         | 336,131          | -                | 3,831,673         |
| Savannah River National Laboratory             | 154,623            | 102,765            | 168             | 46,302            | 56,661           | -                | 103,131           |
| Savannah River Operations Office               | 52,138             | 17,761             | 17,366          | 436               | 1,062            | -                | 18,864            |
| Savannah River Site                            | 1,353,706          | 1,837,143          | -               | 3,059,975         | 57,428           | -                | 3,117,403         |
| SLAC National Accelerator Laboratory           | 1,455              | 335                | -               | 180               | 210              | -                | 390               |
| Thomas Jefferson National Accelerator Facility | 711                | 676                | -               | -                 | 650              | -                | 650               |
| University of Rochester                        | 94,839             | 111,000            | -               | 88,028            | -                | -                | 88,028            |
| Washington Headquarters                        | 1,857,518          | 2,724,146          | 425,122         | 3,336,106         | 250,820          | 76,167           | 4,088,215         |
| Waste Isolation Pilot Plant                    | 7,742              | 6,571              | -               | -                 | 8,547            | -                | 8,547             |
| Y-12 Field Office                              | 43,457             | 97,378             | 20,151          | 13,500            | -                | -                | 33,651            |
| Y-12 National Security Complex                 | 2,782,757          | 2,422,479          | -               | 2,448,735         | 96,979           | -                | 2,545,714         |
| Adjustments                                    | -                  | (48,996)           | -               | -                 | -                | (1,676)          | (1,676)           |
| <b>Grand Total</b>                             | <b>24,135,000</b>  | <b>25,404,000</b>  | <b>577,097</b>  | <b>27,441,159</b> | <b>2,389,595</b> | <b>2,393,692</b> | <b>32,801,543</b> |

## **Notification and Use of Minor Construction Authority**

### **Authorities:**

10 US Code 6273(b) requires an annual report on each exercise of minor construction authority. As a result of addressing all minor construction, this report also includes all project information requested in the FY 2018 National Defense Authorization Act.

Additionally, pursuant to 10 US Code 6273(d), this report notifies all minor construction projects, as indicated by checkmark, having a total estimated cost of more than \$5 million planned for execution.

Finally, 10 US Code 6277(b) requires that if the total estimated cost for construction design in connection with any construction project exceeds \$5,000,000, funds for that design must be specifically authorized by law. NNSA requests Congressional authorization for those minor construction projects, as indicated by checkmark, that are estimated to exceed the \$5,000,000 design threshold.

### **Percent Complete:**

NNSA developed the following standardized calculation for Percent Complete:

**% Complete for Minor Construction (MC) = 100 \* (total estimated cost (TEC) costed to date / TEC)**

See **Abbreviations** list (end of document).

### **Icon Key:**

**6 - Project starting its notification and wait period.**

**V - Provisional Notification – Project is planned to start within the budget request period. NNSA may accelerate or delay these projects to address emerging changes in priorities and unplanned infrastructure failures.**

**@- Fix reporting or notification. Usually, reclassifying previously characterized MIE (personal property), as MC (related personal property).**

## Minor Construction (MC) Notification & Reporting (Use of Authority) (\$K)

|      |         |      | Icons<br>⚠️ ⚡                                                                     |                                                                                                                                                                                   | ✓          | ✓                   | Percent Complete |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                                                                                   |                                                                                                                                                                                   | New Notif. | Auth. - Con. Design |                  |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title                                                                     | Project Description                                                                                                                                                               |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                                                                                   |                                                                                                                                                                                   |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                                                                                   |                                                                                                                                                                                   | N/A        | N/A                 | N/A              |              | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |
| WA   | SM      | N/A  | MC (TEC <\$5M)                                                                    | N/A                                                                                                                                                                               |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 8,328           | 8,495           | 8,664            | 8,838           | 9,014           | 9,195           | 9,379           |
|      |         |      |                                                                                   |                                                                                                                                                                                   |            |                     | 23%              |              | FY 2024       | FY 2024                | FY 2026          | FY 2024         | FY 2024         | FY 2026          |                 |                 |                 |                 |
| WA   | SM      | PX   | 12-64 Bays 11, 12 & 15 Replacement Facilities                                     | As originally notified                                                                                                                                                            |            |                     | 5,283            | 5,283        | 5,283         | 1,300                  | 1,300            | 3,983           | -               | -                | -               | -               | -               | -               |
|      |         |      | ⚠️                                                                                |                                                                                                                                                                                   | ✓          |                     | -                |              | FY 2026       | FY 2026                | FY 2028          | FY 2026         | FY 2026         | FY 2028          |                 |                 |                 |                 |
| WA   | SM      | SNL  | Bldg 855 conversion to lab space                                                  | Convert an existing VTR in building 855 to a laboratory space, that also meets SEC-705 & Corp+ Security Requirements, including installation of RF shielding and sound mitigation |            |                     | 5,300            | -            | 5,300         | 300                    | -                | 300             | -               | 5,000            | -               | -               | -               | -               |
|      |         |      |                                                                                   |                                                                                                                                                                                   |            |                     | 50%              |              | FY 2020       | FY 2022                | FY 2023          | FY 2024         | FY 2027         | FY 2028          |                 |                 |                 |                 |
| WA   | SM      | SRS  | Mass Spec Replacement Project #1A: New Inert Mass Spec (New MS #5) 234-H Room 301 | As originally notified                                                                                                                                                            |            |                     | 5,500            | 9,500        | 9,500         | 2,000                  | 5,800            | 1,000           | -               | -                | -               | 2,700           | -               | -               |
|      |         |      |                                                                                   |                                                                                                                                                                                   |            |                     | 100%             |              | FY 2021       | FY 2021                | FY 2023          | FY 2021         | FY 2025         | FY 2025          |                 |                 |                 |                 |
| WA   | SM      | Y-12 | 9990-03 Facility Upgrades                                                         | As originally notified                                                                                                                                                            |            |                     | 19,952           | 19,952       | 19,952        | 1,750                  | 19,952           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                   |                                                                                                                                                                                   |            |                     | 45%              |              | FY 2021       | FY 2023                | FY 2025          | FY 2025         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| WA   | SM      | Y-12 | Building 9201-1 Pangborn Upgrades                                                 | Installation, tie-in, and testing of new Pangborn graphite filtration/exhaust system for Bldg. 9201-01.                                                                           |            |                     | 5,000            | 12,000       | 16,000        | 1,200                  | 12,000           | 4,000           | -               | -                | -               | -               | -               | -               |

|      |         |      | Icons<br>⚠️❌⚠️                                                                         |                                                                                                                                                                       | ✓                                                                     | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                        |                                                                                                                                                                       | New<br>Notif.                                                         | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                          | Project Description                                                                                                                                                   |                                                                       |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                                        |                                                                                                                                                                       | FY 2025    FY 2026    FY 2028    FY 2026    FY 2027    FY 2028        |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | SM      | Y-12 | Graphite Oven #1 Associated Construction                                               | Associated construction to install Graphite Oven (cooling water, exhaust)                                                                                             |                                                                       |                           | Under \$5M          | -               | 5,400            | 600                          | 5,400               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                        |                                                                                                                                                                       | 98%    FY 2023    FY 2024    FY 2026    FY 2024    FY 2026    FY 2026 |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | SM      | Y-12 | Large Graphite/VTL Lathe #1 with Facility Mods                                         | Install integral lathe with facility mods in 9201-01; require utility reroutes. BO achieved - currently working punchlist.                                            |                                                                       |                           | Under \$5M          | 10,500          | 11,500           | 1,400                        | 10,500              | 1,000              | -                  | -                   | -                  | -                  | -                  | -                  |
| WA   | SM      |      |                                                                                        | SUBTOTAL                                                                                                                                                              |                                                                       |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 18,611             | 8,495              | 13,664              | 8,838              | 11,714             | 9,195              | 9,379              |
|      |         |      |                                                                                        |                                                                                                                                                                       | N/A                                                                   | N/A                       | N/A                 |                 | N/A              | N/A                          | N/A                 | N/A                | N/A                | N/A                 |                    |                    |                    |                    |
| WA   | PM      | N/A  | MC (TEC <\$5M)                                                                         | N/A                                                                                                                                                                   |                                                                       |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 28,813             | 29,389             | 29,977              | 30,577             | 31,188             | 31,812             | 32,448             |
|      |         |      |                                                                                        |                                                                                                                                                                       | 10%    N/A    N/A    FY 2023    FY 2024    FY 2025    FY 2027         |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | LANL | PF-4 Relocated Vault Administrative Area                                               | As originally notified                                                                                                                                                |                                                                       |                           | 5,296               | 9,032           | 12,725           | 1,200                        | 6,984               | 4,328              | 1,413              | -                   | -                  | -                  | -                  | -                  |
|      |         |      | ⚠️                                                                                     |                                                                                                                                                                       | ✓                                                                     |                           | -                   |                 | FY 2027          | FY 2027                      | FY 2027             | FY 2027            | FY 2028            | FY 2029             |                    |                    |                    |                    |
| WA   | PM      | LANL | BTF Inspection Lab                                                                     | Modular Metrology Laboratory for the QA/QC of newly fabricated components within the Beryllium Technology Facility. The "room" itself is a self-contained capability. |                                                                       |                           | 10,000              | -               | 17,000           | 1,500                        | -                   | -                  | -                  | 17,000              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                        |                                                                                                                                                                       | -    N/A    N/A    FY 2029    FY 2027    FY 2029    FY 2030           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | LANL | Standards and Cal: Demo and Installation of a Mod Lab for Coordinate Measuring Machine | As originally notified                                                                                                                                                |                                                                       |                           | 8,200               | 8,200           | 14,600           | 1,400                        | -                   | -                  | 1,400              | 13,200              | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>⚠⚡⚡                                     |                                                                                                              | ✓                                                              | ✓                         |                     |                 | Original |                  |                              | Current             |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|------|---------|------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------|---------------------|-----------------|----------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|--|--|
|      |         |      |                                                  |                                                                                                              | New<br>Notif.                                                  | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |          | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |  |  |
| Appr | Program | Site | Project Title                                    | Project Description                                                                                          |                                                                |                           | Original<br>TEC     | Previous<br>TEC |          | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | FY 2026    FY 2027    FY 2028    FY 2027    FY 2028    FY 2029 |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | -                                                              |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LANL | 09-0038 pilot scale<br>formulation<br>capability | Facility modifications<br>necessary to accommodate<br>new pilot scale<br>formulation equipment               |                                                                |                           | 5,000               | -               |          | 5,000            | 500                          | -                   | -                  | 5,000              | -                   | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | FY 2026    FY 2027    FY 2028    FY 2027    FY 2028    FY 2029 |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | -                                                              |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LANL | 09-0037 relocated<br>operations                  | Facility modifications<br>necessary to accommodate<br>co-location of new<br>equipment and older<br>equipment |                                                                |                           | 5,000               | -               |          | 5,000            | 600                          | -                   | -                  | 5,000              | -                   | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      | ⚠                                                |                                                                                                              | ✓                                                              |                           | -                   |                 |          | FY 2026          | FY 2026                      | FY 2027             | FY 2026            | FY 2026            | FY 2027             |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | -                                                              |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LANL | TA-03-0066 hot<br>press upgrades                 | Facility modifications to<br>support new equipment in<br>TA-03-0066                                          |                                                                |                           | 5,000               | -               |          | 5,000            | 1,436                        | -                   | -                  | 5,000              | -                   | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | 10%                                                            |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | FY 2025    FY 2026    FY 2027    FY 2025    FY 2026    FY 2028 |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LLNL | Bldg 226 Power<br>Service Upgrade                | Procure and install a new<br>transformer to service<br>B226                                                  |                                                                |                           | 5,890               | -               |          | 5,890            | 1,140                        | -                   | 1,140              | 4,750              | -                   | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      | ⚡                                                |                                                                                                              | ✓                                                              |                           | -                   |                 |          | FY 2028          | FY 2030                      | FY 2030             | FY 2028            | FY 2030            | FY 2030             |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | -                                                              |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LLNL | Bldg 806B Bay 5<br>Upgrades                      | Facility modifications<br>needed to support new<br>remote capability mill                                    |                                                                |                           | 7,000               | -               |          | 7,000            | 1,000                        | -                   | -                  | -                  | -                   | 1,000              | 6,000              | -                  | -                  |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | 85%                                                            |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | FY 2024    FY 2024    FY 2026    FY 2024    FY 2025    FY 2026 |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
|      |         |      |                                                  |                                                                                                              | -                                                              |                           |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | LLNL | B321A Secondary<br>Space Expansion               | The scope of this project<br>is to construction of the<br>expanded secondary space<br>in B321A.              |                                                                |                           | 3,452               | 5,000           |          | 5,825            | 750                          | 3,425               | 1,400              | 1,000              |                     | -                  | -                  | -                  | -                  |  |  |  |  |

|      |         |      | Icons<br>⚠️ ❌ ⚡                                              |                                                                                                                                                                                                                                  | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| Appr | Program | Site |                                                              |                                                                                                                                                                                                                                  | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
|      |         |      | Project Title                                                | Project Description                                                                                                                                                                                                              |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                              |                                                                                                                                                                                                                                  | FY 2023       |                           |                     |                 | 14%              | FY 2023                      | FY 2024             | FY 2026            | FY 2026            | FY 2032             |                    |                    |                    |                    |
| WA   | PM      | LLNL | DAF Glovebox Exhaust System for expanded glovebox operations | Upgrade exhaust system for adequate ventilation of gloveboxes at NNSS Device Assembly Facility (DAF) that support LLNL's pit certification, surveillance, and development work to meet program requirements.                     |               |                           | 10,000              | 20,700          | 20,700           | 4,000                        | 20,700              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                                                                  | FY 2027       |                           |                     |                 | -                | FY 2027                      | FY 2028             | FY 2031            | FY 2031            | FY 2033             |                    |                    |                    |                    |
| WA   | PM      | NNSS | Certified Packaging Maintenance Capability                   | Certified Packaging Maintenance Capability and equipment will be contained as a single modular structure.                                                                                                                        |               |                           | 5,700               | -               | 6,000            | 1,763                        | -                   | -                  | -                  | -                   | -                  | -                  | 6,000              |                    |
|      |         |      | ⚡                                                            |                                                                                                                                                                                                                                  | ✓             |                           | -                   | FY 2028         |                  |                              |                     | FY 2029            | FY 2030            | FY 2028             | FY 2029            | FY 2030            |                    |                    |
| WA   | PM      | NNSS | Classified Machine Shop Capabilities                         | Design and construct an additional classified machining area at the NLV campus                                                                                                                                                   |               |                           | 8,500               | -               | 8,500            | 500                          | -                   | -                  | -                  | -                   | -                  | 500                | 8,000              | -                  |
|      |         |      |                                                              |                                                                                                                                                                                                                                  | FY 2024       |                           |                     |                 | 95%              | FY 2024                      | FY 2025             | FY 2024            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| WA   | PM      | NNSS | DAF Mission Capabilities                                     | As originally notified                                                                                                                                                                                                           |               |                           | 5,700               | 2,846           | 2,389            | 1,500                        | 1,500               | 4,000              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                                                                  | FY 2021       |                           |                     |                 | 99%              | FY 2022                      | FY 2025             | FY 2022            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| WA   | PM      | NNSS | ECSE Test Stand Capabilities                                 | As originally notified                                                                                                                                                                                                           |               |                           | 1,500               | 6,496           | 6,481            | 1,089                        | 6,661               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      | ⚠️                                                           |                                                                                                                                                                                                                                  | ✓             |                           | -                   | FY 2027         |                  |                              |                     | FY 2027            | FY 2027            | FY 2029             |                    |                    |                    |                    |
| WA   | PM      | NNSS | ESP Prototype Relocation                                     | Project will Design a new configuration for the Enhanced Staging Program Prototype, currently residing in RNC TEC. Once complete the current Prototype will be removed from RNC TEC and relocated to building 23-474 in Mercury. |               |                           | 5,000               | -               | 5,000            | 500                          | -                   | -                  | -                  | 5,000               | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>⚠⚡⚡                                                                                     |                                                                                                                                                                                         | ✓                                                              | ✓                                                              |                     |                 |                  | Original                     |                     |                    | Current            |                     |                    |                    |                    |                    |  |  |
|------|---------|------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|
|      |         |      |                                                                                                  |                                                                                                                                                                                         | New<br>Notif.                                                  | Auth. -<br>Con.<br>Design                                      | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |
| Appr | Program | Site | Project Title                                                                                    | Project Description                                                                                                                                                                     |                                                                |                                                                | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |
|      |         |      | ⚠                                                                                                |                                                                                                                                                                                         | ✓                                                              | FY 2027    FY 2027    FY 2029    FY 2027    FY 2027    FY 2029 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | NNSS | 23-474 Gas Analysis Lab                                                                          | Project will design, build, and install a new limited area enclosure within the high bay of building 23-474. The project will also procure equipment to be used in gas sample analysis. |                                                                |                                                                | 5,000               | -               | 5,000            | 350                          | -                   | -                  | -                  | 5,000               | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                  |                                                                                                                                                                                         | FY 2025    FY 2026    FY 2026    FY 2025    FY 2026    FY 2027 |                                                                |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | NNSS | MicroTCAP/DPF Mission Support                                                                    | Install a mobile unit to house a MicroTCAP                                                                                                                                              |                                                                |                                                                | 6,500               | 7,400           | 7,500            | 500                          | 3,000               | 500                | 4,000              | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      | ⚡                                                                                                |                                                                                                                                                                                         | ✓                                                              | FY 2029    FY 2029    FY 2031    FY 2029    FY 2029    FY 2031 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | NNSS | NLV Printing Lab Consolidation                                                                   | Design and consolidate all NLV printing capabilities into the A-15 building at the NLV campus                                                                                           |                                                                |                                                                | 5,500               | -               | 5,500            | 500                          | -                   | -                  | -                  | -                   | -                  | 500                | 5,000              | -                  |  |  |
|      |         |      |                                                                                                  |                                                                                                                                                                                         | FY 2026    FY 2026    FY 2028    FY 2026    FY 2026    FY 2028 |                                                                |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | NNSS | PULSE A-Shaft Modernization                                                                      | Replace key components of the PULSE A-Shaft hoist                                                                                                                                       |                                                                |                                                                | 6,000               | 9,000           | 9,000            | 1,500                        | -                   | -                  | 1,500              | 7,500               | -                  | -                  | -                  | -                  |  |  |
|      |         |      | ⚡                                                                                                |                                                                                                                                                                                         | ✓                                                              | FY 2029    FY 2030    FY 2031    FY 2029    FY 2030    FY 2031 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | NNSS | PULSE Chilled Water Upgrade Secondary Loop                                                       | Design and install a secondary chilled water loop below ground at PULSE                                                                                                                 |                                                                |                                                                | 5,500               | -               | 5,500            | 1,000                        | -                   | -                  | -                  | -                   | -                  | 1,000              | 4,500              | -                  |  |  |
|      |         |      |                                                                                                  |                                                                                                                                                                                         | FY 2021    FY 2022    FY 2023    FY 2024    FY 2026    FY 2026 |                                                                |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | PM      | ORNL | Demonstration Cascade 2 (DCAS2) and associated 6010 Manufacturing Capacity Vault Type Room (VTR) | As originally notified                                                                                                                                                                  |                                                                |                                                                | 19,000              | 22,500          | 22,500           | 1,390                        | 22,500              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |

|      |         |      | Icons<br>⚠️❌⚡                                                                                                                  |                                                                                                                                       | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                                                                |                                                                                                                                       | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                                                                  | Project Description                                                                                                                   |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                                                                                |                                                                                                                                       | 10%           |                           |                     |                 | N/A              | N/A                          | FY 2025             | FY 2025            | FY 2025            | FY 2027             |                    |                    |                    |                    |
|      |         |      | 325 RPL<br>(Radiochemical<br>Processing<br>Laboratory)<br>Analytical and On-<br>Line Monitoring<br>Laboratory<br>Upgrade       |                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | PNNL | Upgrade                                                                                                                        | As originally notified                                                                                                                |               |                           | 9,200               | 9,200           | 7,700            | 700                          | -                   | 7,700              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                                                |                                                                                                                                       | 65%           |                           |                     |                 | FY<br>2023       | FY 2023                      | FY 2025             | FY 2023            | FY 2024            | FY 2027             |                    |                    |                    |                    |
|      |         |      | 325 RPL<br>(Radiochemical<br>Processing<br>Laboratory)<br>Building Systems<br>Upgrade<br>(previously<br>Electrical<br>Upgrade) |                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | PNNL | Upgrade)                                                                                                                       | As originally notified                                                                                                                |               |                           | 17,250              | 17,654          | 32,600           | 2,200                        | 32,600              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                                                |                                                                                                                                       | 28%           |                           |                     |                 | FY<br>2023       | FY 2023                      | FY 2025             | FY 2023            | FY 2024            | FY 2027             |                    |                    |                    |                    |
|      |         |      | 325 RPL<br>(Radiochemical<br>Processing<br>Laboratory)<br>Plutonium Metal<br>Glovebox<br>Laboratory<br>Upgrade                 |                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | PNNL | Upgrade                                                                                                                        | As originally notified                                                                                                                |               |                           | 11,100              | 9,958           | 9,958            | 700                          | 9,958               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      | ⚡                                                                                                                              |                                                                                                                                       | ✓             | -                         |                     |                 | FY<br>2028       | FY 2029                      | FY 2030             | FY 2028            | FY 2029            | FY 2030             |                    |                    |                    |                    |
|      |         |      |                                                                                                                                |                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | PX   | 12-68 Capability<br>Refresh                                                                                                    | Facility modifications<br>required to support the<br>installation of 3 new<br>pieces of equipment in<br>tooling fabrication facility. |               |                           | 6,000               | -               | 6,000            | 1,500                        | -                   | -                  | -                  | -                   | 6,000              | -                  | -                  | -                  |
|      |         |      |                                                                                                                                |                                                                                                                                       | 25%           |                           |                     |                 | FY<br>2025       | FY 2026                      | FY 2027             | FY 2026            | FY 2027            | FY 2028             |                    |                    |                    |                    |
|      |         |      |                                                                                                                                |                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | PM      | PX   | CNC HE Saw Bay<br>Modification                                                                                                 | Modify Building 11-50,<br>Bay 2                                                                                                       |               |                           | 10,000              | 10,000          | 12,000           | 1,200                        | -                   | 1,200              | 10,800             | -                   | -                  | -                  | -                  | -                  |



|      |         |      | Icons<br>☒☒☒                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ✓             | ✓                         |                     |                 |  | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |  |  |
|------|---------|------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|--|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|--|--|
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |  | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |  |  |
| Appr | Program | Site | Project Title                          | Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                           | Original<br>TEC     | Previous<br>TEC |  | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |  |  |
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | FY 2025       |                           |                     |                 |  |                  |                              |                     |                    |                    | FY 2025             | FY 2026            | FY 2028            |                    |                    |         |  |  |
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -             |                           |                     |                 |  |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                        | The facility modifications include upgrading the electrical power circuits and the mechanical piping/valves/compressors /pumps supporting the new chambers, refrigeration systems and chiller systems. Installation of concrete pads for the new chillers, sidewalk access to them, and finish grading / grading restoration to ensure proper drainage away from the new equipment. Two new Building 12-094 remote monitoring stations will be installed. And finally new flooring will be applied throughout. |               |                           |                     |                 |  |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
| WA   | PM      | PX   | Environmental Chambers                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                           | 6,300               | -               |  | 6,300            | 1,900                        | -                   | 1,900              | 4,400              | -                   | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      | ☒                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ✓             | FY 2029                   |                     |                 |  |                  |                              |                     |                    |                    |                     | FY 2030            | FY 2031            | FY 2028            | FY 2029            | FY 2030 |  |  |
| WA   | PM      | PX   | Firing Site Light Gas Gun Fac Mods     | Design and execute the required facility modifications required to support the installation of the firing site gas gun                                                                                                                                                                                                                                                                                                                                                                                         |               |                           | 6,000               | -               |  | 24,000           | 2,000                        | -                   | -                  | -                  | -                   | 2,000              | 22,000             | -                  | -                  |         |  |  |
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 60%           |                           |                     |                 |  |                  |                              |                     |                    |                    | N/A                 | N/A                | FY 2025            | FY 2023            | FY 2025            | FY 2026 |  |  |
| WA   | PM      | PX   | Heat Treat Oven                        | As originally notified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |                           | 2,960               | 5,839           |  | 9,299            | 1,000                        | 5,839               | 3,460              | -                  | -                   | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0%            |                           |                     |                 |  |                  |                              |                     |                    |                    | FY 2026             | FY 2026            | FY 2027            | FY 2025            | FY 2026            | FY 2027 |  |  |
| WA   | PM      | PX   | Increase Subassembly Room Modification | Modify Building 11-50, Room 112                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                           | 15,000              | 15,000          |  | 11,900           | 1,200                        | -                   | -                  | 1,200              | 10,700              | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 40%           |                           |                     |                 |  |                  |                              |                     |                    |                    | FY 2025             | FY 2026            | FY 2027            | FY 2026            | FY 2027            | FY 2027 |  |  |
| WA   | PM      | PX   | Pellet Press/Oven Bay Modification     | Modify Building 11-50, Bay 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                           | 12,200              | 12,000          |  | 6,000            | 1,200                        | -                   | 1,200              | 4,800              | -                   | -                  | -                  | -                  | -                  |         |  |  |

|      |         |      | Icons<br>☒ ☒ ☒                                                      |                                                                                                                                                         | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |
|------|---------|------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|
|      |         |      |                                                                     |                                                                                                                                                         | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |
| Appr | Program | Site | Project Title                                                       | Project Description                                                                                                                                     |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |
|      |         |      | ☒                                                                   | Design and execute the<br>faculty modifications that<br>are required to support the<br>storage capability<br>enhancement in the<br>tooling warehouse.   | ✓             | FY<br>2028                |                     |                 | FY 2028          | FY 2029                      | FY 2028             | FY 2028            | FY 2030            |                     |                    |                    |                    |                    |  |
| WA   | PM      | PX   | Tooling<br>Warehouse<br>Storage<br>Enhancements<br>Facility Mods    |                                                                                                                                                         |               |                           | 12,000              | -               | 12,000           | 1,500                        | -                   | -                  | -                  | -                   | 1,500              | 10,500             | -                  | -                  |  |
|      |         |      | ☒                                                                   | Design and execute the<br>facility modifications<br>required to install an<br>independent compressed<br>air system supporting the<br>tooling warehouse. | ✓             | FY<br>2028                |                     |                 | FY 2028          | FY 2029                      | FY 2028             | FY 2028            | FY 2031            |                     |                    |                    |                    |                    |  |
| WA   | PM      | PX   | Tooling<br>Independent<br>Compressed Air<br>System Facility<br>Mods |                                                                                                                                                         |               |                           | 5,000               | -               | 5,000            | 1,000                        | -                   | -                  | -                  | -                   | -                  | 1,000              | 4,000              | -                  |  |
|      |         |      | ☒                                                                   | Install a flexible<br>production stepper at<br>MESA                                                                                                     | ✓             | FY<br>2029                |                     |                 | FY 2029          | FY 2029                      | FY 2028             | FY 2028            | FY 2029            |                     |                    |                    |                    |                    |  |
| WA   | PM      | SNL  | Flexible<br>Production Stepper                                      |                                                                                                                                                         |               |                           | 5,500               | -               | 5,500            | 500                          | -                   | -                  | -                  | -                   | 5,500              | -                  | -                  | -                  |  |
|      |         |      |                                                                     | Modify SiFab Building<br>858N Bay 1514 and<br>Chase 1515 for<br>specifications needed for<br>new tool.                                                  | ✓             | ✓                         | 53%                 | FY<br>2025      |                  |                              | FY 2026             | FY 2026            | FY 2025            | FY 2026             | FY 2026            |                    |                    |                    |  |
| WA   | PM      | SNL  | FSI Tel Track (2<br>of 4)                                           |                                                                                                                                                         |               |                           | 5,000               | 5,000           | 5,800            | 600                          | -                   | 5,800              | -                  | -                   | -                  | -                  | -                  | -                  |  |
|      |         |      |                                                                     | Install a track at MESA                                                                                                                                 | 0%            |                           |                     | FY<br>2026      | FY 2026          | FY 2027                      | FY 2026             | FY 2027            | FY 2027            |                     |                    |                    |                    |                    |  |
| WA   | PM      | SNL  | FSI Track<br>Replacement (3 of<br>4)                                |                                                                                                                                                         |               |                           | 5,000               | -               | 5,000            | 1,300                        | -                   | -                  | 5,000              | -                   | -                  | -                  | -                  | -                  |  |
|      |         |      |                                                                     | Install a track at MESA                                                                                                                                 | 0%            |                           |                     | FY<br>2029      | FY 2029          | FY 2030                      | FY 2029             | FY 2030            | FY 2030            |                     |                    |                    |                    |                    |  |
| WA   | PM      | SNL  | FSI Track<br>Replacement (4 of<br>4)                                |                                                                                                                                                         |               |                           | 5,000               | -               | 6,000            | 1,400                        | -                   | -                  | -                  | -                   | -                  | 6,000              | -                  | -                  |  |
|      |         |      |                                                                     | Install an I-Line Stepper at<br>MESA                                                                                                                    | -             |                           |                     | FY<br>2029      | FY 2029          | FY 2030                      | FY 2029             | FY 2030            | FY 2030            |                     |                    |                    |                    |                    |  |
| WA   | PM      | SNL  | I-Line Stepper<br>Replacement (2 of<br>2)                           |                                                                                                                                                         |               |                           | 5,000               | -               | 6,000            | 1,300                        | -                   | -                  | -                  | -                   | -                  | 6,000              | -                  | -                  |  |
|      |         |      | ☒                                                                   | Procure and install a new<br>low pressure chemical<br>vapor deposition tools.                                                                           | ✓             | FY<br>2027                |                     |                 | FY 2027          | FY 2028                      | FY 2027             | FY 2027            | FY 2028            |                     |                    |                    |                    |                    |  |
| WA   | PM      | SNL  | LPCVD Poly-Si &<br>Nitride VTRs                                     |                                                                                                                                                         |               |                           | 5,000               | -               | 5,000            | 600                          | -                   | -                  | -                  | 5,000               | -                  | -                  | -                  | -                  |  |

|      |         |      |                                                                                                      |                                                                                                          | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      | Icons<br>⚠ ⚡ ⚙                                                                                       |                                                                                                          | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                                        | Project Description                                                                                      |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ⚠                                                                                                    |                                                                                                          | ✓             |                           | 85%                 |                 | FY<br>2024       | FY 2025                      | FY 2026             | FY 2024            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| WA   | PM      | SNL  | NG Hydrogen Fire<br>Furnace<br>Construction                                                          | Facility upgrades required<br>for the installation of a<br>new hydrogen fire furnace                     |               |                           | 3,900               | -               | 6,200            | 370                          | 1,496               | 4,704              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                      |                                                                                                          |               |                           | 93%                 |                 | FY<br>2019       | FY 2019                      | FY 2020             | FY 2022            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| WA   | PM      | SNL  | Reliable Dry<br>Room Installation<br>and Li Battery<br>Pack Rapid<br>Prototyping Lab<br>Installation | As originally notified                                                                                   |               |                           | 12,000              | 18,100          | 18,100           | 1,100                        | 18,100              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      | ⚠                                                                                                    |                                                                                                          | ✓             |                           | -                   |                 | FY<br>2027       | FY 2027                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| WA   | PM      | SNL  | QU3992<br>Centrifuge Facility<br>Mods                                                                | QU3992 Centrifuge<br>Facility Mods                                                                       |               |                           | 5,000               | -               | 5,000            | 500                          | -                   | -                  | -                  | -                   | -                  | 5,000              | -                  | -                  |
|      |         |      | ⚡                                                                                                    |                                                                                                          | ✓             |                           | -                   |                 | FY<br>2031       | FY 2032                      | FY 2033             | FY 2031            | FY 2032            | FY 2033             |                    |                    |                    |                    |
| WA   | PM      | SRS  | Expand Breathing<br>Air System                                                                       | Expand Breathing Air<br>System in Tritium<br>Extraction Facility to<br>support future workload.          |               |                           | 12,500              | -               | 12,500           | 2,000                        | -                   | -                  | -                  | -                   | -                  | -                  | -                  | 12,500             |
|      |         |      |                                                                                                      |                                                                                                          |               |                           | 25%                 |                 | N/A              | N/A                          | FY 2025             | FY 2025            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | PM      | SRS  | Glovebox Stripper<br>Blower<br>Redesign/Replace<br>ment                                              | As originally notified                                                                                   |               |                           | 7,000               | 7,000           | 10,639           | 2,000                        | 10,639              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                      |                                                                                                          |               |                           | 25%                 |                 | N/A              | N/A                          | FY 2024             | FY 2023            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | PM      | SRS  | Install HT-TCAP<br>Feed/Product<br>Transfer Lines                                                    | As originally notified                                                                                   |               |                           | 6,000               | 6,765           | 7,823            | 750                          | 1,765               | -                  | -                  | 6,058               | -                  | -                  | -                  | -                  |
|      |         |      | ⚡                                                                                                    |                                                                                                          | ✓             |                           | -                   |                 | FY<br>2028       | FY 2029                      | FY 2034             | FY 2031            | FY 2032            | FY 2037             |                    |                    |                    |                    |
| WA   | PM      | SRS  | Install New STCS<br>in HT-TCAP                                                                       | Install New Seismic<br>Tritium Confinement<br>System in HANM HT-<br>TCAP for dose reduction<br>strategy. |               |                           | 16,400              | 16,400          | 17,900           | 4,000                        | -                   | -                  | -                  | -                   | -                  | -                  | -                  | 17,900             |
|      |         |      | ⚠                                                                                                    |                                                                                                          | ✓             |                           | -                   |                 | FY<br>2026       | FY 2026                      | FY 2027             | FY 2026            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | PM      | SRS  | Manufacturing<br>Technology Center<br>(MTC) Limited<br>Area and VTR<br>Establishment                 | Enclosing the PPOP<br>Manufacturing<br>Technology Center (MTC)<br>in a Limited Area/ Vault<br>Type Room  |               |                           | 5,100               | 5,100           | 9,600            | 800                          | -                   | -                  | 9,600              | -                   | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>✖ ↻ ↱                                                                                                                                                   |                                                                                                                                                                     | ✓             | ✓                                               |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |  |  |
|------|---------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|--|--|
|      |         |      |                                                                                                                                                                  |                                                                                                                                                                     | New<br>Notif. | Auth. -<br>Con.<br>Design                       | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |  |  |
| Appr | Program | Site | Project Title                                                                                                                                                    | Project Description                                                                                                                                                 |               |                                                 | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |  |  |
|      |         |      | ✖                                                                                                                                                                |                                                                                                                                                                     | ✓             | FY 2027 FY 2028 FY 2029 FY 2027 FY 2028 FY 2029 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | 236-3F Operations and Training Modernization                                                                                                                     | Repurpose several rooms in the Weapons Support Building (WSB) 236-3F to create operations work and training areas.                                                  |               |                                                 | 28,953              | -               | 28,953           | 595                          | -                   | -                  | -                  | 28,953              | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      |                                                                                                                                                                  |                                                                                                                                                                     |               | - N/A N/A FY 2028 FY 2025 FY 2027 FY 2028       |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | Module Stripper Blower Redesign/Replacement                                                                                                                      | As originally notified                                                                                                                                              |               |                                                 | 7,750               | 7,000           | 10,500           | 2,000                        | 2,000               | 8,500              | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      | ↱                                                                                                                                                                |                                                                                                                                                                     | ✓             | FY 2029 FY 2030 FY 2031 FY 2029 FY 2030 FY 2031 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | Restoration of P-EVAC (Hydride Beds and HCN valves)                                                                                                              | In HANM Product Evacuation (P-Evac) system: replace hydride beds, upgrade hot and cold nitrogen valves and piping, reconfigure for hybrid storage - beds and tanks. |               |                                                 | 20,700              | -               | 20,700           | 4,000                        | -                   | -                  | -                  | -                   | -                  | 20,700             | -                  | -                  |  |  |  |  |
|      |         |      |                                                                                                                                                                  |                                                                                                                                                                     |               | 20% N/A N/A FY 2024 FY 2024 FY 2028 FY 2030     |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | TEF modifications to support new Mass Spec equipment (formerly, Redesign TEF Mass Spec 4 Location for interim testing and final install of new Mass Spec for TEF | As originally notified                                                                                                                                              |               |                                                 | 8,600               | 6,300           | 10,700           | 2,100                        | 6,300               | -                  | -                  | -                   | 4,400              | -                  | -                  | -                  |  |  |  |  |
|      |         |      |                                                                                                                                                                  |                                                                                                                                                                     |               | FY 2025 FY 2026 FY 2028 FY 2026 FY 2027 FY 2029 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | Upgrade Diffuser System                                                                                                                                          | As originally notified                                                                                                                                              |               |                                                 | 9,000               | 25,000          | 25,817           | 3,000                        | -                   | -                  | 3,000              | 22,817              | -                  | -                  | -                  | -                  |  |  |  |  |
|      |         |      |                                                                                                                                                                  |                                                                                                                                                                     |               | FY 2027 FY 2027 FY 2029 FY 2029 FY 2030 FY 2034 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |
| WA   | PM      | SRS  | Upgrade Existing Seismic Tritium Confinement System (STCS) Components to Safety Class-Hydride Beds                                                               | As originally notified                                                                                                                                              |               |                                                 | 10,000              | 8,400           | 7,600            | 2,000                        | -                   | -                  | -                  | -                   | -                  | 7,600              | -                  | -                  |  |  |  |  |

|      |         |      | Icons<br>⚠️❌⚠️                                                                                    |                                                                                                                                                                                                                                                                                             | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |  |  |
|------|---------|------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|--|--|
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |  |  |
| Appr | Program | Site | Project Title                                                                                     | Project Description                                                                                                                                                                                                                                                                         |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |  |  |
|      |         |      | Upgrade Existing Seismic Tritium Confinement System (STCS) Components to Safety Class - Mix Tanks | This project will include preparation of a design to replace existing components (including changes to meet safety class requirements, perform BFA for components that will not be replaced, and perform SFA on STCS), construction and installation (scope is limited to the Mixed Tanks). | FY 2028       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | -             |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2028            | FY 2031            | FY 2029            | FY 2030            | FY 2033 |  |  |
| WA   | PM      | SRS  |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 10,000              | -               | 10,000           | 2,000                        | -                   | -                  | -                  | -                   | -                  | 2,000              | 8,000              | -                  |         |  |  |
|      |         |      | 9201-01 Can Hydroform                                                                             | Install new hyrdroform in 9201-01. Install Argon, air, electrical utilities. Dig pit and install new concrete                                                                                                                                                                               | ✓             | -                         |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2027       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2027            | FY 2029            | FY 2027            | FY 2027            | FY 2029 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 5,000               | -               | 5,000            | 1,000                        | -                   | -                  | -                  | 1,000               | 4,000              | -                  | -                  | -                  |         |  |  |
|      |         |      | 9212 Decon/Sorting and Segmenting Facility                                                        | Scope modified to eliminate VTR work and align funding received with subcontract work.                                                                                                                                                                                                      | 100%          |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2019       |                           |                     |                 |                  |                              |                     |                    |                    |                     | N/A                | FY 2024            | FY 2022            | FY 2026            | FY 2026 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 9,600               | 10,700          | 10,700           | 694                          | 10,700              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      | 9215 Demo & Modification of High Bay Rack Area                                                    | As originally notified                                                                                                                                                                                                                                                                      | 30%           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2025            | FY 2025            | FY 2024            | FY 2026            | FY 2027 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 7,500               | 11,300          | 14,792           | 2,300                        | 2,300               | -                  | -                  | 12,492              | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      | 9215 Dock Modification                                                                            | As originally notified                                                                                                                                                                                                                                                                      | 30%           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2024            | FY 2025            | FY 2025            | FY 2026            | FY 2027 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 5,500               | 5,500           | 8,754            | 1,500                        | -                   | -                  | 1,500              | -                   | 7,254              | -                  | -                  | -                  |         |  |  |
|      |         |      | 9215 Liquid Transfer Station                                                                      | As originally notified                                                                                                                                                                                                                                                                      | 0%            |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2025            | FY 2025            | FY 2026            | FY 2026            | FY 2027 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 7,000               | 13,700          | 8,044            | 1,500                        | -                   | -                  | 1,500              | -                   | -                  | 6,544              | -                  | -                  |         |  |  |
|      |         |      | 9215 Security Fiber Line                                                                          | Install new security fiber optic lines for 9215                                                                                                                                                                                                                                             | 30%           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |  |  |
|      |         |      |                                                                                                   |                                                                                                                                                                                                                                                                                             | FY 2026       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2024            | FY 2027            | FY 2024            | FY 2024            | FY 2027 |  |  |
| WA   | PM      | Y-12 |                                                                                                   |                                                                                                                                                                                                                                                                                             |               |                           | 10,000              | -               | 9,500            | 1,500                        | 1,500               | 8,000              | -                  | -                   | -                  | -                  | -                  | -                  |         |  |  |

|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | ✓                                               | ✓                   |                                                 |              |  | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------|-------------------------------------------------|--------------|--|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | New Notif.                                      | Auth. - Con. Design | Percent Complete                                |              |  | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title                                             | Project Description                                                                                                                                                                                                                                                 |                                                 |                     | Original TEC                                    | Previous TEC |  | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2024 FY 2024 FY 2025 FY 2026 FY 2026 FY 2027 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | 9995 Dock 12 Modifications                                | As originally notified                                                                                                                                                                                                                                              |                                                 |                     | 5,500                                           | 5,500        |  | 7,854         | 1,500                  | -                | -               | 1,500           | 6,354            |                 | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2024 FY 2025 FY 2025 FY 2026 FY 2026 FY 2027 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | 9995 Liquid Transfer Station                              | As originally notified                                                                                                                                                                                                                                              |                                                 |                     | 7,000                                           | 13,700       |  | 10,854        | 1,500                  | -                | -               | 1,500           | 9,354            | -               | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2026 FY 2027 FY 2029 FY 2026 FY 2027 FY 2029 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | Binary Demonstration Facility                             | Construct a 20k square foot non-nuclear facility necessary for demonstrating alloying technologies at production scale.                                                                                                                                             |                                                 |                     | 34,000                                          | 34,000       |  | 34,000        | 2,000                  | -                | 34,000          | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2026 FY 2027 FY 2030 FY 2026 FY 2027 FY 2030 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | CA28 Utility Upgrade                                      | Upgrade Utilities for CA28                                                                                                                                                                                                                                          |                                                 |                     | 27,600                                          | -            |  | 22,600        | 2,000                  | -                | -               | 2,000           | 20,600           | -               | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2025 FY 2025 FY 2028 FY 2025 FY 2025 FY 2028 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | Direct Chip Melt Compaction Associated Minor Construction | Associated construction for the Direct Chip Melt Bottom Loading Furnaces Chip Compaction Subproject. Construction will enable installation of the capability to compact received chips. TEC includes design and other costs previously miscategorized as MIE scope. |                                                 |                     | <5,000                                          | 12,300       |  | 12,300        | 1,100                  | 1,100            | 2,500           | 8,700           | -                | -               | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | ✓                                               |                     | FY 2027 FY 2028 FY 2030 FY 2027 FY 2027 FY 2027 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | DUM Storage Facility                                      | Constructing a new storage facility to support DU storage.                                                                                                                                                                                                          |                                                 |                     | 10,000                                          | -            |  | 5,000         | 500                    | -                | -               | -               | 5,000            | -               | -               | -               | -               |
|      |         |      |                                                           |                                                                                                                                                                                                                                                                     | FY 2025 FY 2025 FY 2027 FY 2025 FY 2026 FY 2028 |                     |                                                 |              |  |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | PM      | Y-12 | GMM 9201-01 Can Anneal Furn Assoc Construction            | As originally notified, cost growth                                                                                                                                                                                                                                 |                                                 |                     | 5,000                                           | 5,000        |  | 9,800         | 2,000                  | -                | 500             | 9,300           | -                | -               | -               | -               | -               |

|      |         |      | Icons<br>☒ ☒ ☒                                       |                                                                                                                         | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |         |  |  |
|------|---------|------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|---------|--|--|
|      |         |      |                                                      |                                                                                                                         | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |         |  |  |
| Appr | Program | Site | Project Title                                        | Project Description                                                                                                     |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |         |  |  |
|      |         |      |                                                      |                                                                                                                         | FY 2026       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |  |  |
|      |         |      |                                                      |                                                                                                                         | 1%            |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2026            | FY 2026            | FY 2028            | FY 2026            | FY 2027 | FY 2029 |  |  |
| WA   | PM      | Y-12 | GMM East End Argon Supply                            | Install new argon supply station for Alpha 1. Cost growth.                                                              |               |                           | 8,000               | 8,000           | 13,288           | 2,460                        | -                   | -                  | 2,460              | 10,828              | -                  | -                  | -                  | -                  |         |         |  |  |
|      |         |      |                                                      |                                                                                                                         | FY 2026       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2026            | FY 2028            | FY 2026            | FY 2026            | FY 2028 |         |  |  |
| WA   | PM      | Y-12 | Quality Ops Modernization (QOM) 9737 Mass Lab        | Construct new mass lab in 9737                                                                                          |               |                           | 9,300               | -               | 9,300            | 900                          | -                   | -                  | 900                | 8,400               | -                  | -                  | -                  | -                  |         |         |  |  |
|      |         |      | ☒                                                    |                                                                                                                         | ✓             |                           | -                   |                 | FY 2027          | FY 2027                      | FY 2029             | FY 2027            | FY 2027            | FY 2029             |                    |                    |                    |                    |         |         |  |  |
| WA   | PM      | Y-12 | QOM 5N 2 MeV Linatron #2 Assoc Constr                | Facility mods associated with install of Linatron #2.                                                                   |               |                           | 8,000               | -               | 8,000            | 1,000                        | -                   | -                  | -                  | 1,000               | 7,000              | -                  | -                  | -                  |         |         |  |  |
|      |         |      |                                                      |                                                                                                                         | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     | N/A                | FY 2025            | FY 2028            | FY 2028            | FY 2030 |         |  |  |
| WA   | PM      | Y-12 | UM Bldg 9204-2E Sample Capability Assoc Construction | As originally notified; cost escalation                                                                                 |               |                           | 6,500               | 7,680           | 11,650           | 750                          | -                   | -                  | -                  | -                   | 750                | 10,900             | -                  | -                  |         |         |  |  |
|      |         |      |                                                      |                                                                                                                         | FY 2026       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2026            | FY 2028            | FY 2027            | FY 2027            | FY 2029 |         |  |  |
| WA   | PM      | Y-12 | Lithium Modular Salvage Unit                         | Associated construction of modular facilities to house capabilities related to lithium recycling operations.            |               |                           | 33,000              | -               | 33,000           | 3,000                        | -                   | -                  | -                  | 3,000               | 30,000             | -                  | -                  | -                  |         |         |  |  |
|      |         |      | ☒                                                    |                                                                                                                         | ✓             |                           | -                   |                 | FY 2026          | FY 2027                      | FY 2029             | FY 2027            | FY 2027            | FY 2029             |                    |                    |                    |                    |         |         |  |  |
| WA   | PM      | Y-12 | Lithium Modular Deuterium Gas Unit                   | Associated construction of modular facilities to house capabilities related to lithium deuteride processing operations. |               |                           | 30,000              | -               | 30,000           | 3,000                        | -                   | -                  | -                  | 30,000              | -                  | -                  | -                  | -                  |         |         |  |  |
|      |         |      | ☒                                                    |                                                                                                                         | ✓             |                           | -                   |                 | FY 2026          | FY 2027                      | FY 2027             | FY 2026            | FY 2027            | FY 2028             |                    |                    |                    |                    |         |         |  |  |
| WA   | PM      | Y-12 | Building 9201-5N Demo and Cleanout                   | Associated construction to coating equipment installation                                                               |               |                           | 17,340              | -               | 17,340           | 800                          | -                   | -                  | 17,340             | -                   | -                  | -                  | -                  | -                  |         |         |  |  |
|      |         |      | ☒                                                    |                                                                                                                         | ✓             |                           | -                   |                 | FY 2027          | FY 2027                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |         |         |  |  |
| WA   | PM      | Y-12 | Lithium Electrolytic Cell Scrubber/Dike Relocation   | Associated construction to relocate and affix the new scrubber and dike system to the Beta-2 building.                  |               |                           | 8,000               | -               | 8,000            | 800                          | -                   | -                  | -                  | 8,000               | -                  | -                  | -                  | -                  |         |         |  |  |
| WA   | PM      |      |                                                      | SUBTOTAL                                                                                                                |               |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 119,645            | 143,953            | 267,233             | 99,981             | 137,432            | 67,312             | 62,848             |         |         |  |  |

|      |         |      | Icons<br>⚠️❌⚡                                          |                                                                                                  | ✓          | ✓                   |                  |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Appr | Program | Site |                                                        |                                                                                                  | New Notif. | Auth. - Con. Design | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
|      |         |      | Project Title                                          | Project Description                                                                              |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                                                        |                                                                                                  | N/A        | N/A                 | N/A              |              | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |
| WA   | SRT&E   | N/A  | MC (TEC <\$5M)                                         | N/A                                                                                              |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 3,223           | 3,287           | 3,353            | 3,420           | 3,489           | 3,558           | 3,630           |
|      |         |      | ⚡                                                      |                                                                                                  | ✓          |                     | -                |              | FY 2029       | FY 2029                | FY 2031          | FY 2029         | FY 2029         | FY 2031          |                 |                 |                 |                 |
| WA   | SRT&E   | LANL | SCC Electrical Expansion Project                       | Enabling Power Headroom for Future Platforms                                                     |            |                     | 30,000           | -            | 30,000        | 1,500                  | -                | -               | -               | -                | -               | 1,500           | 28,500          | -               |
|      |         |      |                                                        |                                                                                                  |            |                     | 25%              |              | FY 2022       | FY 2022                | FY 2024          | FY 2022         | FY 2022         | FY 2026          |                 |                 |                 |                 |
| WA   | SRT&E   | LANL | SCC Electrical Upgrades                                | As originally notified                                                                           |            |                     | 15,000           | 18,400       | 20,821        | 1,135                  | 20,821           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      | ⚡                                                      |                                                                                                  | ✓          |                     | -                |              | FY 2030       | FY 2030                | FY 2032          | FY 2030         | FY 2030         | FY 2032          |                 |                 |                 |                 |
| WA   | SRT&E   | LANL | SCC Power Distribution Project                         | Power allocation across computing zones                                                          |            |                     | 25,000           | -            | 25,000        | 1,500                  | -                | -               | -               | -                | -               | -               | 1,500           | 23,500          |
|      |         |      | ⚡                                                      |                                                                                                  | ✓          |                     | -                |              | FY 2028       | FY 2028                | FY 2030          | FY 2028         | FY 2028         | FY 2030          |                 |                 |                 |                 |
| WA   | SRT&E   | LANL | SCC Warm Water Cooling Distribution Project            | Maximizing Cooling Efficiency and Flexibility                                                    |            |                     | 30,000           | -            | 30,000        | 1,500                  | -                | -               | -               | -                | 1,500           | 28,500          | -               | -               |
|      |         |      | ⚡                                                      |                                                                                                  |            |                     | -                |              | FY 2023       | FY 2023                | FY 2026          | FY 2027         | FY 2028         | FY 2030          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | 3w Power Sensors                                       | Refurbish existing 58 power sensors and populate 36 additional power sensors on the inner cones. |            |                     | 19,900           | 19,900       | 7,040         | 1,100                  | -                | -               | -               | 1,100            | 1,980           | 1,980           | 1,980           | -               |
|      |         |      |                                                        |                                                                                                  |            |                     | -                |              | FY 2024       | FY 2024                | FY 2026          | FY 2025         | FY 2026         | FY 2031          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | Beam Blockers                                          | As originally notified                                                                           |            |                     | 28,000           | 28,000       | 31,600        | 1,000                  | -                | 1,000           | 8,000           | 5,650            | 5,650           | 5,650           | 5,650           | -               |
|      |         |      |                                                        |                                                                                                  |            |                     | -                |              | FY 2025       | FY 2025                | FY 2027          | FY 2028         | FY 2028         | FY 2029          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | Bldg 451 Power and Cooling Improvements/Mo difications | As originally notified                                                                           |            |                     | 7,500            | 7,500        | 7,500         | 750                    | -                | -               | -               | -                | 7,500           | -               | -               | -               |
|      |         |      |                                                        |                                                                                                  |            |                     | -                |              | FY 2023       | FY 2023                | FY 2026          | FY 2026         | FY 2027         | FY 2029          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | Blue Blockers                                          | As originally notified                                                                           |            |                     | 18,400           | 18,400       | 15,485        | 740                    | -                | -               | 4,400           | 3,620            | 5,430           | 2,035           | -               | -               |



|      |         |      | Icons<br>✖ ↻                                                  |                                                                                                                         | ✓          | ✓                   |                  |              |  | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------|---------------------|------------------|--------------|--|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Appr | Program | Site |                                                               |                                                                                                                         | New Notif. | Auth. - Con. Design | Percent Complete |              |  | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
|      |         |      | Project Title                                                 | Project Description                                                                                                     |            |                     | Original TEC     | Previous TEC |  | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      | ↻                                                             |                                                                                                                         | ✓          | FY 2028             |                  |              |  | FY 2028       | FY 2029                |                  | FY 2028         | FY 2028         | FY 2029          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B453 ATS - 6 Site Prep                                        | Site preparation for the high performance computing Advanced Technology System-6 (ATS-6) system                         |            |                     | 22,000           | -            |  | 22,000        | 2,200                  | -                | -               | -               | -                | 2,200           | 19,800          | -               | -               |
|      |         |      | ↻                                                             |                                                                                                                         | ✓          | FY 2030             |                  |              |  | FY 2030       | FY 2031                |                  | FY 2030         | FY 2030         | FY 2031          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B453 ATS Power Improvements/Mo difications                    | Modify/improve power and cooling in B453 for Advanced Technology System (ATS) high performance computing capabilities.  |            |                     | 5,000            | -            |  | 5,000         | 500                    | -                | -               | -               | -                | -               | -               | 5,000           | -               |
|      |         |      | ✖                                                             |                                                                                                                         | ✓          | FY 2027             |                  |              |  | FY 2027       | FY 2028                |                  | FY 2027         | FY 2027         | FY 2028          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B453 CTS Power and Cooling Improvements/Mo difications        | Modify/improve power and cooling in B453 for Commodity Technology System (CTS) high performance computing capabilities. |            |                     | 7,500            | -            |  | 7,500         | 750                    | -                | -               | -               | 7,500            | -               | -               | -               | -               |
|      |         |      | ↻                                                             |                                                                                                                         | ✓          | FY 2030             |                  |              |  | FY 2030       | FY 2031                |                  | FY 2030         | FY 2030         | FY 2031          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B453 DDC Upgrade                                              | Upgrade of the Direct Digital Control (DDC) in B453 to maintain the high performance computing environment.             |            |                     | 10,000           | -            |  | 10,000        | 1,000                  | -                | -               | -               | -                | -               | -               | 1,000           | 9,000           |
|      |         |      |                                                               |                                                                                                                         |            | FY 2026             |                  |              |  | FY 2026       | FY 2027                |                  | FY 2026         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B654 Post CTS-2 Power and Cooling Improvements/Mo difications | Modify/improve power and cooling in B654 for Commodity Technology System (CTS) high performance computing capabilities. |            |                     | 15,000           | 15,000       |  | 15,000        | 1,500                  | -                | -               | 15,000          | -                | -               | -               | -               | -               |
|      |         |      | ↻                                                             |                                                                                                                         | ✓          | FY 2029             |                  |              |  | FY 2029       | FY 2030                |                  | FY 2029         | FY 2029         | FY 2030          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B453 CTS Power and Cooling Improvements/Mo difications        | Modify/improve power and cooling in B453 for Commodity Technology System (CTS) high performance computing capabilities. |            |                     | 10,000           | -            |  | 10,000        | 1,000                  | -                | -               | -               | -                | -               | 1,000           | 9,000           | -               |
|      |         |      | ↻                                                             |                                                                                                                         | ✓          | FY 2031             |                  |              |  | FY 2031       | FY 2032                |                  | FY 2031         | FY 2031         | FY 2032          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | B654 Post CTS-3 Power and Cooling Improvements/Mo difications | Modify/improve power and cooling in B654 for Commodity Technology System (CTS) high performance computing capabilities. |            |                     | 5,000            | -            |  | 5,000         | 500                    | -                | -               | -               | -                | -               | -               | -               | 5,000           |

|      |         |      |                                                                |                                                                                                                                                                                                         | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |  |  |
|------|---------|------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|--|--|
|      |         |      | Icons<br>✖ ↻                                                   |                                                                                                                                                                                                         | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |  |  |
| Appr | Program | Site | Project Title                                                  | Project Description                                                                                                                                                                                     |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |  |  |
|      |         |      | ✖                                                              |                                                                                                                                                                                                         | ✓             | FY 2026                   |                     |                 |                  |                              |                     |                    |                    |                     | FY 2026            | FY 2027            | FY 2027            | FY 2027            | FY 2028 |  |  |
| WA   | SRT&E   | LLNL | B453 AI/ML Improvements/Mo<br>difications                      | Modify/Improve B453 for Artificial Intelligence/Machine Learning High Performance Computing capabilities.                                                                                               |               |                           | 15,000              | -               | 15,000           | 1,500                        | -                   | -                  | -                  | 15,000              | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      |                                                                |                                                                                                                                                                                                         | FY 2025       |                           |                     |                 |                  |                              |                     |                    |                    | FY 2026             | FY 2029            | FY 2026            | FY 2027            | FY 2031            |         |  |  |
| WA   | SRT&E   | LLNL | Multi-Pass Amplifier (MPA) Gain Stability                      | As originally notified                                                                                                                                                                                  |               |                           | 24,000              | 24,000          | 25,275           | 4,900                        | -                   | -                  | 8,025              | 4,140               | 4,140              | 4,140              | 4,830              | -                  |         |  |  |
|      |         |      |                                                                |                                                                                                                                                                                                         | -             |                           |                     |                 |                  |                              |                     |                    |                    | N/A                 | N/A                | FY 2026            | FY 2027            | FY 2027            | FY 2029 |  |  |
| WA   | SRT&E   | LLNL | Neutron Imaging System - Polar (previously NIS Equator 90-213) | As originally notified                                                                                                                                                                                  |               |                           | 6,700               | 6,700           | 6,700            | 1,700                        | -                   | -                  | -                  | 1,700               | 5,000              | -                  | -                  | -                  |         |  |  |
|      |         |      |                                                                |                                                                                                                                                                                                         | -             |                           |                     |                 |                  |                              |                     |                    |                    | N/A                 | N/A                | FY 2025            | FY 2026            | FY 2026            | FY 2028 |  |  |
| WA   | SRT&E   | LLNL | NIF High Resolution, neutron-hardened VISAR                    | As originally notified                                                                                                                                                                                  |               |                           | 7,230               | 7,230           | 7,230            | 1,700                        | -                   | -                  | 7,230              | -                   | -                  | -                  | -                  | -                  |         |  |  |
|      |         |      |                                                                |                                                                                                                                                                                                         | -             |                           |                     |                 |                  |                              |                     |                    |                    | FY 2026             | FY 2027            | FY 2027            | FY 2026            | FY 2027            | FY 2027 |  |  |
| WA   | SRT&E   | LLNL | Lower Hemisphere Platforms                                     | Replace temporary unergonomic scaffolds on the lower-hemisphere Integrated Optics Modules (IOM) with permanent work platforms like those installed in the upper-hemisphere for IOM optics transactions. |               |                           | 6,200               | -               | 6,200            | 3,000                        | -                   | -                  | 3,800              | 2,400               | -                  | -                  | -                  | -                  |         |  |  |

|      |         |      |                                                                         |                |            |                     |                  |        | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|-------------------------------------------------------------------------|----------------|------------|---------------------|------------------|--------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                                                                         | Icons<br>⚠️❌⚠️ | ✓          | ✓                   | Percent Complete |        | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title                                                           |                | New Notif. | Auth. - Con. Design |                  |        | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                                                                         |                | ✓          |                     | -                |        | FY 2027       | FY 2027                | FY 2029          | FY 2027         | FY 2027         | FY 2029          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | Second Glovebox for the Tritium Delivery System                         |                |            |                     | 8,000            | -      | 8,000         | 1,300                  | -                | -               | -               | 8,000            | -               | -               | -               | -               |
|      |         |      |                                                                         |                |            |                     | -                |        | FY 2025       | FY 2026                | FY 2028          | FY 2027         | FY 2028         | FY 2030          |                 |                 |                 |                 |
| WA   | SRT&E   | LLNL | Vacuum Enclosed Phase Plates                                            |                |            |                     | 5,900            | 5,900  | 5,900         | 2,700                  | -                | -               | -               | 2,700            | 3,200           | -               | -               | -               |
|      |         |      |                                                                         |                | ✓          |                     | -                |        | FY 2026       | FY 2026                | FY 2028          | FY 2026         | FY 2026         | FY 2028          |                 |                 |                 |                 |
| WA   | SRT&E   | PNNL | Secure AI Compute Capabilities in the National Security Research Campus |                |            |                     | 28,000           | -      | 28,000        | 3,000                  | -                | -               | 28,000          | -                | -               | -               | -               | -               |
|      |         |      |                                                                         |                |            |                     | -                |        | FY 2026       | FY 2026                | FY 2027          | FY 2026         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| WA   | SRT&E   | PX   | 12-44 Cell 1 Refurb and Updates                                         |                |            |                     | 7,710            | -      | 7,710         | 1,000                  | -                | -               | 7,710           | -                | -               | -               | -               | -               |
|      |         |      |                                                                         |                |            |                     | 93%              |        | N/A           | N/A                    | FY 2022          | FY 2022         | FY 2025         | FY 2026          |                 |                 |                 |                 |
| WA   | SRT&E   | SNL  | 4MW Power Upgrade for 725 HPC Facility                                  |                |            |                     | 5,500            | 5,600  | 5,600         | 500                    | 5,600            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                         |                |            |                     | 77%              |        | N/A           | N/A                    | FY 2024          | FY 2023         | FY 2025         | FY 2026          |                 |                 |                 |                 |
| WA   | SRT&E   | SNL  | 725E Cooling Capacity Expansion                                         |                |            |                     | 9,500            | 14,700 | 14,700        | 100                    | 14,700           | -               | -               | -                | -               | -               | -               | -               |

|      |         |        | Icons<br>8X4                                                          |                                                                                                                                                                                                                                                                                 | ✓             | ✓                         |                     |                 |  | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|--------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|--|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| Appr | Program | Site   |                                                                       |                                                                                                                                                                                                                                                                                 | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |  | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
|      |         |        | Project Title                                                         | Project Description                                                                                                                                                                                                                                                             |               |                           | Original<br>TEC     | Previous<br>TEC |  | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | FY 2025       |                           |                     | -               |  | FY 2025          | FY 2029                      |                     | FY 2026            | FY 2026            | FY 2029             |                    |                    |                    |                    |
| WA   | SRT&E   | SNL    | Intermediate Data Center NDIC (formerly GPP Data Center 1)            | New Intermediate Data Center                                                                                                                                                                                                                                                    |               |                           | 34,000              | -               |  | 33,636           | 400                          | -                   | -                  | 3,420              | 30,216              | -                  | -                  | -                  | -                  |
| WA   | SRT&E   |        |                                                                       | SUBTOTAL                                                                                                                                                                                                                                                                        |               |                           | N/A                 | N/A             |  | N/A              | N/A                          | N/A                 | 4,223              | 88,872             | 85,379              | 40,020             | 68,094             | 61,018             | 41,130             |
| WA   | I&O     | N/A    | MC (TEC <\$5M)                                                        | N/A                                                                                                                                                                                                                                                                             | N/A           | N/A                       | N/A                 |                 |  | N/A              | N/A                          | N/A                 | N/A                | N/A                | N/A                 |                    |                    |                    |                    |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | FY 2024       |                           |                     | -               |  | FY 2024          | FY 2026                      |                     | FY 2026            | FY 2027            | FY 2029             |                    |                    |                    |                    |
| WA   | I&O     | KC NSC | Building 23 North Additive Manufacturing Expansion Buildout           | As originally notified                                                                                                                                                                                                                                                          |               |                           | 16,022              | 23,142          |  | 30,033           | 2,273                        | -                   | -                  | 2,273              | 27,760              | -                  | -                  | -                  | -                  |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | ✓             |                           | FY 2028             |                 |  | FY 2029          | FY 2030                      |                     | FY 2028            | FY 2029            | FY 2030             |                    |                    |                    |                    |
| WA   | I&O     | KC NSC | Building 23 North Advanced and Exploratory Technologies Area Buildout | The construction includes the buildout of electrical and mechanical distribution systems to prepare the space for equipment installations. Builds out infrastructure & capabilities for additional Research, Development, Test, & Evaluation (RDT&E) for future weapon systems. |               |                           | 17,545              | -               |  | 17,545           | 1,168                        | -                   | -                  | -                  | -                   | 1,168              | 16,377             | -                  | -                  |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | FY 2023       |                           |                     | 52%             |  | FY 2023          | FY 2024                      | FY 2026             | FY 2023            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| WA   | I&O     | KC NSC | Building 23 North Classification Upgrade                              | As originally notified                                                                                                                                                                                                                                                          |               |                           | 6,935               | 6,935           |  | 9,174            | 696                          | 9,174               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | FY 2023       |                           |                     | 42%             |  | FY 2023          | FY 2024                      |                     | FY 2023            | FY 2025            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | KCNSC  | Building 23 North Expansion Infrastructure Upgrades                   | As originally notified                                                                                                                                                                                                                                                          |               |                           | 18,243              | 27,368          |  | 29,368           | 1,868                        | 4,868               | 24,500             | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |        |                                                                       |                                                                                                                                                                                                                                                                                 | FY 2024       |                           |                     | -               |  | FY 2024          | FY 2026                      |                     | FY 2029            | FY 2030            | FY 2031             |                    |                    |                    |                    |
| WA   | I&O     | KC NSC | Building 23 North Manufacturing Support Buildout                      | As originally notified                                                                                                                                                                                                                                                          |               |                           | 12,924              | 18,976          |  | 18,976           | 1,420                        | -                   | -                  | -                  | -                   | -                  | 1,420              | 17,556             | -                  |

|      |         |        |                                                                                     |                        | ✓          | ✓                   |                  |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|--------|-------------------------------------------------------------------------------------|------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |        |                                                                                     |                        | New Notif. | Auth. - Con. Design | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site   | Project Title                                                                       | Project Description    |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |        | Icons<br>✖ ↻                                                                        |                        |            |                     |                  |              | FY 2024       | FY 2024                | FY 2026          | FY 2027         | FY 2028         | FY 2029          |                 |                 |                 |                 |
| WA   | I&O     | KC NSC | Building 23 North Non-Destructive Testing & Environmental Lab Buildout              | As originally notified |            |                     | 15,959           | 22,312       | 15,470        | 1,547                  | -                | -               | -               | 1,547            | 13,923          | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     |                  |              | FY 2024       | FY 2024                | FY 2026          | FY 2026         | FY 2027         | FY 2029          |                 |                 |                 |                 |
| WA   | I&O     | KCNSC  | Building 23 North Surveillance Production Activities Expansion Buildout             | As originally notified |            |                     | 14,350           | 24,611       | 29,333        | 2,974                  | -                | -               | 2,974           | 26,359           | -               | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     |                  |              | N/A           | N/A                    | N/A              | FY 2027         | FY 2028         | FY 2029          |                 |                 |                 |                 |
| WA   | I&O     | KC NSC | Building 23 North Development Capabilities Conversion                               | As originally notified |            |                     | 19,585           | 19,585       | 26,425        | 2,631                  | -                | -               | -               | 2,631            | 23,794          | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     | 100%             |              | N/A           | N/A                    | FY 2026          | FY 2023         | FY 2023         | FY 2026          |                 |                 |                 |                 |
| WA   | I&O     | LLNL   | Building 133 Heating Hot Water System Upgrade                                       | As originally notified |            |                     | 7,950            | 10,000       | 10,000        | 650                    | 10,000           | -               | -               | -                | -               | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     | 97%              |              | FY 2023       | FY 2024                | FY 2025          | FY 2023         | FY 2023         | FY 2026          |                 |                 |                 |                 |
| WA   | I&O     | LLNL   | Building 151 Nuclear and Radiochemistry Facility Dissolver Laboratory Suite Upgrade | As originally notified |            |                     | 12,400           | 14,500       | 14,500        | 585                    | 14,500           | -               | -               | -                | -               | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     |                  |              | FY 2026       | FY 2026                | FY 2028          | FY 2027         | FY 2027         | FY 2029          |                 |                 |                 |                 |
| WA   | I&O     | LLNL   | Bldg 170 SE Wing Upgrade                                                            | As originally notified |            |                     | N/A              | 16,675       | 16,675        | 740                    | -                | -               | -               | 16,675           | -               | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     | 86%              |              | N/A           | N/A                    | FY 2026          | FY 2023         | FY 2024         | FY 2026          |                 |                 |                 |                 |
| WA   | I&O     | LLNL   | Building 190 CAMS SF6 Transfer Station Upgrade Bldg                                 | As originally notified |            |                     | 5,800            | 8,100        | 8,100         | 425                    | 8,100            | -               | -               | -                | -               | -               | -               | -               |
|      |         |        |                                                                                     |                        |            |                     | 96%              |              | FY 2022       | FY 2023                | FY 2025          | FY 2022         | FY 2023         | FY 2026          |                 |                 |                 |                 |
| WA   | I&O     | LLNL   | Building 331 Tritium Delivery System Upgrade                                        | As originally notified |            |                     | 19,450           | 25,650       | 25,650        | 1,650                  | 23,350           | 2,300           | -               | -                | -               | -               | -               | -               |

|      |         |      | Icons<br>⚠️❌⚠️                                                              |                                                                                                                                                                                                       | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|------|---------|------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|--|--|--|
|      |         |      |                                                                             |                                                                                                                                                                                                       | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |  |  |  |
| Appr | Program | Site | Project Title                                                               | Project Description                                                                                                                                                                                   |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       | FY<br>96%     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | Building 391<br>Optics and<br>Materials Science<br>Clean room<br>Conversion |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             | As originally notified                                                                                                                                                                                |               |                           | 19,000              | 21,000          | 21,000           | 1,400                        | 21,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       | FY<br>6%      |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | Building 411<br>Shipping and<br>Receiving Seismic<br>Upgrade                |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             | As originally notified                                                                                                                                                                                |               |                           | 19,220              | 19,220          | 19,220           | 915                          | -                   | 19,220             | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      | ⚠️                                                                          |                                                                                                                                                                                                       | ✓             | FY<br>-                   |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | Bldg 802A<br>Hydrotest Facility<br>Conversion                               | Project will rejuvenate<br>B802, a bunker building,<br>to be used as a training<br>facility for use of up to 20<br>occupants completing<br>optical and electrical<br>diagnostics, and<br>radiography. |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             |                                                                                                                                                                                                       |               |                           | 6,650               | -               | 6,650            | 575                          | -                   | -                  | -                  | -                   | 6,650              | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       | 97%           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL | Building 850<br>Upgrade                                                     | As originally notified                                                                                                                                                                                |               |                           | 7,000               | 10,400          | 10,400           | 400                          | 10,400              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       | FY<br>5%      |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | New Building 296<br>Energetic<br>Materials Office<br>Facility (STAR)        |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             | As originally notified                                                                                                                                                                                |               |                           | 27,875              | 27,875          | 27,875           | 925                          | -                   | 27,875             | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      | ⚠️                                                                          |                                                                                                                                                                                                       | ✓             | FY<br>-                   |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | New Network<br>Intelligence<br>Research Office<br>Facility (STAR)           | Construct a single-story<br>SCIF office building at<br>Site 200, utilizing the<br>NNSA STAR<br>methodology, to expand<br>the intelligence-driven<br>analytics workspace.                              |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             |                                                                                                                                                                                                       |               |                           | 33,700              | 33,700          | 33,700           | 1,775                        | -                   | -                  | -                  | 33,700              | -                  | -                  | -                  | -                  |  |  |  |  |  |
|      |         |      |                                                                             |                                                                                                                                                                                                       | FY<br>1%      |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
|      |         |      | New Site 200<br>Automated<br>Materials<br>Development<br>Facility (STAR)    |                                                                                                                                                                                                       |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |
| WA   | I&O     | LLNL |                                                                             | As originally notified                                                                                                                                                                                |               |                           | 28,545              | 28,545          | 28,545           | 1,325                        | -                   | 1,325              | 27,220             | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |

|      |         |      | Icons<br>✖ ↻ ↶                                                                                           |                                                                                                                                                                                                                                                                     | ✓                      | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                                          |                                                                                                                                                                                                                                                                     | New<br>Notif.          | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                                            | Project Description                                                                                                                                                                                                                                                 |                        |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ✖                                                                                                        | Project will construct an approximately 10,400 ft2 facility at the LLNL Site 300 location, using custom lab space designed to accommodate characterization and evaluation activities as well as protective structural design to conform to DOE HE safety standards. | ✓                      | FY 2028                   |                     |                 | FY 2029          | FY 2030                      | FY 2028             | FY 2029            | FY 2030            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL | New Site 300 Energetic Materials Characterization and Evaluation Center (EMCEC)                          |                                                                                                                                                                                                                                                                     |                        |                           | 33,600              | -               | 33,600           | 2,550                        | -                   | -                  | -                  | -                   | 2,550              | 31,050             | -                  | -                  |
|      |         |      | New Site 300 Energetic Materials Development Enclave Campus (EMDEC) Office Building and Site Development |                                                                                                                                                                                                                                                                     | 1%                     |                           |                     | FY 2026         | FY 2027          | FY 2028                      | FY 2026             | FY 2027            | FY 2028            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL |                                                                                                          |                                                                                                                                                                                                                                                                     | As originally notified |                           | 31,577              | 31,577          | 31,577           | 1,877                        | 1,877               | -                  | -                  | 29,700              | -                  | -                  | -                  | -                  |
|      |         |      | ✖                                                                                                        | Construct an ~14,000 sqft facility at the LLNL Site 300 location, using custom lab space designed to accommodate new agile technologies to develop, qualify and produce high explosives.                                                                            | ✓                      | FY 2027                   |                     |                 | FY 2028          | FY 2029                      | FY 2027             | FY 2028            | FY 2029            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL | New Site 300 Energetic Materials Manufacturing Science Facility (EMMSF)                                  |                                                                                                                                                                                                                                                                     |                        |                           | 33,400              | 33,400          | 33,400           | 2,125                        | -                   | -                  | -                  | 2,125               | 31,275             | -                  | -                  | -                  |
|      |         |      | ✖                                                                                                        | Construct a single-story office building containing an estimated 70 offices in the GSA area of Site 300 to support the research and testing.                                                                                                                        | ✓                      | FY 2027                   |                     |                 | FY 2028          | FY 2029                      | FY 2027             | FY 2028            | FY 2029            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL | New Site 300 Stockpile Modernization & Production Office                                                 |                                                                                                                                                                                                                                                                     |                        |                           | 33,400              | 33,400          | 33,400           | 1,565                        | -                   | -                  | -                  | 33,400              | -                  | -                  | -                  | -                  |
|      |         |      | Site 200 U791 and U792 Electrical Utility Substation Upgrade                                             |                                                                                                                                                                                                                                                                     | -                      |                           |                     | FY 2024         | FY 2025          | FY 2026                      | FY 2028             | FY 2029            | FY 2030            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL |                                                                                                          |                                                                                                                                                                                                                                                                     | As originally notified |                           | 22,850              | 24,905          | 29,000           | 1,444                        | -                   | -                  | -                  | -                   | 29,000             | -                  | -                  | -                  |
|      |         |      | Site 300 Bldg 843 Corp Yard Upgrade                                                                      |                                                                                                                                                                                                                                                                     | -                      |                           |                     | FY 2026         | FY 2026          | FY 2028                      | FY 2027             | FY 2027            | FY 2029            |                     |                    |                    |                    |                    |
| WA   | I&O     | LLNL |                                                                                                          |                                                                                                                                                                                                                                                                     | As originally notified |                           | 5,980               | 5,980           | 5,980            | 255                          | -                   | -                  | -                  | 5,980               | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>☒ ☒ ☒ |                     | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|----------------|---------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                |                     | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title  | Project Description |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | 22%           |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
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|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                |                     | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                | </                  |               |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |



|      |         |      | Icons<br>☒☒☒                                                                   |                                                                                                                                                                                                                                                                                                                                                                       | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |         |         |  |
|------|---------|------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|---------|---------|--|
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |         |         |  |
| Appr | Program | Site | Project Title                                                                  | Project Description                                                                                                                                                                                                                                                                                                                                                   |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |         |         |  |
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | FY<br>100%    |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2022            | FY 2023            | FY 2023            | FY 2022            | FY 2022 | FY 2026 |         |  |
| WA   | I&O     | LANL | New TA-15<br>DARHT Hydro<br>Vessel Repair<br>Facility                          | As originally notified                                                                                                                                                                                                                                                                                                                                                |               |                           | 16,491              | 34,000          | 34,000           | 2,800                        | 34,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |         |  |
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | FY<br>100%    |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2021            | FY 2022            | FY 2023            | FY 2022            | FY 2022 | FY 2025 |         |  |
| WA   | I&O     | LANL | New TA-15 Flight<br>Instrumentation<br>Test Laboratory<br>(FITL) (STAR)        | As originally notified                                                                                                                                                                                                                                                                                                                                                |               |                           | 19,472              | 34,000          | 34,000           | 1,900                        | 34,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |         |  |
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | FY<br>71%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2021            | FY 2021            | FY 2023            | FY 2021            | FY 2023 | FY 2026 |         |  |
| WA   | I&O     | LANL | New TA-16 Fire<br>Station 5 (SPEAR)                                            | As originally notified                                                                                                                                                                                                                                                                                                                                                |               |                           | 18,600              | 33,614          | 33,614           | 1,900                        | 30,614              | 3,000              | -                  | -                   | -                  | -                  | -                  | -                  |         |         |         |  |
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | FY<br>77%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2022            | FY 2022            | FY 2023            | FY 2022            | FY 2024 | FY 2026 |         |  |
| WA   | I&O     | LANL | New TA-22<br>Detonator Storage<br>Magazines                                    | As originally notified                                                                                                                                                                                                                                                                                                                                                |               |                           | 11,137              | 11,137          | 11,137           | 1,437                        | 11,137              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |         |  |
|      |         |      |                                                                                |                                                                                                                                                                                                                                                                                                                                                                       | FY<br>-       |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2027            | FY 2028            | FY 2029            | FY 2027            | FY 2028 | FY 2031 |         |  |
| WA   | I&O     | LANL | New TA-22<br>Secure Detonator<br>Support and<br>Storage Facility<br>(STAR)     | As originally notified                                                                                                                                                                                                                                                                                                                                                |               |                           | 27,659              | 27,659          | 27,659           | 3,148                        | -                   | -                  | -                  | 27,659              | -                  | -                  | -                  | -                  |         |         |         |  |
|      |         |      | ☒                                                                              |                                                                                                                                                                                                                                                                                                                                                                       | ✓             | FY<br>-                   |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2028            | FY 2029            | FY 2032            | FY 2028 | FY 2029 | FY 2032 |  |
| WA   | I&O     | LANL | New TA-33<br>Global Security<br>Development and<br>Training Facility<br>(STAR) | Project is intended to<br>construct a single 4,000<br>square foot climate<br>controlled warehouse at a<br>location along Hot Point<br>Road in TA-33 and<br>reshape firing point<br>earthen berms at the end<br>of Hot Point Road. The<br>project will also extend<br>domestic and fire water<br>lines (8800 ft) along Hot<br>Point Road to serve the<br>new building. |               |                           | 18,400              | -               | 18,400           | 1,840                        | -                   | -                  | -                  | -                   | 18,400             | -                  | -                  | -                  |         |         |         |  |

|      |         |      |                                                              |                                                                                                                                                                                            | ✓             | ✓                         |                     |                 |  | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|--|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                              |                                                                                                                                                                                            | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |  | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Icons<br>Project Title                                       | Project Description                                                                                                                                                                        |               |                           | Original<br>TEC     | Previous<br>TEC |  | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                              |                                                                                                                                                                                            | ✓             |                           | -                   |                 |  | FY 2028          | FY 2029                      | FY 2031             | FY 2027            | FY 2028            | FY 2029             |                    |                    |                    |                    |
| WA   | I&O     | LANL | New TA-36 HE Storage Magazine Multiplex                      | Construct and install a new pre-manufactured 1,600 square foot armored magazine multiplex to store HE materials. The facility will meet Vault Type Room (VTR) construction specifications. |               |                           | 9,700               | -               |  | 9,700            | 975                          | -                   | -                  | -                  | 9,700               | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            |               |                           | 66%                 |                 |  | FY 2022          | FY 2022                      | FY 2022             | FY 2021            | FY 2022            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | LANL | PF-4 High Pressure Water Supply Feed Separation              | As originally notified                                                                                                                                                                     |               |                           | 10,277              | 11,327          |  | 24,977           | 1,259                        | 24,294              | 683                | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            |               |                           | 93%                 |                 |  | FY 2022          | FY 2022                      | FY 2023             | FY 2022            | FY 2023            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | LANL | TA-55 Fire Suppression Water Line for Program Facilities     | As originally notified                                                                                                                                                                     |               |                           | 13,895              | 13,894          |  | 18,523           | 579                          | 16,864              | 1,659              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            |               |                           | 6%                  |                 |  | N/A              | N/A                          | FY 2026             | FY 2024            | FY 2026            | FY 2030             |                    |                    |                    |                    |
| WA   | I&O     | LANL | TA-55 Fire Suppression Water Line for Security Facilities    | As originally notified                                                                                                                                                                     |               |                           | 9,472               | 9,794           |  | 15,735           | 1,287                        | 1,935               | -                  | -                  | 13,800              | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            |               |                           | 5%                  |                 |  | FY 2025          | FY 2026                      | FY 2027             | FY 2025            | FY 2026            | FY 2028             |                    |                    |                    |                    |
| WA   | I&O     | LANL | WETF Redundant Fire Loop Installation                        | As originally notified                                                                                                                                                                     |               |                           | 15,166              | 15,166          |  | 15,166           | 1,283                        | -                   | 1,283              | 13,883             | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            | ✓             |                           | -                   |                 |  | FY 2027          | FY 2028                      | FY 2030             | FY 2027            | FY 2028            | FY 2030             |                    |                    |                    |                    |
| WA   | I&O     | NNSS | 138kV Power Transmission System to Valley Substation Upgrade | Replaces 11 miles of overhead power lines at the NNSS and increase the power capacity and communication capabilities of the Power Transmission System.                                     |               |                           | 26,800              | -               |  | 26,800           | 2,600                        | -                   | -                  | -                  | 26,800              | -                  | -                  | -                  | -                  |
|      |         |      |                                                              |                                                                                                                                                                                            |               |                           | 6%                  |                 |  | FY 2025          | FY 2026                      | FY 2028             | FY 2025            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | NNSS | Area 6 Fleet Compound Water Line Upgrade                     | As originally notified                                                                                                                                                                     |               |                           | 17,000              | 17,000          |  | 17,000           | 2,100                        | -                   | 2,100              | 14,900             | -                   | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>✖ ✖ ✖                                                                                                         |                                                                                                                                                                                                                         | ✓                                                              | ✓                   | Percent Complete                                               |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |  |  |
|------|---------|------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------|----------------------------------------------------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|--|--|
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | New Notif.                                                     | Auth. - Con. Design |                                                                |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |  |  |
| Appr | Program | Site | Project Title                                                                                                          | Project Description                                                                                                                                                                                                     |                                                                |                     | Original TEC                                                   | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | FY 2025    FY 2026    FY 2028    FY 2025    FY 2026    FY 2028 |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | 2%                                                             |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
| WA   | I&O     | NNSS | Area DAF Watershed Drainage Upgrades (Previously DAF Area Watershed Drainage Upgrades)                                 | As originally notified                                                                                                                                                                                                  |                                                                |                     | 14,700                                                         | 14,700       | 14,700        | 900                    | -                | 900             | 13,800          | -                | -               | -               | -               | -               |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | FY 2025    FY 2026    FY 2027    FY 2025    FY 2026    FY 2027 |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
| WA   | I&O     | NNSS | DAF Workplace Upgrade                                                                                                  | As originally notified                                                                                                                                                                                                  |                                                                |                     | 9,700                                                          | 9,700        | 9,700         | 1,600                  | -                | 9,700           | -               | -                | -               | -               | -               | -               |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | FY 2026    FY 2027    FY 2028    FY 2028    FY 2029    FY 2030 |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | -                                                              |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
| WA   | I&O     | NNSS | Area 6 Tweezer Solar PV and Storage Installation (formerly New Area 6 Tweezer Solar PV and Storage))                   | As originally notified                                                                                                                                                                                                  |                                                                |                     | 27,500                                                         | 27,500       | 27,500        | 4,000                  | -                | -               | -               | -                | 27,500          | -               | -               | -               |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | FY 2024    FY 2025    FY 2027    FY 2024    FY 2026    FY 2028 |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | 7%                                                             |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
| WA   | I&O     | NNSS | Area 23 Mercury Solar PV & Storage Installation (formerly New Area 23 Mercury Solar PV & Storage Installation (ERICA)) | As originally notified                                                                                                                                                                                                  |                                                                |                     | 23,800                                                         | 23,800       | 23,800        | 3,600                  | 3,600            | -               | -               | 20,200           | -               | -               | -               | -               |  |  |
|      |         |      | ✖                                                                                                                      |                                                                                                                                                                                                                         | ✓                                                              |                     | FY 2027    FY 2028    FY 2029    FY 2027    FY 2028    FY 2029 |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                         | -                                                              |                     |                                                                |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |
| WA   | I&O     | NNSS | Mercury Materials Packaging and Surveillance Facility 23-474                                                           | Build a 16,000 GSF facility that can be customized to meet specific end user/program needs. The facility design will include standardized prototype facility that combines a high bay with administrative office space. |                                                                |                     | 33,300                                                         | -            | 33,300        | 2,300                  | -                | -               | -               | 33,300           | -               | -               | -               | -               |  |  |

|      |         |      | Icons<br>✖ ⌂ ↻                                                                                                               |                                                                                                                                                                                                                                       | ✓             | ✓                                                              |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |
|------|---------|------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|
|      |         |      |                                                                                                                              |                                                                                                                                                                                                                                       | New<br>Notif. | Auth. -<br>Con.<br>Design                                      | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |
| Appr | Program | Site | Project Title                                                                                                                | Project Description                                                                                                                                                                                                                   |               |                                                                | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |
|      |         |      | ↻                                                                                                                            | Mission Corridor water pumps, motors and electrical equipment will be installed at NNSS well houses and booster stations to improve reliability of the water system supplying domestic- and fire- water to PULSE (U1a), DAF, and RWMC | ✓             | FY 2028    FY 2029    FY 2031    FY 2027    FY 2028    FY 2029 |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | NNSS | Mission Corridor Water System Upgrades                                                                                       |                                                                                                                                                                                                                                       |               |                                                                | 21,000              | -               | 21,000           | 3,100                        | -                   | -                  | -                  | 21,000              | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                              |                                                                                                                                                                                                                                       |               |                                                                | 11%                 |                 | FY 2026          | FY 2027                      | FY 2028             | FY 2026            | FY 2026            | FY 2027             |                    |                    |                    |                    |  |  |
| WA   | I&O     | NNSS | New DAF Engineering & Maintenance Facility Bldg 06-541                                                                       | As originally notified                                                                                                                                                                                                                |               |                                                                | 25,800              | 25,800          | 27,800           | 1,400                        | 3,400               | -                  | 24,400             | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                              |                                                                                                                                                                                                                                       |               |                                                                | 100%                |                 | FY 2024          | FY 2024                      | FY 2026             | FY 2024            | FY 2024            | FY 2025             |                    |                    |                    |                    |  |  |
| WA   | I&O     | NNSS | New DAF Operations Support Facility Bldg. 06-540 (STAR) (Previously DAF New Operations Support Facility Bldg. 06-540 (STAR)) | As originally notified                                                                                                                                                                                                                |               |                                                                | 23,500              | 22,000          | 22,000           | 2,350                        | 22,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                              |                                                                                                                                                                                                                                       |               |                                                                | -                   |                 | FY 2027          | FY 2028                      | FY 2029             | FY 2028            | FY 2029            | FY 2030             |                    |                    |                    |                    |  |  |
| WA   | I&O     | NNSS | New Mercury Engineering and Training Facility 23-471 (formerly New Mercury Site Services Facility Bldg 23-463)               | As originally notified                                                                                                                                                                                                                |               |                                                                | 31,000              | 31,000          | 32,000           | 1,500                        | -                   | -                  | -                  | -                   | 32,000             | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                              |                                                                                                                                                                                                                                       |               |                                                                | 46%                 |                 | FY 2024          | FY 2025                      | FY 2028             | FY 2023            | FY 2024            | FY 2026             |                    |                    |                    |                    |  |  |
| WA   | I&O     | NNSS | New Principal Underground Laboratory for Subcritical Experimentation (PULSE) (formerly U1a) 02b Refuge Station               | As originally notified                                                                                                                                                                                                                |               |                                                                | 16,700              | 16,700          | 16,700           | 2,000                        | 16,700              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |

|      |         |      |                                                                                                                      |                                                                                                                                                              | ✓                                                              | ✓                         |                                                                |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|------|---------|------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------|----------------------------------------------------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|--|--|--|--|
|      |         |      |                                                                                                                      |                                                                                                                                                              | New<br>Notif.                                                  | Auth. -<br>Con.<br>Design | Percent<br>Complete                                            |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |  |  |  |  |
| Appr | Program | Site | Project Title                                                                                                        | Project Description                                                                                                                                          |                                                                |                           | Original<br>TEC                                                | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |  |  |  |  |
|      |         |      | Icons<br>✖ ↻ ↺                                                                                                       |                                                                                                                                                              |                                                                |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | FY 2023    FY 2024    FY 2025    FY 2024    FY 2027    FY 2028 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | 42%                                                            |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
| WA   | I&O     | NNSS | New PULSE (formerly U1a) Centralized Monitor and Control Center                                                      | As originally notified                                                                                                                                       |                                                                |                           | 12,000                                                         | 12,000          | 12,000           | 1,700                        | 1,700               | 10,300             | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | FY 2021    FY 2022    FY 2024    FY 2022    FY 2023    FY 2025 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | 100%                                                           |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
| WA   | I&O     | NNSS | New PULSE (formerly U1a) Operations Support Facility 01-380 (STAR) (formerly U1a Operations Support Facility 01-351) | As originally notified                                                                                                                                       |                                                                |                           | 19,500                                                         | 31,230          | 31,230           | 1,730                        | 31,230              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | FY 2022    FY 2023    FY 2025    FY 2022    FY 2023    FY 2027 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | 62%                                                            |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
| WA   | I&O     | NNSS | PULSE Fire Detection and Alarm System Upgrade Portfolio                                                              | As originally notified                                                                                                                                       |                                                                |                           | 4,500                                                          | 14,050          | 20,050           | 450                          | 20,050              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |  |
|      |         |      | ✖                                                                                                                    |                                                                                                                                                              | ✓                                                              |                           | FY 2027    FY 2028    FY 2030    FY 2027    FY 2028    FY 2030 |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              |                                                                |                           | -                                                              |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
| WA   | I&O     | NNSS | PULSE Lightning Protection Upgrades                                                                                  | Installs a lightning protection system for high-risk surface structures to reduce operational and personnel risk and potential experimental delays at PULSE. |                                                                |                           | 5,700                                                          | -               | 5,700            | 400                          | -                   | -                  | -                  | -                   | 5,700              | -                  | -                  | -                  |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | FY 2025    FY 2026    FY 2027    FY 2025    FY 2026    FY 2028 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
|      |         |      |                                                                                                                      |                                                                                                                                                              | 2%                                                             |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |  |  |  |
| WA   | I&O     | NNSS | RNCTEC & Substation Watershed Drainage Upgrades                                                                      | As originally notified                                                                                                                                       |                                                                |                           | 11,500                                                         | 11,500          | 11,500           | 500                          | -                   | 11,500             | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |  |  |  |

|      |         |      | Icons<br>⚠️❌⚠️                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                      | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                      | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                         | Project Description                                                                                                                                                                                                                                                                                                                                                                                  |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ⚠️                                                                                    | This project will replace one of the existing backup generators, and install a tie-in point to be used as a tie input for a temporary generator. Additionally, improvements are needed to the electrical rooms that house the UPS system. The HVAC system shall be replaced in the electrical rooms as the existing evaporative coolers cannot keep the rooms adequately cool for the UPS batteries. | ✓             | FY 2028                   |                     |                 | FY 2028          | FY 2029                      | FY 2031             | FY 2028            | FY 2029            | FY 2031             |                    |                    |                    |                    |
| WA   | I&O     | PX   | Bldg 12-98 Generator Upgrade                                                          |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 10,000          | -                | 10,000                       | 2,000               | -                  | -                  | -                   | -                  | 10,000             | -                  | -                  |
|      |         |      | ⚠️                                                                                    | This project will replace 18 software based PLCs at Building 12-104 with electro-mechanical systems.                                                                                                                                                                                                                                                                                                 | ✓             | FY 2028                   |                     |                 | FY 2028          | FY 2029                      | FY 2031             | FY 2028            | FY 2029            | FY 2031             |                    |                    |                    |                    |
| WA   | I&O     | PX   | Bldg 12-104 Blast Door Interlock PLC Upgrade                                          |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 18,600          | -                | 18,600                       | 4,000               | -                  | -                  | -                   | -                  | 18,600             | -                  | -                  |
|      |         |      |                                                                                       | As originally notified                                                                                                                                                                                                                                                                                                                                                                               | FY 2025       |                           |                     |                 |                  | FY 2025                      | FY 2026             | FY 2027            | FY 2025            | FY 2026             | FY 2027            |                    |                    |                    |
| WA   | I&O     | PX   | Building 15-33 Pump House and Tank Upgrades                                           |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 6,850           | 9,264            | 9,264                        | 1,000               | -                  | 9,264              | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       | As originally notified                                                                                                                                                                                                                                                                                                                                                                               | FY 2026       |                           |                     |                 |                  | FY 2026                      | FY 2027             | FY 2026            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | PX   | Building 15-34 Pump House and Tank Upgrades                                           |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 6,350           | 6,350            | 6,350                        | 1,000               | 6,350              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       | As originally notified                                                                                                                                                                                                                                                                                                                                                                               | FY 2026       |                           |                     |                 |                  | FY 2026                      | FY 2027             | FY 2026            | FY 2026            | FY 2027             |                    |                    |                    |                    |
| WA   | I&O     | PX   | Bldg 15-34 Pump House High Pressure Firewater Loop (HPFL) Secondary Feed Installation |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 7,850           | 7,850            | 7,850                        | 850                 | -                  | -                  | 7,850               | -                  | -                  | -                  | -                  |
|      |         |      | ⚠️                                                                                    | The proposed project would design and construct a new 17,500 ft2 (minimum) facility in the LA for storage of weapon containers.                                                                                                                                                                                                                                                                      | ✓             | FY 2028                   |                     |                 | FY 2028          | FY 2029                      | FY 2030             | FY 2028            | FY 2029            | FY 2030             |                    |                    |                    |                    |
| WA   | I&O     | PX   | New Classified Container Staging Facility                                             |                                                                                                                                                                                                                                                                                                                                                                                                      |               |                           |                     | 31,800          | -                | 31,800                       | 2,900               | -                  | -                  | -                   | -                  | 31,800             | -                  | -                  |

|      |         |      | Icons<br>✖ ↻ ↺                                                                       |                                                                                                                                                                                                                                                           | ✓          | ✓                   | Percent Complete |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
|------|---------|------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|---------|---------|---------|---------|--|--|
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | New Notif. | Auth. - Con. Design |                  |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |         |         |         |         |  |  |
| Appr | Program | Site | Project Title                                                                        | Project Description                                                                                                                                                                                                                                       |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | FY 2026    |                     |                  |              |               |                        |                  |                 |                 |                  | FY 2027         | FY 2028         | FY 2026         | FY 2027         | FY 2029 |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
| WA   | I&O     | PX   | New Zone 12 South Maintenance Facility                                               | As originally notified                                                                                                                                                                                                                                    |            |                     | 24,300           | 24,300       | 24,300        | 2,000                  | -                | -               | 24,300          | -                | -               | -               | -               | -               |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | ✓          |                     | FY 2027          |              |               |                        |                  |                 |                 |                  |                 |                 | FY 2028         | FY 2030         | FY 2027 | FY 2028 | FY 2030 |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
| WA   | I&O     | PX   | New Zone 12 South HPFL Tank & Pump House                                             | The scope of this project will design and install a new pump house facility to include a new fire water storage tank to replace the 15-024A pump house and 15-024 storage tank. This work will reinforce the response capabilities of the HPFL at Pantex. |            |                     | 25,168           | -            | 25,168        | 2,000                  | -                | -               | -               | 5,000            | 20,168          | -               | -               | -               |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | 17%        |                     |                  |              |               |                        |                  |                 |                 |                  | FY 2024         | FY 2025         | FY 2026         | FY 2024         | FY 2025 | FY 2027 |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
| WA   | I&O     | PX   | South Main Substation Switchgear, Capacitor Bank, & Controller Upgrade - 100 Circuit | As originally notified                                                                                                                                                                                                                                    |            |                     | 12,625           | 12,625       | 19,315        | 1,900                  | 1,900            | 10,725          | 6,690           | -                | -               | -               | -               | -               |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  | FY 2027         | FY 2028         | FY 2029         | FY 2027         | FY 2028 | FY 2029 |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
| WA   | I&O     | PX   | South Main Substation Switchgear, Capacitor Bank, & Controller Upgrade - 200 Circuit | As originally notified                                                                                                                                                                                                                                    |            |                     | 16,600           | 16,600       | 16,600        | 700                    | -                | -               | -               | 6,500            | 10,100          | -               | -               | -               |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | ✓          |                     | -                |              |               |                        |                  |                 |                 |                  |                 |                 | FY 2027         | FY 2028         | FY 2030 | FY 2027 | FY 2028 | FY 2030 |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |         |         |         |         |  |  |
| WA   | I&O     | PX   | New Zone 4 Material Receipt & Staging Support Facility                               | This project will construct a new storage facility across the street from the Zone 4 gate as a part of the Zone 4 Bridging Strategy to house Enhanced Cargo Restraints and store Transportation equipment that directly impacts operations.               |            |                     | 11,800           | -            | 11,800        | 550                    | -                | -               | -               | 11,800           | -               | -               | -               | -               |         |         |         |         |  |  |
|      |         |      |                                                                                      |                                                                                                                                                                                                                                                           | -          |                     |                  |              |               |                        |                  |                 |                 |                  | FY 2026         | FY 2027         | FY 2028         | FY 2026         | FY 2027 | FY2028  |         |         |  |  |
| WA   | I&O     | PX   | Zone 12 Sectional Switch Upgrades                                                    | As originally notified                                                                                                                                                                                                                                    |            |                     | 9,000            | 9,000        | 9,000         | 1,400                  | -                | -               | 1,400           | 7,600            | -               | -               | -               | -               |         |         |         |         |  |  |

|      |         |      | Icons<br>🏠🔧📊                                                               |                                                                                                                                                                   | ✓                                               | ✓                         |                                                 |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------|-------------------------------------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                            |                                                                                                                                                                   | New<br>Notif.                                   | Auth. -<br>Con.<br>Design | Percent<br>Complete                             |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                              | Project Description                                                                                                                                               |                                                 |                           | Original<br>TEC                                 | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                            |                                                                                                                                                                   | FY<br>1%2026FY 2027FY 2028FY 2025FY 2027FY 2029 |                           |                                                 |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Bldg 827 PSL Mechanical Calibration Lab Addition                           | As originally notified                                                                                                                                            |                                                 |                           | 24,525                                          | 24,525          | 24,525           | 1,950                        | -                   | 1,950              | -                  | 22,575              | -                  | -                  | -                  | -                  |
|      |         |      | 🏠🔧                                                                         |                                                                                                                                                                   | ✓                                               |                           | FY<br>-2027FY 2027FY 2028FY 2027FY 2027FY 2028  |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | MESA Bldg 858N Generator Installation                                      | Provide a 3.9 MW standby generator to sustain and protect the B858N SiFab at MESA in the event of an extended power outage.                                       |                                                 |                           | 8,000                                           | 8,000           | 8,000            | 50                           | -                   | -                  | -                  | 8,000               | -                  | -                  | -                  | -                  |
|      |         |      | 🏠🔧                                                                         |                                                                                                                                                                   | ✓                                               |                           | FY<br>-2027FY 2028FY 2029FY 2027FY 2028FY 2029  |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Bldg 899A Central Utility Building (CUB) Chilled Water Upgrade             | This project will replace the four (4) chillers, four (4) cooling towers, associated pumps and controls, and provide redundant/dual power feeds in the B899A CUB. |                                                 |                           | 18,500                                          | 18,500          | 18,500           | 1,850                        | -                   | -                  | -                  | 1,850               | 16,650             | -                  | -                  | -                  |
|      |         |      | 🏠🔧                                                                         |                                                                                                                                                                   | ✓                                               |                           | FY<br>-2027FY 2027FY 2028FY 2027FY 2027FY 2028  |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Building 983 (Z Machine) HVAC Upgrade                                      | Remove the existing evaporative coolers and associated equipment and replace with four (4) new chilled/hot water (CW/HW) AHUs.                                    |                                                 |                           | 18,000                                          | 18,000          | 18,000           | 250                          | -                   | -                  | -                  | 18,000              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                            |                                                                                                                                                                   |                                                 |                           | 100%N/AN/AFY 2025FY 2023FY 2024FY 2025          |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Building 6530 High Radiation Laboratory Upgrade (AKA LINAC in TA-III)      | As originally notified                                                                                                                                            |                                                 |                           | 5,400                                           | 5,400           | 3,650            | 400                          | 3,650               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                            |                                                                                                                                                                   |                                                 |                           | 100%N/AN/AFY 2024FY 2021FY 2022FY 2025          |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Building 6715 Light Initiated High Explosive (LIHE) Test Facility Upgrades | As originally notified                                                                                                                                            |                                                 |                           | 7,000                                           | 22,910          | 20,910           | 750                          | 20,910              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                            |                                                                                                                                                                   |                                                 |                           | FY<br>1%2025FY 2025FY 2026FY 2025FY 2025FY 2028 |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | Burn Site Electrical Upgrade                                               | As originally notified                                                                                                                                            |                                                 |                           | 5,374                                           | 5,374           | 5,374            | 586                          | -                   | 5,374              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                            |                                                                                                                                                                   |                                                 |                           | 50%N/AN/AFY 2026FY 2024FY 2025FY 2026           |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | SNL  | CA Electrical Substation 41, 42, 43 & 44 Upgrades                          | As originally notified                                                                                                                                            |                                                 |                           | 7,900                                           | 7,900           | 7,900            | 1,100                        | 1,100               | 6,800              | -                  | -                   | -                  | -                  | -                  | -                  |



|      |         |      | Icons<br>✖ ↶                                                        |                                                                                                                                                                                                                                        | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                     |                                                                                                                                                                                                                                        | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                       | Project Description                                                                                                                                                                                                                    |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ✖                                                                   |                                                                                                                                                                                                                                        | ✓             | FY 2027                   |                     |                 | FY 2027          | FY 2028                      | FY 2027             | FY 2027            | FY 2028            |                     |                    |                    |                    |                    |
|      |         |      | CA Potable Water South Branch Distribution System Upgrade           | This project will recapitalize portions of the SNL/CA potable water distribution system by addressing deficiencies in the south branch which consists of approximately 10,000 LF of pipe along with associated valves and assemblies.  |               |                           | 11,750              | -               | 11,750           | 750                          | -                   | -                  | -                  | 11,750              | -                  | -                  | -                  | -                  |
| WA   | I&O     | SNL  |                                                                     |                                                                                                                                                                                                                                        | ✓             | FY 2028                   |                     |                 | FY2029           | FY 2030                      | FY 2028             | FY2029             | FY 2030            |                     |                    |                    |                    |                    |
|      |         |      | CA New WEST Chemistry and Surface Science Lab (CheSS) Facility      | This project will design and construct an approximately 12,000 GSF lab building to support chemistry and hydrogen science/capabilities at SNL/CA that will accommodate current capabilities and provide flexibility for future growth. |               |                           | 33,600              | -               | 33,600           | 2,800                        | -                   | -                  | -                  | -                   | 33,600             | -                  | -                  | -                  |
|      |         |      | New CA Complex Central Utility Building                             |                                                                                                                                                                                                                                        |               |                           | 1%                  |                 | FY 2026          | FY 2027                      | FY 2028             | FY 2026            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| WA   | I&O     | SNL  |                                                                     | As originally notified                                                                                                                                                                                                                 |               |                           | 20,000              | 24,000          | 24,000           | 1,900                        | -                   | 1,900              | -                  | 22,100              | -                  | -                  | -                  | -                  |
|      |         |      | New CA Materials Science and Diagnostics Lab Facility (MSDL) (STAR) |                                                                                                                                                                                                                                        |               |                           | -                   |                 | FY 2026          | FY 2027                      | FY 2028             | FY 2026            | FY 2028            | FY 2029             |                    |                    |                    |                    |
| WA   | I&O     | SNL  |                                                                     | As originally notified                                                                                                                                                                                                                 |               |                           | 28,000              | 31,000          | 31,000           | 1,900                        | 1,900               | -                  | -                  | 29,100              | -                  | -                  | -                  | -                  |
|      |         |      | New CA Secure Weapons Integration Center (SWIC)                     |                                                                                                                                                                                                                                        |               |                           | 7%                  |                 | FY 2025          | FY 2026                      | FY 2027             | FY 2025            | FY 2026            | FY 2028             |                    |                    |                    |                    |
| WA   | I&O     | SNL  |                                                                     | As originally notified                                                                                                                                                                                                                 |               |                           | 26,500              | 26,500          | 26,500           | 2,600                        | -                   | 2,600              | 23,900             | -                   | -                  | -                  | -                  | -                  |
|      |         |      | New Explosive Manufacturing Science and Technology (EMSAT) Facility |                                                                                                                                                                                                                                        |               |                           | 95%                 |                 | FY 2020          | FY 2020                      | FY 2023             | FY 2020            | FY 2022            | FY 2026             |                    |                    |                    |                    |
| WA   | I&O     | SNL  |                                                                     | As originally notified                                                                                                                                                                                                                 |               |                           | 17,500              | 28,997          | 28,997           | 1,500                        | 28,997              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |      |                                                                                             |                        | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |         |  |
|------|---------|------|---------------------------------------------------------------------------------------------|------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|---------|--|
|      |         |      |                                                                                             |                        | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |         |  |
| Appr | Program | Site | Project Title                                                                               | Project Description    |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>100%    |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2021            | FY 2022            | FY 2023            | FY 2021            | FY 2022 | FY 2025 |  |
| WA   | I&O     | SNL  | New Geosciences Laboratory- Building 740 (STAR) (formerly New Geosciences Laboratory)       | As originally notified |               |                           | 18,500              | 23,808          | 21,408           | 1,750                        | 21,408              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>2%      |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2025            | FY 2025            | FY 2027            | FY 2025            | FY 2026 | FY 2029 |  |
| WA   | I&O     | SNL  | New Production Storage Facility                                                             | As originally notified |               |                           | 11,342              | 17,600          | 17,600           | 1,500                        | -                   | 1,500              | 16,100             | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>95%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2023            | FY 2023            | FY 2025            | FY 2023            | FY 2024 | FY 2026 |  |
| WA   | I&O     | SNL  | NM New TA-II Substation 43 (previously New TA-II Master Substation)                         | As originally notified |               |                           | 18,500              | 18,500          | 19,001           | 1,850                        | 19,001              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | 27%           |                           |                     |                 |                  |                              |                     |                    |                    |                     | N/A                | N/A                | FY 2026            | FY 2023            | FY 2024 | FY 2026 |  |
| WA   | I&O     | SNL  | SNL\CA Site High Voltage LGS Replacement                                                    | As originally notified |               |                           | 5,700               | 5,700           | 5,700            | 600                          | 5,700               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>82%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2022            | FY 2022            | FY 2024            | FY 2022            | FY 2023 | FY 2026 |  |
| WA   | I&O     | SNL  | Substation 36 Upgrade                                                                       | As originally notified |               |                           | 10,000              | 11,823          | 11,823           | 1,000                        | 11,823              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>13%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2022            | FY 2022            | FY 2024            | FY 2025            | FY 2026 | FY 2027 |  |
| WA   | I&O     | SNL  | Substation 41 Replacement                                                                   | As originally notified |               |                           | 19,486              | 19,486          | 15,250           | 1,850                        | 5,540               | 1,000              | 8,710              | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>100%    |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2021            | FY 2022            | FY 2023            | FY 2021            | FY 2023 | FY 2025 |  |
| WA   | I&O     | SNL  | TA-I Substation 35 Upgrade (previously TA-I Substation 35 Replacement)                      | As originally notified |               |                           | 10,000              | 10,000          | 8,889            | 1,000                        | 8,889               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>31%     |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2023            | FY 2024            | FY 2025            | FY 2023            | FY 2024 | FY 2027 |  |
| WA   | I&O     | SNL  | Substations 7 & 34 Replacement (previously TA-III, V, & Remotes 5kV Substation Replacement) | As originally notified |               |                           | 19,500              | 19,500          | 19,511           | 1,950                        | 12,911              | 6,600              | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |
|      |         |      |                                                                                             |                        | FY<br>100%    |                           |                     |                 |                  |                              |                     |                    |                    |                     | FY 2021            | FY 2022            | FY 2023            | FY 2021            | FY 2022 | FY 2025 |  |
| WA   | I&O     | SNL  | TA-IV District Chilled Water Expansion                                                      | As originally notified |               |                           | 18,250              | 14,650          | 14,650           | 1,500                        | 14,650              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |  |

|      |         |      | Icons<br>☒ ☒ ☒                                                                                                      |                                                                                                                                                                                                                                | ✓                                                              | ✓                         |                                                                |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |
|------|---------|------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------|----------------------------------------------------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | New<br>Notif.                                                  | Auth. -<br>Con.<br>Design | Percent<br>Complete                                            |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |
| Appr | Program | Site | Project Title                                                                                                       | Project Description                                                                                                                                                                                                            |                                                                |                           | Original<br>TEC                                                | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2024    FY 2025    FY 2027    FY 2024    FY 2025    FY 2027 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | 20%                                                            |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SNL  | Weapons<br>Evaluation and<br>Testing Laboratory<br>Addition - Lab &<br>Office Space<br>(WETL/PX)                    | As originally notified                                                                                                                                                                                                         |                                                                |                           | 14,500                                                         | 14,500          | 16,500           | 1,500                        | 3,500               | 13,000             | -                  | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2022    FY 2022    FY 2024    FY 2024    FY 2025    FY 2027 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | 11%                                                            |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SRS  | New Tritium<br>Office Building<br>(STAR)                                                                            | As originally notified                                                                                                                                                                                                         |                                                                |                           | 19,600                                                         | 30,000          | 30,000           | 1,750                        | 30,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2026    FY 2027    FY 2029    FY 2026    FY 2027    FY 2029 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | -                                                              |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SRS  | Bldg 263-241F<br>Classified Storage<br>Conversion<br>(formerly Bldg<br>221-12F Classified<br>Storage<br>Conversion) | As originally notified                                                                                                                                                                                                         |                                                                |                           | 15,000                                                         | 15,000          | 15,000           | 2,000                        | -                   | -                  | 15,000             | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2026    FY 2026    FY 2027    FY 2026    FY 2026    FY 2027 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | -                                                              |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SRS  | Bldg 233-H GS-<br>PLC Upgrade                                                                                       | As originally notified                                                                                                                                                                                                         |                                                                |                           | 6,419                                                          | 6,419           | 6,419            | 1,609                        | -                   | 6,419              | -                  | -                   | -                  | -                  | -                  | -                  |  |  |
|      |         |      | ☒                                                                                                                   |                                                                                                                                                                                                                                | ✓                                                              |                           | FY 2028    FY 2029    FY 2031    FY 2027    FY 2028    FY 2029 |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     | This project provides an analytical laboratory to perform certification of commodities that touch the weapon during the manufacturing process and the work provided ensures all items are traceable to the originating source. |                                                                |                           | -                                                              |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SRS  | New Analytical<br>Receipt &<br>Inspection Center<br>(ARIC)                                                          |                                                                                                                                                                                                                                |                                                                |                           | 33,900                                                         | -               | 33,900           | 1,300                        | -                   | -                  | -                  | 1,300               | 32,600             | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2026    FY 2027    FY 2029    FY 2027    FY 2028    FY 2030 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | -                                                              |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | SRS  | New Radiological<br>Operations Center                                                                               | As originally notified                                                                                                                                                                                                         |                                                                |                           | 30,000                                                         | 31,202          | 31,202           | 3,000                        | -                   | -                  | -                  | 31,202              | -                  | -                  | -                  | -                  |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2028    FY 2029    FY 2031    FY 2028    FY 2029    FY 2031 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      | ☒                                                                                                                   |                                                                                                                                                                                                                                | ✓                                                              |                           | -                                                              |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
|      |         |      |                                                                                                                     |                                                                                                                                                                                                                                | FY 2028    FY 2029    FY 2031    FY 2028    FY 2029    FY 2031 |                           |                                                                |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |
| WA   | I&O     | Y-12 | New Agile<br>Radiation Case<br>Capability<br>(ARCC) DU<br>Complex Chiller<br>Building                               | Construct a new chiller building to support the East End Campus (ARCC).                                                                                                                                                        |                                                                |                           | 25,000                                                         | -               | 25,000           | 3,000                        | -                   | -                  | -                  | -                   | 3,000              | 22,000             | -                  | -                  |  |  |

|      |         |      | Icons<br>⚡⚙️🔧                                                                                       |                                                                                                                               | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                                     |                                                                                                                               | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                                       | Project Description                                                                                                           |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ⚡                                                                                                   | This project will install switchgear and conductor runs to bring power to the East end of Y-12 primarily for the ARCC campus. | ✓             | FY 2028                   |                     |                 | FY 2029          | FY 2031                      | FY 2028             | FY 2029            | FY 2031            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | ARCC Vista BDF Switchgear Installation                                                              |                                                                                                                               | 15,000        | -                         | 15,000              | 3,000           | -                | -                            | -                   | -                  | 3,000              | 12,000              | -                  | -                  |                    |                    |
|      |         |      |                                                                                                     |                                                                                                                               | 100%          |                           |                     | FY 2023         | FY 2024          | FY 2025                      | FY 2024             | FY 2024            | FY 2026            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldgs 9201-01 & 9201-03 Vista Switchgear Installation                                               | As originally notified                                                                                                        |               | 12,201                    | 12,202              | 12,202          | 635              | 12,202                       | -                   | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | -             |                           |                     | FY 2026         | FY 2027          | FY 2028                      | FY 2026             | FY 2027            | FY 2028            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldgs 9201-01 Supply Fan SF-308 AHU Upgrade                                                         | As originally notified                                                                                                        |               | 9,300                     | 9,300               | 9,300           | 1,500            | -                            | -                   | 9,300              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | 100%          |                           |                     | N/A             | N/A              | FY 2024                      | FY 2022             | FY 2023            | FY 2025            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Building 9201-05N AJ-5714 HVAC Replacement                                                          | As originally notified                                                                                                        |               | 5,413                     | 7,261               | 8,261           | 286              | 7,261                        | 1,000               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | -             |                           |                     | FY 2026         | FY 2027          | FY 2028                      | FY 2026             | FY 2027            | FY 2028            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldg 9204-02 Lighting Transformers and Panels Upgrade (formerly Building 9204-2 Electrical Upgrade) | As originally notified                                                                                                        |               | 8,000                     | 8,000               | 8,000           | 750              | -                            | -                   | 8,000              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | 100%          |                           |                     | FY 2023         | FY 2024          | FY 2026                      | FY 2023             | FY 2024            | FY 2025            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldg 9204-02 Switchgear 810 Replacement                                                             | As originally notified                                                                                                        |               | 4,492                     | 6,680               | 6,680           | 890              | 6,680                        | -                   | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | 7%            |                           |                     | FY 2025         | FY 2026          | FY 2027                      | FY 2025             | FY 2026            | FY 2028            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Building 9204-02E South Fire and Potable Water Laterals Replacement                                 | As originally notified                                                                                                        |               | 16,500                    | 16,500              | 16,500          | 1,700            | -                            | 1,700               | 14,800             | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                     |                                                                                                                               | 14%           |                           |                     | FY 2024         | FY 2025          | FY 2026                      | FY 2024             | FY 2025            | FY 2026            |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Building 9212 North Potable and Fire Water Lateral Replacements                                     | As originally notified                                                                                                        |               | 11,195                    | 11,195              | 11,172          | 2,157            | 2,134                        | 9,038               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | ✓                                                   | ✓                                               |                     |                 |        | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|---------------------|-----------------|--------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | New<br>Notif.                                       | Auth. -<br>Con.<br>Design                       | Percent<br>Complete |                 |        | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Icons<br>Project Title                                                                                                 | Project Description                                                                                                                                                                                                                                                |                                                     |                                                 | Original<br>TEC     | Previous<br>TEC |        | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | 8                                                                                                                      |                                                                                                                                                                                                                                                                    | ✓                                                   | FY 2027 FY 2028 FY 2030 FY 2027 FY 2028 FY 2030 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldg 9204-02E North Potable & Bldg 9215 South Fire & Potable Water Lateral East Section Upgrades                       | Project will strengthen, replace, or install potable and fire water piping along the corridor of 9204-2E North & 9215 South; evaluate and install backflow prevention where required; and to accomplish this in support of the life extension of the 9215 complex. |                                                     |                                                 | 14,800              | -               | 14,800 | 2,600            | -                            | -                   | -                  | -                  | 2,600               | 12,200             | -                  | -                  | -                  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | 19% FY 2025 FY 2025 FY 2026 FY 2025 FY 2025 FY 2027 |                                                 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldg 9423 Facility Conversion                                                                                          | As originally notified                                                                                                                                                                                                                                             |                                                     |                                                 | 6,496               | 6,496           | 6,496  | -                | -                            | -                   | 6,496              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      | 4                                                                                                                      |                                                                                                                                                                                                                                                                    | ✓                                                   | FY 2028 FY 2029 FY 2030 FY 2028 FY 2029 FY 2030 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Bldg 9720-82 Mobile Guardian Transport (MGT) Facility Upgrades                                                         | Project will complete several upgrades to building 9720-82 to support offloading of containers for the new Mobile Guardian Transport (MGT) trucks.                                                                                                                 |                                                     |                                                 | 26,000              | -               | 26,000 | 3,000            | -                            | -                   | -                  | -                  | -                   | 3,000              | 23,000             | -                  | -                  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | 52% N/A N/A FY 2024 FY 2022 FY 2025 FY 2026         |                                                 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Building 9995 198/222 Feeders Electrical Panel Replacement                                                             | As originally notified                                                                                                                                                                                                                                             |                                                     |                                                 | 5,400               | 4,859           | 4,859  | 1,155            | 4,859                        | -                   | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | - FY 2025 FY 2025 FY 2027 FY 2025 FY 2026 FY 2027   |                                                 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Building 9998 H2 Supply Fans H2-3 and H2-4 Revitalization                                                              | As originally notified                                                                                                                                                                                                                                             |                                                     |                                                 | 13,356              | 13,356          | 13,356 | -                | -                            | -                   | 13,356             | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                                        |                                                                                                                                                                                                                                                                    | 1% FY 2021 FY 2021 FY 2022 FY 2021 FY 2026 FY 2027  |                                                 |                     |                 |        |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | Development Facility Conversion (formerly Production Development Facility Acquisition and Revitalization Modification) | As originally notified                                                                                                                                                                                                                                             |                                                     |                                                 | 16,000              | 25,171          | 25,171 | 1,500            | 25,171                       | -                   | -                  | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |      |                                             |                                                                                                                                                                                                                                                                                                       | ✓             | ✓                         |                     |                 |  | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|--|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                             |                                                                                                                                                                                                                                                                                                       | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |  | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                               | Project Description                                                                                                                                                                                                                                                                                   |               |                           | Original<br>TEC     | Previous<br>TEC |  | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | Icons<br>⚠ ⚡ ⚙                              |                                                                                                                                                                                                                                                                                                       | ✓             |                           | -                   |                 |  | FY<br>2027       | FY 2028                      | FY 2030             | FY 2027            | FY 2028            | FY 2030             |                    |                    |                    |                    |
|      |         |      | ⚠                                           | This project provides additional switchgear and 13.6 kV lines to improve the electrical grid reliability and feed the new power requirements from the Pine Ridge substation and provide redundancy by connecting to the new Elza substation.                                                          |               |                           | 28,500              | -               |  | 28,500           | 3,000                        | -                   | -                  | -                  | 3,000               | 25,500             | -                  | -                  | -                  |
| WA   | I&O     | Y-12 | East End Electrical Distribution Upgrade    |                                                                                                                                                                                                                                                                                                       |               |                           |                     |                 |  |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      |                                             |                                                                                                                                                                                                                                                                                                       |               |                           | -                   |                 |  | FY<br>2022       | FY 2022                      | FY 2024             | FY 2026            | FY 2027            | FY 2029             |                    |                    |                    |                    |
| WA   | I&O     | Y-12 | New West End Production Change House        | As originally notified                                                                                                                                                                                                                                                                                |               |                           | 13,824              | 32,000          |  | 32,000           | 3,000                        | -                   | -                  | 3,000              | 29,000              | -                  | -                  | -                  | -                  |
|      |         |      | ⚠                                           |                                                                                                                                                                                                                                                                                                       | ✓             |                           | -                   |                 |  | FY<br>2027       | FY 2028                      | FY 2030             | FY 2027            | FY 2028            | FY 2030             |                    |                    |                    |                    |
|      |         |      |                                             | The project is to construct a new pre-fab metal construction facility at Y-12 to house the future UPF/HEUMF (Highly Enriched Uranium Material Facility) production maintenance operations including supply chain materials and personnel.                                                             |               |                           | 34,000              | -               |  | 34,000           | 3,000                        | -                   | -                  | -                  | 3,000               | 31,000             | -                  | -                  | -                  |
| WA   | I&O     | Y-12 | New Protected Area Maintenance Facility 1   |                                                                                                                                                                                                                                                                                                       |               |                           |                     |                 |  |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      | ⚠                                           |                                                                                                                                                                                                                                                                                                       | ✓             |                           | -                   |                 |  | FY<br>2027       | FY 2028                      | FY 2030             | FY 2027            | FY 2028            | FY 2030             |                    |                    |                    |                    |
|      |         |      |                                             | This project will remove existing, out of service poles, establish a distribution backbone from the new Elza substation, and move power supplies for the Mercury Treatment Facility, Special Materials Facility, and new 9201-1 operations from the Pine Ridge substation to the new ELZA substation. |               |                           | 26,100              | -               |  | 26,100           | 1,800                        | -                   | -                  | -                  | 26,100              | -                  | -                  | -                  | -                  |
| WA   | I&O     | Y-12 | South Ridge Electrical Distribution Upgrade |                                                                                                                                                                                                                                                                                                       |               |                           |                     |                 |  |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| WA   | I&O     |      |                                             | SUBTOTAL                                                                                                                                                                                                                                                                                              |               |                           | N/A                 | N/A             |  | N/A              | N/A                          | N/A                 | 249,223            | 279,698            | 614,446             | 470,808            | 105,847            | 17,556             | -                  |

|      |         |      | Icons<br>☒ ☒ ☒                                                                            |                        | ✓             | ✓                         |                     |        |        | Original         |                    |                     | Current          |                    |                     |                    |                    |                    |                    |
|------|---------|------|-------------------------------------------------------------------------------------------|------------------------|---------------|---------------------------|---------------------|--------|--------|------------------|--------------------|---------------------|------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| Appr | Program | Site |                                                                                           |                        | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |        |        | Project<br>Start | Design<br>Complete | Constr.<br>Complete | Project<br>Start | Design<br>Complete | Constr.<br>Complete | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                                           |                        | N/A           | N/A                       | N/A                 |        |        | N/A              | N/A                | N/A                 | N/A              | N/A                | N/A                 |                    |                    |                    |                    |
| WA   | STA     | N/A  | MC (TEC <\$5M)                                                                            | N/A                    |               |                           | N/A                 | N/A    |        | N/A              | N/A                | N/A                 | 3,341            | 3,852              | 1,725               | 497                | 6,737              | 11,566             | 10,992             |
|      |         |      |                                                                                           |                        | FY 2025       |                           |                     |        |        | FY 2025          | FY 2025            | FY 2025             | FY 2026          | FY 2026            | FY 2028             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        | -             |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | AR   | TRACOM<br>(Training<br>Command)<br>Construct Multi-<br>Use Facility                       | As originally notified |               |                           | 14,182              | 28,000 | 28,583 | 2,800            | -                  | -                   | 28,583           | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | 27%           |                           |                     |        |        | N/A              | N/A                | FY 2023             | FY 2024          | FY 2025            | FY 2026             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | AR   | TRACOM<br>Physical Training<br>Facility                                                   | As originally notified |               |                           | 3,947               | 6,000  | 7,608  | 600              | 7,608              | -                   | -                | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | 100%          |                           |                     |        |        | FY 2020          | FY 2021            | FY 2022             | FY 2020          | FY 2022            | FY 2025             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | NM   | Agent Operation<br>Western<br>Command<br>(AOWC) Facility                                  | As originally notified |               |                           | 10,000              | 20,383 | 20,925 | 2,000            | 20,806             | 119                 | -                | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | -             |                           |                     |        |        | FY 2026          | FY 2026            | FY 2027             | FY 2028          | FY 2029            | FY 2030             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | TX   | Agent Operations<br>Central Command<br>(AOCC) Federal<br>Agent Facility                   | As originally notified |               |                           | 15,300              | 25,000 | 25,000 | 2,500            | -                  | -                   | -                | -                  | -                   | 25,000             | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | 78%           |                           |                     |        |        | FY 2023          | FY 2023            | FY 2024             | FY 2023          | FY 2024            | FY 2026             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | TX   | Agent Operations<br>Central Command<br>(AOCC) Sitewide<br>Infrastructure<br>Upgrades      | As originally notified |               |                           | 5,000               | 12,532 | 25,875 | 1,253            | 12,532             | -                   | -                | 13,343             | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | -             |                           |                     |        |        | FY 2027          | FY 2027            | FY 2028             | FY 2028          | FY 2027            | FY 2029             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | TX   | Agent Operations<br>Central Command<br>(AOCC) Highway<br>Access                           | As originally notified |               |                           | 6,000               | 6,000  | 7,000  | 600              | -                  | -                   | -                | -                  | -                   | 7,000              | -                  | -                  | -                  |
|      |         |      |                                                                                           |                        | 30%           |                           |                     | N/A    |        | FY 2022          | FY 2023            | FY 2024             | FY 2025          | FY 2025            | FY 2027             |                    |                    |                    |                    |
|      |         |      |                                                                                           |                        |               |                           |                     |        |        |                  |                    |                     |                  |                    |                     |                    |                    |                    |                    |
| WA   | STA     | TX   | Vehicle<br>Maintenance<br>Facility – Agent<br>Operations Central<br>Command<br>(AOCC) VMF | As originally notified |               |                           | 15,000              | 30,000 | 31,455 | 3,000            | -                  | 31,455              | -                | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |       |                                                                                                |                                                                                   | ✓   | ✓   |                  |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|-------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|-----|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |       |                                                                                                | Icons<br>⚠ ⚡ ⚡                                                                    |     |     | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site  | Project Title                                                                                  | Project Description                                                               |     |     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |       | ⚡                                                                                              |                                                                                   | ✓   | -   |                  |              | N/A           | FY 2029                | FY 2030          | FY 2031         | FY 2029         | FY 2030          | FY 2031         |                 |                 |                 |
|      |         |       | Agent Operations Eastern Command (AOEC) Renovation/ Addition Building 1513 & Site HVAC Updates | Renovation to support increased agent capacity and infrastructure updates at AOEC |     |     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| WA   | STA     | TN    |                                                                                                |                                                                                   |     |     | 12,500           | N/A          | 12,500        | 2,000                  | -                | -               | -               | -                | -               | 12,500          | -               | -               |
| WA   | STA     |       |                                                                                                | SUBTOTAL                                                                          |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | 34,915          | 32,435          | 15,068           | 32,497          | 19,237          | 11,566          | 10,992          |
| WA   | DNS     | N/A   | MC (TEC <\$5M)                                                                                 | N/A                                                                               | N/A | N/A | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |
|      |         |       | ⚡                                                                                              |                                                                                   |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | -               | -               | -                | -               | -               | -               | -               |
|      |         |       | ⚡                                                                                              |                                                                                   | ✓   | -   |                  |              | FY 2027       | FY 2028                | FY 2029          | FY 2027         | FY 2028         | FY 2029          |                 |                 |                 |                 |
| WA   | DNS     | KCNSC | PF Indoor Modular Shooting Range                                                               | Install PF Indoor Modular Shooting Range                                          |     |     | 14,196           | -            | 14,196        | 600                    | -                | -               | -               | 14,196           | -               | -               | -               | -               |
|      |         |       | ⚡                                                                                              |                                                                                   | ✓   | -   |                  |              | FY 2027       | FY 2027                | FY 2028          | FY 2027         | FY 2027         | FY 2028          |                 |                 |                 |                 |
| WA   | DNS     | LLNL  | S200 Indoor Gun Range                                                                          | Containerized indoor gun range system at Site 200                                 |     |     | 14,700           | 14,700       | 14,700        | 14,700                 | -                | -               | -               | 14,700           | -               | -               | -               | -               |
|      |         |       |                                                                                                |                                                                                   |     |     | -                |              | FY 2020       | FY 2020                | FY 2024          | FY 2023         | FY 2023         | FY 2029          |                 |                 |                 |                 |
| WA   | DNS     | PX    | Zone 12 PIDAS Vehicle Barriers                                                                 | Vehicle Barriers                                                                  |     |     | 11,250           | 10,850       | 10,850        | 250                    | 10,850           | -               | -               | -                | -               | -               | -               | -               |
|      |         |       | ⚡                                                                                              |                                                                                   | ✓   | -   |                  |              | FY 2026       | FY 2026                | FY 2028          | FY 2026         | FY 2026         | FY 2028          |                 |                 |                 |                 |
| WA   | DNS     | SNL   | NM PF Training Sprung Facility                                                                 | PF Training Facility for Sandia Protective Force site specific training           |     |     | 5,640            | -            | 5,640         | 200                    | -                | -               | 200             | 5,440            | -               | -               | -               | -               |
| WA   | DNS     |       |                                                                                                | SUBTOTAL                                                                          |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | -               | 200             | 34,336           | -               | -               | -               | -               |
| WA   |         |       |                                                                                                | WA Total                                                                          |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | 426,617         | 553,653         | 1,030,127        | 652,144         | 342,324         | 166,647         | 124,348         |
| DNN  | MMM     | N/A   | MC (TEC <\$5M)                                                                                 | N/A                                                                               |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |
|      |         |       |                                                                                                |                                                                                   |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | 21,411          | 2,399           | 2,450            | 2,501           | 2,554           | 2,607           | 2,662           |
|      |         |       |                                                                                                |                                                                                   |     |     | 36%              |              | FY 2024       | FY 2025                | FY 2026          | FY 2024         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| DNN  | MMM     | SRS   | Install CCO Storage Racks                                                                      | As originally notified                                                            |     |     | 9,898            | 10,000       | 9,898         | 3,526                  | 10,000           | -               | -               | -                | -               | -               | -               | -               |
| DNN  | MMM     |       |                                                                                                | SUBTOTAL                                                                          |     |     | N/A              | N/A          | N/A           | N/A                    | N/A              | 21,411          | 2,399           | 2,450            | 2,501           | 2,554           | 2,607           | 2,662           |





|      |         |        | Icons<br>☒ ☒ ☒                                                                                            |                                                                                                                                                                                                         | ✓                                                                  | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |  |  |  |
|------|---------|--------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--|--|--|
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | New<br>Notif.                                                      | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |  |  |  |
| Appr | Program | Site   | Project Title                                                                                             | Project Description                                                                                                                                                                                     |                                                                    |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | FY 2026    FY 2026    FY 2028    FY 2026    FY 2026    FY 2028     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | -                                                                  |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | R&D     | PNNL   | 325 RPL (Radiochemical Processing Laboratory) Mass Spectrometry and Solvent Extraction Laboratory Upgrade | As originally notified                                                                                                                                                                                  |                                                                    |                           | 8,950               | 8,950           | 9,350            | 900                          | -                   | -                  | 900                | 8,450               | -                  | -                  | -                  | -                  |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | FY 2024    FY 2024    FY 2025    FY 2024    FY 2025    FY 2027     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | 22%                                                                |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | R&D     | PNNL   | 325 RPL (Radiochemical Processing Laboratory) Plutonium-Tritium Processing Lab Upgrade                    | As originally notified                                                                                                                                                                                  |                                                                    |                           | 6,500               | 8,300           | 11,100           | 900                          | 11,100              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | FY 2026    FY 2026    FY 2028    FY 2027    FY 2027    FY 2030     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | -                                                                  |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | R&D     | PNNL   | 325 RPL (Radiochemical Processing Laboratory) Tritium and Microscopy Laboratory Upgrade                   | As originally notified                                                                                                                                                                                  |                                                                    |                           | 10,700              | 10,700          | 8,900            | 700                          | -                   | -                  | -                  | 700                 | 8,200              | -                  | -                  | -                  |  |  |  |
| DNN  | R&D     |        |                                                                                                           | SUBTOTAL                                                                                                                                                                                                |                                                                    |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 17,096             | 45,687             | 9,360               | 8,415              | 219                | 224                | 229                |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | N/A    N/A    N/A    N/A    N/A    N/A    N/A    N/A    N/A    N/A |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | NCTIR   | N/A    | MC (TEC <\$5M)                                                                                            | N/A                                                                                                                                                                                                     |                                                                    |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 9,038              | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | FY 2023    FY 2024    FY 2025    FY 2026    FY 2026    FY 2027     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | 10%                                                                |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | NCTIR   | HQ     | Emergency Operations Center Redesign (CEOC)                                                               | As originally notified                                                                                                                                                                                  |                                                                    |                           | 12,524              | 12,524          | 12,524           | 751                          | 12,524              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | FY 2027    FY 2028    FY 2030    FY 2027    FY 2028    FY 2030     |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
|      |         |        |                                                                                                           |                                                                                                                                                                                                         | ✓    -                                                             |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |  |  |  |
| DNN  | NCTIR   | KC NSC | Nuclear Emergency Support Team (NEST) Technical Operations Center (TOC) - Phase I                         | Renovate a portion of the NEST Training and Operations Center (NTOC) facility Technical Operations Center to establish SCIF/SAP-F capabilities to enable centralizing global NEST home team operations. |                                                                    |                           | 17,000              | 17,000          | 17,000           | 1,700                        | -                   | -                  | -                  | 17,000              | -                  | -                  | -                  | -                  |  |  |  |
| DNN  | NCTIR   |        |                                                                                                           | SUBTOTAL                                                                                                                                                                                                |                                                                    |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 9,038              | -                  | 17,000              | -                  | -                  | -                  | -                  |  |  |  |

|      |         |      | Icons<br>☒ ✖ ⚠                                                                                          |                                                                                                                                                                                                 | ✓          | ✓                   | Percent Complete |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                                                                                                         |                                                                                                                                                                                                 | New Notif. | Auth. - Con. Design |                  |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title                                                                                           | Project Description                                                                                                                                                                             |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
| DNN  |         |      |                                                                                                         | DNN Total                                                                                                                                                                                       |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 55,869          | 48,086          | 28,810           | 10,916          | 2,773           | 2,831           | 2,891           |
| NR   | NR      | N/A  | MC (TEC <\$5M)                                                                                          | N/A                                                                                                                                                                                             |            | N/A                 | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             |                  |                 |                 |                 |                 |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 1,505           | 901             | 19,592           | 35,084          | 95,543          | 106,959         | 81,300          |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | -                |              | FY 2027       | FY 2027                | FY 2031          | FY 2028         | FY 2028         | FY 2031          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL AMTL Upper Mezzanine                                                                                 | As originally notified                                                                                                                                                                          |            |                     | 7,693            | -            | 8,460         | 600                    | -                | -               | -               | -                | 600             | 7,860           | -               | -               |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | 20%              |              | FY 2025       | FY 2026                | FY 2030          | FY 2024         | FY 2026         | FY 2028          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL Classified Islands                                                                                   | As originally notified                                                                                                                                                                          |            |                     | 25,302           | 25,302       | 21,231        | 1,826                  | 15,247           | 5,984           | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | 0%               |              | FY 2026       | FY 2026                | FY 2030          | FY 2026         | FY 2026         | FY 2030          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL CMOSS Switchgear Electrical Power Upgrade and BMOSS Refeed                                           | As originally notified                                                                                                                                                                          |            |                     | 9,390            | 9,390        | 3,390         | 530                    | -                | -               | 6,530           | -                | 2,860           | -               | -               | -               |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | 94%              |              | FY 2023       | FY 2024                | FY 2026          | FY 2024         | FY 2026         | FY 2026          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL Outfall 001 Detention Basin                                                                          | As originally notified                                                                                                                                                                          |            |                     | 7,800            | 7,696        | 10,596        | 950                    | 10,596           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | 85%              |              | FY 2024       | FY 2026                | FY 2028          | FY 2024         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL Shock and Vibration Test Facility (SVTF) and Fundamental Shock and Vibration Test Laboratory (FSVTL) | As originally notified                                                                                                                                                                          |            |                     | 17,096           | 22,096       | 22,096        | -                      | 22,096           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                         |                                                                                                                                                                                                 |            |                     | 85%              |              | FY 2023       | FY 2023                | FY 2026          | FY 2023         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL Simulation Development Laboratory and BRES                                                           | As originally notified                                                                                                                                                                          |            |                     | 19,000           | 29,250       | 29,250        | -                      | 29,250           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      | ☒                                                                                                       |                                                                                                                                                                                                 | ✓          |                     | -                |              | FY 2026       | FY 2027                | FY 2029          | FY 2026         | FY 2027         | FY 2029          |                 |                 |                 |                 |
| NR   | NR      | BL   | BL N-Building Pipe Bridge                                                                               | The project replaces critical system utilities, installs new utilities alongside existing systems, and demolishes legacy utilities that have exceeded their lifespan and show signs of failure. |            |                     | 16,025           | 16,025       | 16,025        | 950                    | -                | -               | 950             | 15,075           | -               | -               | -               | -               |

|      |         |      |                                                        |                        | ✓                   | ✓                   |                  |              | Original    |                        |                 | Current          |                 |                 |                  |                 |                 |                 |  |  |  |  |
|------|---------|------|--------------------------------------------------------|------------------------|---------------------|---------------------|------------------|--------------|-------------|------------------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|--|--|--|--|
|      |         |      |                                                        |                        | New Notif.          | Auth. - Con. Design | Percent Complete |              |             | Project Start          | Design Complete | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |  |  |  |  |
| Appr | Program | Site | Icons<br>✖ ↻ ↱                                         | Project Title          | Project Description |                     | Original TEC     | Previous TEC | Current TEC | Current Constr. Design | Prior Years     | FY 2025 Enacted  | FY 2026 Enacted | FY 2027 Request | FY 2028 Request  | FY 2029 Request | FY 2030 Request | FY 2031 Request |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2023             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | -                   |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | BL   | BL L7 Technology Facility                              | As originally notified |                     |                     | 26,105           | 26,105       | 27,443      | 1,357                  | -               | -                | -               | -               | 1,357            | 26,086          | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2023             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | -                   |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | BL   | BL Craft Facility                                      | As originally notified |                     |                     | 24,322           | 24,332       | 33,988      | 1,004                  | -               | -                | -               | 1,004           | -                | 32,984          | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2022             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 65%                 |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | BL   | BL Warehouse Upgrade                                   | As originally notified |                     |                     | 8,079            | 10,480       | 6,351       | 480                    | 6,351           | -                | -               | -               | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2023             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 11%                 |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL 002 Outfall                                         | As originally notified |                     |                     | 7,600            | 9,353        | 8,403       | 972                    | 972             | -                | 7,431           | -               | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2025             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 6%                  |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL Classified Islands                                  | As originally notified |                     |                     | 18,039           | 18,039       | 20,320      | 1,500                  | 1,500           | -                | 15,020          | 3,800           | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2022             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 60%                 |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL Data Center Power and Capacity Upgrades             | As originally notified |                     |                     | 12,911           | 15,159       | 15,159      | 1,259                  | 15,159          | -                | -               | -               | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2025             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | -                   |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL Firehouse                                           | As originally notified |                     |                     | 13,909           | 13,909       | 13,909      | 1,000                  | -               | -                | 13,909          | -               | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2027             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | -                   |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL Instrument and Control Facility                     | As originally notified |                     |                     | 28,700           | 28,700       | 34,000      | 2,000                  | -               | -                | -               |                 | 34,000           | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2022             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 38%                 |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL Radio Upgrade                                       | As originally notified |                     |                     | 17,800           | 16,800       | 15,475      | 1,000                  | 7,233           | 8,242            | -               | -               | -                | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2025             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 9%                  |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL RML Building Envelope                               | As originally notified |                     |                     | 6,939            | 7,210        | 7,802       | 630                    | -               | 630              | -               | -               | 7,172            | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2020             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 9%                  |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KL   | KL RML HVAC Upgrade (formerly RML HVAC Upgrade Design) | As originally notified |                     |                     | 18,230           | 11,700       | 12,667      | 945                    | 945             | -                | -               | -               | 11,722           | -               | -               | -               |  |  |  |  |
|      |         |      |                                                        |                        |                     | FY 2018             |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
|      |         |      |                                                        |                        |                     | 100%                |                  |              |             |                        |                 |                  |                 |                 |                  |                 |                 |                 |  |  |  |  |
| NR   | NR      | KS   | KS CAS Relocation                                      | As originally notified |                     |                     | 6,100            | 7,631        | 7,631       | 1,288                  | 7,631           | -                | -               | -               | -                | -               | -               | -               |  |  |  |  |

|      |         |      |                             |                        | ✓          | ✓                   |                  |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |  |  |  |  |
|------|---------|------|-----------------------------|------------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|--|--|--|--|
|      |         |      |                             |                        | New Notif. | Auth. - Con. Design | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |  |  |  |  |
| Appr | Program | Site | Project Title               | Project Description    |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |  |  |  |  |
|      |         |      |                             |                        | FY 2027    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS Chemistry Labs           | As originally notified |            |                     | 11,809           | 11,809       | 11,809        | 1,100                  | -                | -               | -               | 1,100            | -               | 10,709          | -               | -               |  |  |  |  |
| NR   | NR      | KS   |                             |                        | FY 2025    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 6%         |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS Classified Islands       | As originally notified |            |                     | 18,583           | 18,583       | 17,022        | 1,169                  | 1,169            | -               | 14,894          | 959              | -               | -               | -               | -               |  |  |  |  |
| NR   | NR      | KS   |                             |                        | FY 2025    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 14%        |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS Firehouse                | As originally notified |            |                     | 14,940           | 14,940       | 17,310        | 1,500                  | 2,000            | 15,310          | -               | -                | -               | -               | -               | -               |  |  |  |  |
| NR   | NR      | KS   |                             |                        | FY 2025    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS Fire Systems Upgrade     | As originally notified |            |                     | 23,667           | 23,667       | 21,324        | 1,292                  | -                | -               | -               | -                | 1,292           | 20,032          | -               | -               |  |  |  |  |
| NR   | NR      | KS   |                             |                        | FY 2020    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 88%        |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS High Yard 30 Upgrade     | As originally notified |            |                     | 8,269            | 19,360       | 19,983        | 623                    | 19,983           | -               | -               | -                | -               | -               | -               | -               |  |  |  |  |
| NR   | NR      | KS   |                             |                        | FY 2023    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | KS Radio Upgrade            | As originally notified |            |                     | 17,678           | 23,829       | 27,170        | 1,322                  | -                | -               | -               | -                | 1,322           | 25,848          | -               | -               |  |  |  |  |
| NR   |         |      |                             |                        | FY 2025    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 75%        |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | NRF Classified Islands      | As originally notified |            |                     | 10,255           | 10,255       | 7,857         | 906                    | 7,857            | -               | -               | -                | -               | -               | -               | -               |  |  |  |  |
| NR   | NR      | NRF  |                             |                        | FY 2019    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 99%        |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | NRF Northeast Boundary Area | As originally notified |            |                     | 9,200            | 13,700       | 13,700        | 1,200                  | 13,700           | -               | -               | -                | -               | -               | -               | -               |  |  |  |  |
| NR   |         |      |                             |                        | FY 2023    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      |                             |                        | 10%        |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |  |  |  |  |
|      |         |      | NRF Transporter Path        | As originally notified |            |                     | 6,745            | 8,487        | 8,800         | 479                    | 479              | 8,321           | -               | -                | -               | -               | -               | -               |  |  |  |  |
| NR   | NR      |      |                             | NR Total               |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 39,992          | 59,635          | 41,530           | 95,409          | 219,062         | 106,959         | 81,300          |  |  |  |  |
|      |         |      |                             |                        | N/A        | N/A                 | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |  |  |  |  |
| Inst | Inst    | LANL | MC (TEC <\$5M)              | N/A                    |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | -               | -               | -                | -               | -               | -               | -               |  |  |  |  |
|      |         |      |                             |                        | N/A        | N/A                 | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |  |  |  |  |
| Inst | Inst    | LLNL | MC (TEC <\$5M)              | N/A                    |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 13,125          | 10,050          | 3,300            | 22,545          | 18,625          | 2,502           | 17,000          |  |  |  |  |
|      |         |      |                             |                        | N/A        | N/A                 | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |  |  |  |  |
| Inst | Inst    | NNSS | MC (TEC <\$5M)              | N/A                    |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | 14,481          | 11,700          | 2,250            | 10,250          | 5,750           | 5,500           | -               |  |  |  |  |
|      |         |      |                             |                        | N/A        | N/A                 | N/A              | N/A          | N/A           | N/A                    | N/A              | N/A             | N/A             | N/A              |                 |                 |                 |                 |  |  |  |  |
| Inst | Inst    | PX   | MC (TEC <\$5M)              | N/A                    |            |                     | N/A              | N/A          | N/A           | N/A                    | N/A              | -               | 500             | -                | -               | 1,600           | 2,300           | 1,600           |  |  |  |  |

|      |         |      | Icons<br>⚠⚡⚡                                                                                              |                                                                                                                                                                                              | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                                           |                                                                                                                                                                                              | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                                             | Project Description                                                                                                                                                                          |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                                                           |                                                                                                                                                                                              | N/A           | N/A                       | N/A                 | N/A             | N/A              | N/A                          | N/A                 | N/A                | N/A                | N/A                 |                    |                    |                    |                    |
| Inst | Inst    | SNL  | MC (TEC <\$5M)                                                                                            | N/A                                                                                                                                                                                          |               |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 2,040              | 2,081              | 2,122               | 2,165              | 2,208              | 2,252              | -                  |
|      |         |      |                                                                                                           |                                                                                                                                                                                              | N/A           | N/A                       | N/A                 | N/A             | N/A              | N/A                          | N/A                 | N/A                | N/A                | N/A                 |                    |                    |                    |                    |
| Inst | Inst    | Y-12 | MC (TEC <\$5M)                                                                                            | N/A                                                                                                                                                                                          |               |                           | N/A                 | N/A             | N/A              | N/A                          | N/A                 | 7,038              | 7,178              | 7,322               | 7,468              | 7,617              | 7,000              | -                  |
|      |         |      | ⚠                                                                                                         | This project will design and construct a 4,000 square foot indoor structure with loading dock to receive, store, treat, and ship enduring LANL regulated, hazardous, and radioactive wastes. | ✓             | 0%                        |                     |                 | FY 2027          | FY 2027                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-54-0 Warehouse New Construction                                                                        |                                                                                                                                                                                              |               |                           |                     | 10,687          | -                | 10,687                       | 1,397               | -                  | -                  | -                   | 1,397              | 9,290              | -                  | -                  |
|      |         |      | ⚠                                                                                                         | Design and construct mechanical and electrical infrastructure enhancements to support next-generation computing and artificial intelligence platforms.                                       | ✓             | -                         |                     |                 | FY 2026          | FY 2027                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-03-2327 SCC Infrastructure Upgrades for Computing and Artificial Intelligence                          |                                                                                                                                                                                              |               |                           |                     | 15,000          | -                | 15,000                       | 800                 | -                  | -                  | 800                 | 14,200             | -                  | -                  | -                  |
|      |         |      | ⚠                                                                                                         | This project will design and construct approximately 15,000 sq. ft. cafeteria building at TA-52 in support of Pajarito Corridor planning.                                                    | ✓             | -                         |                     |                 | FY 2027          | FY 2027                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-52 Cafeteria Building New Construction                                                                 |                                                                                                                                                                                              |               |                           |                     | 34,000          | -                | 34,000                       | 2,050               | -                  | -                  | -                   | 2,050              | 31,950             | -                  | -                  |
|      |         |      |                                                                                                           |                                                                                                                                                                                              | 100%          |                           |                     |                 | FY 2024          | FY 2024                      | FY 2025             | FY 2024            | FY 2024            | FY 2025             |                    |                    |                    |                    |
| Inst | Inst    | LANL | Bldg TA-35-0086 Development of Laboratory Space to Support New Capability - Low Enriched Fuel Fabrication | As originally notified                                                                                                                                                                       |               |                           | 12,174              | 12,174          | 12,174           | 700                          | 700                 | 11,474             | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                                           |                                                                                                                                                                                              | 13%           |                           |                     |                 | FY 2023          | FY 2023                      | FY 2024             | FY 2023            | FY 2025            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | Diamond Drive Road Upgrades                                                                               | As originally notified                                                                                                                                                                       |               |                           | 24,000              | 24,000          | 24,000           | 900                          | 24,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |      |                                                                                                                                    |                        | ✓                   | ✓                   |                  |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                                                                                                                                    |                        | New Notif.          | Auth. - Con. Design | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Icons<br>🏠🔧👷                                                                                                                       | Project Title          | Project Description |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                                                                                                                                    |                        |                     |                     | 100%             |              | FY 2020       | FY 2020                | FY 2022          | FY 2022         | FY 2024         | FY 2024          |                 |                 |                 |                 |
| Inst | Inst    | LANL | New General Purpose Office Building in Pajarito Corridor (formerly Construct General Purpose Office Building in Pajarito Corridor) | As originally notified |                     |                     | 19,000           | 23,500       | 23,500        | 900                    | 23,500           | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 55%              |              | FY 2023       | N/A                    | N/A              | FY 2023         | FY 2024         | FY 2026          |                 |                 |                 |                 |
| Inst | Inst    | LANL | Pajarito Road Traffic Circle Construction                                                                                          | As originally notified |                     |                     | 6,500            | 9,435        | 9,435         | 500                    | 9,435            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | -                |              | FY 2024       | FY 2025                | FY 2026          | FY 2025         | FY 2027         | FY 2028          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-06 to TA-48 Electrical Distribution Line Installation                                                                           | As originally notified |                     |                     | 12,900           | 12,900       | 14,189        | 1,289                  | 1,289            | -               | -               | 12,900           | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 87%              |              | FY 2023       | FY 2023                | FY 2024          | FY 2023         | FY 2023         | FY 2026          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-15 New Construction General Purpose Laboratory/Office Building 1-STAR                                                           | As originally notified |                     |                     | 22,500           | 32,500       | 32,500        | 1,400                  | 24,000           | 8,500           | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 9%               |              | FY 2024       | FY 2024                | FY 2025          | FY 2024         | FY 2026         | FY 2027          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-33-0401 Secure Laboratory & Office Building                                                                                     | As originally notified |                     |                     | 23,500           | 23,500       | 23,500        | 1,500                  | 1,500            | 22,000          | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 14%              |              | N/A           | N/A                    | FY 2025          | FY 2023         | FY 2025         | FY 2027          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-48 East Utilities and Road Installation                                                                                         | As originally notified |                     |                     | 6,130            | 6,130        | 6,880         | 750                    | 712              | -               | -               | 6,168            | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 10%              |              | FY 2024       | N/A                    | FY 2025          | FY 2024         | FY 2025         | FY 2027          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-48 Electrical Line Relocation and Electrical Duct Bank Installation                                                             | As originally notified |                     |                     | 5,503            | 5,503        | 5,503         | 316                    | 316              | 5,187           | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                                                                                                    |                        |                     |                     | 50%              |              | FY 2024       | FY 2024                | FY 2025          | FY 2024         | FY 2025         | FY 2027          |                 |                 |                 |                 |
| Inst | Inst    | LANL | TA-48 Network and Infrastructure Engineering (NIE) Duct Bank Installation                                                          | As originally notified |                     |                     | 9,093            | 9,093        | 9,093         | 506                    | 506              | 8,587           | -               | -                | -               | -               | -               | -               |

## National Nuclear Security Administration/ Overview

## FY 2027 Congressional Justification

|      |         |      |                                                                                       |                        |  | ✓             | ✓                         |                     |                 |            | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |
|------|---------|------|---------------------------------------------------------------------------------------|------------------------|--|---------------|---------------------------|---------------------|-----------------|------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      |                                                                                       |                        |  | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 |            | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                         | Project Description    |  |               |                           | Original<br>TEC     | Previous<br>TEC |            | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      |                                                                                       |                        |  |               |                           | 55%                 |                 | FY<br>2024 |                  | FY 2024                      | FY 2025             | FY 2024            | FY 2025            | FY 2027             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-48/55 Water<br>Line Relocations                                                    | As originally notified |  |               |                           | 7,188               | 7,188           |            | 7,188            | 569                          | 569                 | 6,619              | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | 100%                |                 | FY<br>2019 |                  | N/A                          | N/A                 | FY 2022            | FY 2024            | FY 2024             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-51 Office<br>Building (formerly<br>New Office<br>Building)                         | As originally notified |  |               |                           | 9,500               | 15,000          |            | 15,000           | 500                          | 15,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | 10%                 |                 | FY<br>2024 |                  | FY 2024                      | FY 2025             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-63 Office<br>Building<br>(Formally notified<br>as TA-48 Office<br>Building (STAR)) | As originally notified |  |               |                           | 23,500              | 29,500          |            | 29,500           | 1,500                        | -                   | -                  | -                  | 29,500              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | 100%                |                 | FY<br>2023 |                  | FY 2023                      | FY 2025             | FY 2023            | FY 2023            | FY 2025             |                    |                    |                    |                    |
| Inst | Inst    | LANL | Bldg. 03-2327<br>Revitalization                                                       | As originally notified |  |               |                           | 5,700               | 5,700           |            | 5,700            | 297                          | 5,700               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | 9%                  |                 | FY<br>2025 |                  | FY 2025                      | FY 2026             | FY 2025            | FY 2025            | FY 2026             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-16-1724<br>Secure Office and<br>Laboratory<br>Building New<br>Construction         | As originally notified |  |               |                           | 32,089              | 32,089          |            | 32,089           | 2,000                        | -                   | 2,000              | 30,089             |                     | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | -                   |                 | FY<br>2026 |                  | FY 2026                      | FY 2028             | FY 2026            | FY 2026            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-48-0262<br>Laboratory<br>Building                                                  | As originally notified |  |               |                           | 34,000              | 34,000          |            | 34,000           | 2,833                        | -                   | -                  | 2,833              | 31,167              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | -                   |                 | FY<br>2026 |                  | FY 2026                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-48 Fire Water<br>Loop                                                              | As originally notified |  |               |                           | 13,231              | 13,231          |            | 13,231           | 203                          | -                   | -                  | -                  | 13,231              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | -                   |                 | FY<br>2026 |                  | FY 2026                      | FY 2028             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-48 Parking<br>Garage                                                               | As originally notified |  |               |                           | 34,000              | 34,000          |            | 34,000           | 1,750                        | -                   | -                  | -                  | 34,000              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | -                   |                 | FY<br>2026 |                  | FY 2026                      | FY 2027             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LANL | TA-52/63 Water<br>Line Upgrade<br>(Puye Road)                                         | As originally notified |  |               |                           | 10,216              | 10,216          |            | 10,216           | 203                          | -                   | -                  | -                  | 10,216              | -                  | -                  | -                  | -                  |
|      |         |      |                                                                                       |                        |  |               |                           | -                   |                 | FY<br>2025 |                  | FY 2025                      | FY 2026             | FY 2027            | FY 2027            | FY 2028             |                    |                    |                    |                    |
| Inst | Inst    | LLNL | 15CW Site 300<br>Utilities<br>Installation and<br>Site Preparation                    | As originally notified |  |               |                           | 14,000              | 14,000          |            | 14,000           | 1,700                        | -                   | -                  | -                  | 1,700               | 12,300             | -                  | -                  | -                  |



|      |         |      | Icons<br>✖ ↻ ↶                                                                                                                                                                 |                        | ✓             | ✓                         |                     |                 | Original         |                              |                     | Current            |                    |                     |                    |                    |                    |                    |         |         |
|------|---------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|---------------------------|---------------------|-----------------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|---------|---------|
|      |         |      |                                                                                                                                                                                |                        | New<br>Notif. | Auth. -<br>Con.<br>Design | Percent<br>Complete |                 | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |         |         |
| Appr | Program | Site | Project Title                                                                                                                                                                  | Project Description    |               |                           | Original<br>TEC     | Previous<br>TEC | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |         |         |
|      |         |      | B265<br>Environmental<br>Safety & Health<br>Office Building<br>(STAR)                                                                                                          |                        | FY 2020       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |
|      |         |      |                                                                                                                                                                                |                        |               | 100%                      |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2020            | FY 2020            | FY 2021            | FY 2021 | FY 2021 |
| Inst | Inst    | LLNL |                                                                                                                                                                                | As originally notified |               |                           | 19,000              | 20,700          | 20,700           | 1,000                        | 20,700              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |
|      |         |      | New Bldg 177<br>Wet Chemistry<br>Laboratory<br>Replacement<br>Building (STAR)<br>(formerly New<br>Wet Chemistry<br>Laboratory<br>Replacement<br>Building: New<br>Construction) |                        | FY 2022       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |
|      |         |      |                                                                                                                                                                                |                        |               | 100%                      |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2022            | FY 2022            | FY 2024            | FY 2023 | FY 2024 |
| Inst | Inst    | LLNL |                                                                                                                                                                                | As originally notified |               |                           | 19,000              | 26,500          | 26,500           | 1,000                        | 26,500              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |
|      |         |      | New Bldg 183<br>Multi-Program<br>Office Bldg<br>(STAR) (formerly<br>New Bldg 260<br>Multi-Program<br>Office Building:<br>New Construction)                                     |                        | FY 2022       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |
|      |         |      |                                                                                                                                                                                |                        |               | 100%                      |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2022            | FY 2022            | FY 2023            | FY 2022 | FY 2023 |
| Inst | Inst    | LLNL |                                                                                                                                                                                | As originally notified |               |                           | 19,000              | 22,500          | 22,500           | 1,000                        | 22,500              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |
|      |         |      | New Employee<br>Center 460<br>(formally New<br>Employee Center)                                                                                                                |                        | FY 2024       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |
|      |         |      |                                                                                                                                                                                |                        |               | 42%                       |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2024            | FY 2024            | FY 2025            | FY 2024 | FY 2024 |
| Inst | Inst    | LLNL |                                                                                                                                                                                | As originally notified |               |                           | 23,000              | 23,000          | 23,000           | 2,760                        | 23,000              | -                  | -                  | -                   | -                  | -                  | -                  | -                  |         |         |
|      |         |      | Prototyping<br>Enclave (STAR)                                                                                                                                                  |                        | FY 2026       |                           |                     |                 |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |         |         |
|      |         |      |                                                                                                                                                                                |                        |               | 6%                        |                     |                 |                  |                              |                     |                    |                    |                     |                    | FY 2026            | FY 2026            | FY 2027            | FY 2026 | FY 2026 |
| Inst | Inst    | LLNL |                                                                                                                                                                                | As originally notified |               |                           | 32,000              | 32,000          | 32,000           | 2,880                        | -                   | -                  | 2,880              | 29,120              | -                  | -                  | -                  | -                  |         |         |

|      |         |      |                                                                              |                                                                                                                                                                                                                                                                                                                                      | ✓             | ✓                                                             |                     |                 | Original |                  |                              | Current             |                    |                    |                     |                    |                    |                    |                    |
|------|---------|------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------|---------------------|-----------------|----------|------------------|------------------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
|      |         |      | Icons<br>⚠ ⚡ ⚙                                                               |                                                                                                                                                                                                                                                                                                                                      | New<br>Notif. | Auth. -<br>Con.<br>Design                                     | Percent<br>Complete |                 |          | Project<br>Start | Design<br>Complete           | Constr.<br>Complete | Project<br>Start   | Design<br>Complete | Constr.<br>Complete |                    |                    |                    |                    |
| Appr | Program | Site | Project Title                                                                | Project Description                                                                                                                                                                                                                                                                                                                  |               |                                                               | Original<br>TEC     | Previous<br>TEC |          | Current<br>TEC   | Current<br>Constr.<br>Design | Prior<br>Years      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|      |         |      | ⚠                                                                            |                                                                                                                                                                                                                                                                                                                                      | ✓             | FY 2026    FY 2026    FY2027    FY 2026    FY 2026    FY 2027 |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      | ⚠                                                                            | Design and construct site utilities for a new Forward Area Mission Complex and design & construct of an ~7,000 GSF administration facility that will provide support services including security and badging, Occupational Medicine, Occupational Health and Safety and Information Technology support to the forward area workforce |               |                                                               |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| Inst | Inst    | NNSS | Forward Area Mission Complex Site Prep Utilities & Support Services Facility |                                                                                                                                                                                                                                                                                                                                      |               |                                                               | 31,000              | -               |          | 31,000           | 2,300                        | -                   | -                  | 31,000             | -                   | -                  | -                  | -                  | -                  |
|      |         |      | ⚠                                                                            |                                                                                                                                                                                                                                                                                                                                      | ✓             | FY 2026    FY 2026    FY2027    FY 2026    FY 2026    FY 2027 |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      | ⚠                                                                            | Design and construction of a new Protective Force Headquarters facility within the Mercury Modernization campus. The facility will leverage the 17,600 square foot ProtoSTAR design.                                                                                                                                                 |               |                                                               |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| Inst | Inst    | NNSS | Mercury Security Headquarters Facility 23-473 - STAR                         |                                                                                                                                                                                                                                                                                                                                      |               |                                                               | 33,400              | -               |          | 34,000           | 1,300                        | -                   | -                  | 1,300              | 32,700              | -                  | -                  | -                  | -                  |
|      |         |      | ⚠                                                                            |                                                                                                                                                                                                                                                                                                                                      | ✓             | FY 2026    FY 2026    FY2027    FY 2026    FY 2026    FY 2027 |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      | ⚠                                                                            | The design and construction of a 11,900 GSF building to provide flexible collaboration space supporting multiple functions (training, conference, general meeting space and overflow seating for the future cafeteria).                                                                                                              |               |                                                               |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| Inst | Inst    | NNSS | Mercury Essential Services Complex - Collaboration Center 23-464             |                                                                                                                                                                                                                                                                                                                                      |               |                                                               | 16,600              | -               |          | 16,600           | 1,600                        | -                   | -                  | 1,600              | 15,000              | -                  | -                  | -                  | -                  |
|      |         |      | ⚠                                                                            |                                                                                                                                                                                                                                                                                                                                      | ✓             | FY 2026    FY 2026    FY2027    FY 2026    FY 2026    FY 2027 |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
|      |         |      | ⚠                                                                            | Utilizing ProtoSTAR, design and construct a 17,600 GSF facility . New space will provide administrative workspace to the NWLs, NNSS Site Operations, hoteling and conference space to support the on-going missions at the NNSS.                                                                                                     |               |                                                               |                     |                 |          |                  |                              |                     |                    |                    |                     |                    |                    |                    |                    |
| Inst | Inst    | NNSS | Mercury Laboratory Support and Site Services Facility 23-463 - ProtoSTAR     |                                                                                                                                                                                                                                                                                                                                      |               |                                                               | 29,000              | -               |          | 29,000           | 1,300                        | -                   | -                  | 29,000             | -                   | -                  | -                  | -                  | -                  |
|      |         |      |                                                                              |                                                                                                                                                                                                                                                                                                                                      |               |                                                               | 100%                |                 |          | NA               | NA                           | FY2024              | FY 2023            | FY 2023            | FY2024              |                    |                    |                    |                    |
| Inst | Inst    | NNSS | Area 6 Shaker Plant Installation                                             | As originally notified                                                                                                                                                                                                                                                                                                               |               |                                                               | 5,600               | 7,176           |          | 7,176            | 380                          | 7,176               | -                  | -                  | -                   | -                  | -                  | -                  | -                  |

|      |         |      | Icons<br>⚠️❌⚠️ |                     | ✓          | ✓                   | Percent Complete |              | Original      |                        |                  | Current         |                 |                  |                 |                 |                 |                 |
|------|---------|------|----------------|---------------------|------------|---------------------|------------------|--------------|---------------|------------------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
|      |         |      |                |                     | New Notif. | Auth. - Con. Design |                  |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title  | Project Description |            |                     | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      |                |                     | FY 2026    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     | -          |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     | FY 2026    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     | FY 2026    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     | FY 2028    |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                |                     |            |                     |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
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|      |         |      |                                                          |                                                                                                                                                                                                         | New Notif. | Auth. - Con. Design                             | Percent Complete |              | Project Start | Design Complete        | Constr. Complete | Project Start   | Design Complete | Constr. Complete |                 |                 |                 |                 |
| Appr | Program | Site | Project Title                                            | Project Description                                                                                                                                                                                     |            |                                                 | Original TEC     | Previous TEC | Current TEC   | Current Constr. Design | Prior Years      | FY 2025 Enacted | FY 2026 Enacted | FY 2027 Request  | FY 2028 Request | FY 2029 Request | FY 2030 Request | FY 2031 Request |
|      |         |      | Icons 8X4                                                |                                                                                                                                                                                                         | ✓          | FY 2026 FY 2027 FY 2028 FY 2026 FY 2027 FY 2028 |                  |              |               |                        |                  |                 |                 |                  |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL NM New Eubank Corridor Office Building - IND         | Construct a Office Building ~9k GSF, with 41 workstations to accommodate 100-125 visitors. This project will also include site development work (utilties, sidewalks, parking, etc.) for five acre lot. |            |                                                 | 24,303           | -            | 24,303        | 1,563                  | -                | -               | 1,563           | 22,740           | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 100%             |              | FY 2024       | FY 2025                | FY 2026          | FY 2024         | FY 2025         | FY 2026          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL NM CAMINO High Bay Bridge Tenant Improvements        | As originally notified                                                                                                                                                                                  |            |                                                 | 2,577            | 6,721        | 6,721         | 482                    | -                | 482             | 6,239           | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 97%              |              | FY 2022       | NA                     | FY 2025          | FY 2022         | FY 2023         | FY 2025          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | 957 Manufacturing Liaison Metrology Lab (SNL NM)         | As originally notified                                                                                                                                                                                  |            |                                                 | 3,200            | 7,100        | 7,100         | 250                    | 7,100            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 80%              |              | FY 2022       | NA                     | FY 2025          | FY 2022         | FY 2023         | FY 2025          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | C940 Seismic Upgrade                                     | As originally notified                                                                                                                                                                                  |            |                                                 | 4,500            | 6,200        | 6,200         | 200                    | 6,200            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 100%             |              | FY 2022       | NA                     | FY 2025          | FY 2022         | FY 2023         | FY 2025          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | C910 Seismic Resilience Upgrade                          | As originally notified                                                                                                                                                                                  |            |                                                 | 4,300            | 5,800        | 5,800         | 200                    | 5,800            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 9%               |              | FY 2025       | FY 2025                | FY 2027          | FY 2025         | FY 2025         | FY 2027          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL CA - New Western Utility Corridor                    | As originally notified                                                                                                                                                                                  |            |                                                 | 28,606           | 28,606       | 28,606        | 1,330                  | -                | 1,330           | 27,276          | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 100%             |              | FY 2022       | FY 2023                | FY 2026          | FY 2022         | FY 2023         | FY 2025          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL NM - 6505A Drainage Improvement Upgrades             | Install improved drainage system to prevent flooding                                                                                                                                                    |            |                                                 | 4,012            | 5,000        | 5,000         | 235                    | 5,000            | -               | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 86%              |              | FY 2022       | NA                     | FY 2025          | FY 2022         | FY 2023         | FY 2026          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL-NM - Bldg. 895 Physical Security Laboratory Addition | As originally notified                                                                                                                                                                                  |            |                                                 | 6,500            | 6,500        | 12,000        | 650                    | 6,500            | 5,500           | -               | -                | -               | -               | -               | -               |
|      |         |      |                                                          |                                                                                                                                                                                                         |            |                                                 | 56%              |              | NA            | NA                     | FY2024           | FY 2023         | FY 2024         | FY 2026          |                 |                 |                 |                 |
| Inst | Inst    | SNL  | SNL NM - EST Power and Communications to Ranges at 9920  | As originally notified                                                                                                                                                                                  |            |                                                 | 5,760            | 5,760        | 8,129         | 250                    | 5,760            | 2,369           | -               | -                | -               | -               | -               | -               |



**Institutional Major Item of Equipment (MIE)**

| Appr | Program | Site | Project Title | Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Original<br>TEC | Previous<br>TEC | Current<br>TEC | Current<br>Constr.<br>Design | Prior<br>Years | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|------|---------|------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|----------------|------------------------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Inst | Inst    | LANL | Vision        | Vision Acquisition and Deployment: Design, acquisition, integration, testing, and commissioning of the next-generation Institutional Computing 'Vision' system delivering >45 PFLOP peak compute, ~12PB flash storage, and supporting AI/ML and Genesis mission workloads. Includes GPU computing hardware, storage, networking, system software, and 4-year NVIDIA Premier Support.                                                                                              | 118,008         | N/A             | 118,008        | -                            | -              | -                  | 28,008             | 30,000             | 30,000             | 30,000             | -                  | -                  |
| Inst | Inst    | LANL | Chicoma2      | Chicoma-2 is a placeholder name for the (soon-to-be-named) Chicoma Replacement System. Chicoma-2 Acquisition and Deployment: Design, acquisition, integration, testing, and commissioning of the next-generation Institutional Computing 'Chicoma-2' system delivering CPU/GPU computing hardware, storage, networking, system software, and 4-year NVIDIA Premier supporting open science and engineering workloads broadly and modeling and simulation workloads in particular. | 63,500          | N/A             | 63,500         | -                            | -              | -                  | 23,500             | 10,000             | 10,000             | 10,000             | 10,000             | -                  |

| Institutional Major Item of Equipment (MIE) |         |      |                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                 |                 |                |                              |                |                    |                    |                    |                    |                    |                    |                    |
|---------------------------------------------|---------|------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|----------------|------------------------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Appr                                        | Program | Site | Project Title                | Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Original<br>TEC | Previous<br>TEC | Current<br>TEC | Current<br>Constr.<br>Design | Prior<br>Years | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|                                             |         |      |                              | Procure and deploy a scalable institutional data infrastructure capability for LANL's open computing environment. This investment includes high-performance storage hardware and associated software required to enable data management, metadata indexing, and integration with institutional HPC and AI systems. The capability will support data-intensive modeling, simulation, analytics, and AI/ML workloads across the Laboratory. It is not dedicated to any single project or platform and will be accessible to all institutional HPC-AI systems operating within the open computing environment. The MIE portion of this request reflects capital equipment (hardware). Associated software licenses and support are required for full system functionality. |                 |                 |                |                              |                |                    |                    |                    |                    |                    |                    |                    |
| Inst                                        | Inst    | LANL | AI Data Infrastructure/DIANA |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 12,000          | N/A             | 12,000         | -                            | -              | -                  | 5,000              | 4,000              | 2,000              | 1,000              | -                  | -                  |

## **Abbreviations:**

\*State Abbreviations are standard USPS codes

BL – Bettis Atomic Power Laboratory

DNN – Defense Nuclear Nonproliferation

DNS – Defense Nuclear Security

I&O - Infrastructure and Operations

Inst – Indirect funded Institutional (not an appropriation)

IT/Cyber - Information Technology and Cybersecurity

GMS - Global Material Security

HQ – DOE Headquarters

KCNSC – Kansas City National Security Campus

KL – Kenneth A. Kesselring Site, Naval Nuclear Laboratory

LAFO – Los Alamos Field Office

LANL – Los Alamos National Laboratory

LFO – Livermore Field Office

LLNL – Lawrence Livermore National Laboratory

MMM - Material Management and Minimization

NA – Not Applicable

NCTIR - Nuclear Counterterrorism and Incident Response Program

NNSS – Nevada National Security Site

NPAC - Nonproliferation and Arms Control

NR – Naval Reactors

NRF – Naval Reactors Facility

ORNL – Oak Ridge National Laboratory

PM – Production Modernization

PNNL – Pacific Northwest National Laboratory

PX – Pantex

R&D - Research and Development (DNN)

SM – Stockpile Management

SNL – Sandia National Laboratories

SRFO - Savannah River Field Office

SRS – Savannah River Site

SRT&E - Stockpile Research, Technology, and Engineering

STA – Secure Transportation Asset

TEC – Total Estimated Cost

WA – Weapons Activities

Y-12 – Y-12 National Security Complex



## **NNSA Fiscal Year 2025 Support Service Contract FTE and Obligations NDAA Reporting**

### **“...With respect to the most recent fiscal year for which data is available— the number of service support contracts of the Administration” – Reporting for FY 2025**

The following tables provide information required by SEC. 3241A. paragraph (c)(2)(A), (B), (D) and (E). The tables do not address paragraph (c)(2)(C) “the number of full-time equivalent contractor employees described in subparagraph (B) that have been employed under such a contract for a period greater than two years”. NNSA has been transparent in its budget justification materials citing data limitations that prevent accurate, reliable reporting of this information. NNSA does not have access or privy to contractor personnel systems and collecting and reporting such data could run counter to regulations/statutes regarding employer/employee relationships. In this case, the vendor, not NNSA, is the employer and we must avoid any activities that would give the appearance of attempting to manage or oversee contractor employees or staffing. NNSA will, however, upon request, meet with congressional staff on ways to further enhance the reported data to meet their needs.

Since inception, in the FY 2026 National Defense Authorization Act, the Annual Support Service Contractor (SSC) Summary tables include Technical and Management (professional) support service contracts and exclude the following services: Management and Operating contracts, contracts for housekeeping, custodial, physical security, IT helpline/support, maintenance, and facilities maintenance.

The total number of unique contracts active during FY 2025 was 202, with 2,052 contractor Full Time Equivalents (FTEs) reported, and over \$525,752,574 in obligations for the identified SSC during FY 2025.

| Table 1                                    |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |      |                                            |                         |                                 |                                  |  |
|--------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|
| Awardee Name/Vendor Name                   | Contract/Order Number | Fund Description                                                                                    | Note | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |
| ACCENTURE FEDERAL SERVICES LLC             | 89233124FNA000147     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ -                    | 6                               | -                                |  |
|                                            | 89233124FNA000152     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 3,336,218.23         | 11.5                            | -                                |  |
|                                            |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |      |                                            | \$ 310,448.40           | -                               | -                                |  |
|                                            | 89233125FNA000176     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 42,624,138.21        | -                               | -                                |  |
| ADVANCED MANAGEMENT STRATEGIES GROUP, INC. | 89233120FNA400258     | Weapons Activities Program Direction                                                                |      |                                            | \$ (5,955.01)           | 20                              | -                                |  |
|                                            |                       | Weapons Activities PD                                                                               |      |                                            | \$ 1,884,979.85         | -                               | -                                |  |
| AKIMA SYSTEMS ENGINEERING, LLC             | 89233124CNA000336     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 733,646.00           | 3                               | -                                |  |
| AMAZON WEB SERVICES LLC                    | 89233123FNA400556     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ -                    | -                               | -                                |  |
|                                            | 89233124FNA000186     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 492,813.00           | -                               | -                                |  |
| AMYX, INC.                                 | 89233123FNA400502     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 2,894,622.09         | 10                              | -                                |  |
| ANALEX CORPORATION                         | 89233119CNA000083     | WA RW with Non-Federal Entities (was 2T)                                                            |      |                                            | \$ -                    | 4                               | -                                |  |
| AUTONOMIC INTEGRA LLC                      | 89233125FNA400719     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 1,441,241.00         | 5.5                             | -                                |  |
| BANDA GROUP INTERNATIONAL, LLC             | 89233124CNA000337     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 1,922,368.00         | 4                               | -                                |  |
| BENALYTICS CONSULTING GROUP, LLC           | 89233124CNA000350     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 514,996.09           | 8                               | -                                |  |
| BGRS RELOCATION INC.                       | 89233124FNA000137     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 3,600.00             | -                               | -                                |  |
|                                            | 89233124FNA000149     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 15,300.00            | -                               | -                                |  |
|                                            | 89233124FNA000162     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 700.00               | -                               | -                                |  |
|                                            | 89233124FNA000164     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 14,010.00            | -                               | -                                |  |
|                                            | 89233125FNA000169     | Weapons Activities PD                                                                               |      |                                            | \$ 15,500.00            | -                               | -                                |  |
|                                            | 89233125FNA000170     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 8,300.00             | -                               | -                                |  |
|                                            | 89233125FNA000171     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 28,300.00            | -                               | -                                |  |
|                                            | 89233125FNA000173     | Weapons Activities PD                                                                               |      |                                            | \$ 42,500.00            | -                               | -                                |  |
|                                            | 89233125FNA000177     | Federal Salaries and Expenses                                                                       |      |                                            | \$ 31,000.00            | -                               | -                                |  |
|                                            | 89233125FNA000178     | Federal Salaries and Expenses                                                                       |      |                                            | \$ 36,000.00            | -                               | -                                |  |
|                                            | 89233125FNA000179     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 52,800.00            | -                               | -                                |  |
|                                            | 89233125FNA000181     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 53,100.00            | -                               | -                                |  |
|                                            | 89233125FNA000194     | FSE Ukraine Emerg. Sup. PL118-50                                                                    |      |                                            | \$ 46,000.00            | -                               | -                                |  |
|                                            | 89233125FNA000196     | Weapons Activities PD                                                                               |      |                                            | \$ 100,250.00           | -                               | -                                |  |
|                                            | 89233125FNA000198     | Federal Salaries and Expenses                                                                       |      |                                            | \$ 98,050.00            | -                               | -                                |  |
|                                            | 89233125FNA000202     | Working Capital Fund (42 USC 5815) (was WF)                                                         |      |                                            | \$ 14,600.00            | -                               | -                                |  |

| Table 1                                        |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                            |                         |                                 |                                  |  |  |
|------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|
| Awardee Name/Vendor Name                       | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |
| BRAZEN TECHNOLOGIES, INC.                      | 89233124CNA000347     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 1                               | -                                |  |  |
|                                                |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 4,013.71             | -                               | -                                |  |  |
| BRIC PERIKIN JV, LLC                           | 89233124CNA000332     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 7,151,484.72         | 25.5                            | -                                |  |  |
| BUILDING PEOPLE, LLC, THE                      | 89233122FNA000102     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 645,840.23           | -                               | -                                |  |  |
|                                                |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,399,042.34         | 9                               | -                                |  |  |
| BY LIGHT, PROFESSIONAL IT SERVICES, INC.       | 89233124FNA400576     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | 5                               | -                                |  |  |
|                                                | 89233124FNA400629     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 675,000.00           | -                               | -                                |  |  |
|                                                | 89233125CNA000423     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 12,015,000.00        | -                               | -                                |  |  |
| CE2 CORPORATION INC                            | 89233122FNA400408     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 4                               | -                                |  |  |
|                                                |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 772,102.99           | -                               | -                                |  |  |
| CHENEGA PROFESSIONAL & TECHNICAL SERVICES, LLC | 89233119CNA000081     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,835,000.00         | 14                              | -                                |  |  |
|                                                | 89233122FNA400406     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 25,221.00            | -                               | -                                |  |  |
|                                                |                       | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,221,736.00         | 23                              | -                                |  |  |
|                                                |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 890,094.00           | -                               | -                                |  |  |
|                                                |                       | Weapons Activities Program Direction                                                                |                                                        |                                            | \$ (7,514.65)           | -                               | -                                |  |  |
|                                                |                       | Weapons Activities PD                                                                               |                                                        |                                            | \$ 165,736.03           | -                               | -                                |  |  |
| COGENT SECURITY CONSULTING LLC                 | 89233119FNA400197     | Weapons Activities (WA) Primary Fund (was TC)                                                       | Expired requirement with a follow-on starting in FY25. | 89233125FNA400660                          | \$ (103,393.41)         | -                               | 4                                |  |  |
|                                                | 89233125FNA400660     | Weapons Activities (WA) Primary Fund (was TC)                                                       | Follow-on for FY25 expired contract.                   | 89233119FNA400197                          | \$ 701,035.01           | 4                               | -                                |  |  |
|                                                | 89233125FNA400718     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 5,414,257.59         | -                               | -                                |  |  |
|                                                |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 385,000.00           | 32.15                           | -                                |  |  |
| COLLEAGUE CONSULTING LLC                       | 89233124FNA000165     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ (435,383.75)         | 0.082                           | -                                |  |  |
|                                                |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | 9                               | -                                |  |  |
| COVENANT PARK INTEGRATED INITIATIVES           | 89233121CNA000187     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 43,758,347.90        | 172                             | -                                |  |  |
| CRITERION SYSTEMS, INC.                        | 89233125FNA400672     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,200,431.46         | 10                              | -                                |  |  |
| CYBERNAMIC LLC                                 | 89233125FNA400675     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,153,873.40         | 2                               | -                                |  |  |
| DECK PRISM                                     | 89233124CNA000331     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
| DELOITTE CONSULTING LLP                        | 89233121FNA000091     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 20,000.00            | -                               | -                                |  |  |
|                                                | 89233125FNA400723     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 4,000,000.00         | 98                              | -                                |  |  |

| Table 1                                         |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                            |                         |                                 |                                  |  |  |
|-------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|
| Awardee Name/Vendor Name                        | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |
| DIGON SYSTEMS, LLC                              | 89233120CNA000146     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 3                               | -                                |  |  |
| GARTNER, INC.                                   | 89233123FNA400498     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 | 89233123FNA400561     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
| GEM TECHNOLOGY INTERNATIONAL CORP               | 89233123FNA400505     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 4                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 593,102.77           | -                               | -                                |  |  |
| GENERAL DYNAMICS INFORMATION TECHNOLOGY INC     | 89233124FNA000167     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 | 89233124FNA000168     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ (6,022,229.34)       | -                               | -                                |  |  |
| GRADILLAS COURT REPORTERS INC                   | 89233119FNA400231     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 1,654.77             | -                               | -                                |  |  |
| GRAHAM INC.                                     | 89233124CNA000384     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 119,565.23           | -                               | -                                |  |  |
|                                                 |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 1,336,310.13         | 17                              | -                                |  |  |
| HARKCON, INC                                    | 89233120FNA400313     |                                                                                                     |                                                        |                                            | \$ -                    | 5                               | -                                |  |  |
|                                                 | 89233121FNA400339     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ 442,000.00           | -                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ -                    | 16.27                           | -                                |  |  |
|                                                 | 89233122FNA400443     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 2,451,169.85         | -                               | -                                |  |  |
|                                                 |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ (370,635.33)         | -                               | -                                |  |  |
| HENRY L STIMSON CENTER                          | 89233119CNA000075     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
| HTGS-CULMEN JV LLC                              | 89233123CNA000314     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 2,439,856.40         | 18.25                           | -                                |  |  |
|                                                 |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Expired requirement with a follow-on starting in FY25. | 89233125CNA000427                          | \$ 3,380,626.70         | -                               | -                                |  |  |
|                                                 | 89233123CNA000324     | Weapons Activities RW with Other Federal Agencies                                                   |                                                        |                                            | \$ -                    | 26                              | -                                |  |  |
|                                                 |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 2,492,624.00         | 5                               | -                                |  |  |
| HUNATEK SYSTEM SOLUTIONS LLC                    | 89233123CNA000306     |                                                                                                     |                                                        |                                            | \$ 250,000.00           | 0.408                           | -                                |  |  |
| HYPERION TECHNOLOGIES LLC                       | 89233125CNA000422     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 8,277,875.02         | 72                              | -                                |  |  |
| INNOVATIVE TECHNOLOGY PARTNERSHIPS LLC          | 89233120FNA400264     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 44,181.20            | -                               | -                                |  |  |
|                                                 |                       | Weapons Activities RW with Other Federal Agencies                                                   |                                                        |                                            | \$ 1,895,875.00         | 10                              | -                                |  |  |
|                                                 | 89233122FNA400409     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 1                               | -                                |  |  |
|                                                 | 89233123FNA400515     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ 46,743.76            | -                               | -                                |  |  |
|                                                 |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                                 |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 3,343,335.00         | 8.4                             | -                                |  |  |
| INTUITIVE INFORMATION SYSTEMS TECHNOLOGIES, LLC | 89233122FNA400419     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 1,117,506.25         | 5.8                             | -                                |  |  |
|                                                 |                       | DNN Ukraine Emerg. Sup. PL118-50                                                                    |                                                        |                                            | \$ 314,000.00           | -                               | -                                |  |  |

| Table 1                                                |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                            |                         |                                 |                                  |  |  |
|--------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|
| Awardee Name/Vendor Name                               | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |
| JGMS GOVERNMENT SERVICES, LLC                          | 89233122FNA400415     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 341,132.00           | 3                               | -                                |  |  |
|                                                        | 89233122FNA400417     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 4.166                           | -                                |  |  |
|                                                        |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 441,930.20           | -                               | -                                |  |  |
|                                                        | 89233122FNA400434     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 2                               | -                                |  |  |
|                                                        |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 98,530.00            | -                               | -                                |  |  |
|                                                        | 89233122FNA400439     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 66,355.60            | 5                               | -                                |  |  |
|                                                        | 89233122FNA400473     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ (12,906.98)          | 4                               | -                                |  |  |
|                                                        | 89233124FNA400565     | Weapons Activities Program Direction                                                                |                                                        |                                            | \$ -                    | 1.1                             | -                                |  |  |
|                                                        |                       | Weapons Activities PD                                                                               |                                                        |                                            | \$ 380,767.26           | -                               | -                                |  |  |
|                                                        | 89233125FNA400680     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 513,000.00           | 3                               | -                                |  |  |
| JOHN HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY LLC | 89233123CNA000312     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 50,000.00            | 0.74                            | -                                |  |  |
| LINK TECHNOLOGIES INC                                  | 89233120FNA400317     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 784,000.00           | -                               | -                                |  |  |
|                                                        |                       | WA RW with Other Federal Agencies (was 3T)                                                          |                                                        |                                            | \$ 2,842,205.00         | 13.7                            | -                                |  |  |
| LONGENECKER AND ASSOCIATES, INC                        | 89233119FNA400224     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 2,087,286.22         | 6.4                             | -                                |  |  |
|                                                        | 89233122FNA000107     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 40,000.00            | -                               | -                                |  |  |
|                                                        |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 7,977,963.13         | 25.5                            | -                                |  |  |
|                                                        | 89233124FNA000140     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 300,000.00           | 0.5                             | -                                |  |  |
|                                                        | 89233125FNA400664     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 500,000.00           | 1.5                             | -                                |  |  |
| MANTECH ADVANCED SYSTEMS INTERNATIONAL, INC.           | 89233123FNA400558     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,003,137.00         | 6.5                             | -                                |  |  |
|                                                        | 89233124FNA400586     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,921,208.00         | 12                              | -                                |  |  |
| MASPEC LLC                                             | 89233125FNA400725     | Weapons Activities PD                                                                               | Follow-on for FY25 expired contract.                   | 89233120FNA400303                          | \$ 638,556.78           | 7                               | -                                |  |  |
| MCLANE ADVANCED TECHNOLOGIES, LLC                      | 89233121FNA400365     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 5,915,575.62         | 41                              | -                                |  |  |
| MELE ASSOCIATES INC                                    | 89233119FNA400200     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Expired requirement with a follow-on starting in FY25. | 89233125FNA400679                          | \$ 1,067,686.75         | -                               | -                                |  |  |
|                                                        |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | 27                               |  |  |
|                                                        | 89233120FNA400255     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 11,534,725.11        | 52                              | -                                |  |  |
|                                                        | 89233120FNA400260     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 6,216,612.57         | 37                              | -                                |  |  |
|                                                        | 89233121FNA400373     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Expired requirement with a follow-on starting in FY25. | 89233125FNA400663                          | \$ -                    | -                               | -                                |  |  |
|                                                        |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | 11                               |  |  |
|                                                        | 89233122FNA400454     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 16,480,819.21        | 31                              | -                                |  |  |
|                                                        | 89233122FNA400481     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,663,000.00         | 11                              | -                                |  |  |
|                                                        | 89233123FNA400553     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 19,310,526.23        | 62                              | -                                |  |  |
|                                                        |                       | DNN Ukraine Emerg. Sup. PL118-50                                                                    |                                                        |                                            | \$ 1,289,418.00         | -                               | -                                |  |  |

| Table 1                               |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                            |                         |                                 |                                  |  |  |
|---------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|
| Awardee Name/Vendor Name              | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |
| MELE ASSOCIATES INC                   | 89233119FNA400200     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Expired requirement with a follow-on starting in FY25. | 89233125FNA400679                          | \$ 1,067,686.75         | -                               | -                                |  |  |
|                                       | 89233123FNA400555     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 10,766,134.78        | -                               | -                                |  |  |
|                                       |                       | WA RW with Other Federal Agencies (was 3T)                                                          |                                                        |                                            | \$ 364,077.67           | 42                              | -                                |  |  |
|                                       |                       | DNN Ukraine Emerg. Sup. PL118-50                                                                    |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       | 89233124FNA400599     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 5,071,650.79         | 8                               | -                                |  |  |
|                                       | 89233125FNA400663     | Weapons Activities (WA) Primary Fund (was TC)                                                       | Follow-on for FY25 expired contract.                   | 89233121FNA400373                          | \$ 6,345,159.00         | 11                              | -                                |  |  |
|                                       | 89233125FNA400679     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 9,112,474.31         | -                               | -                                |  |  |
|                                       |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,350,000.00         | 27                              | -                                |  |  |
|                                       | 89233125FNA400698     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 6,761,865.27         | 75                              | -                                |  |  |
| MERRICK-SMSI JOINT VENTURE LLP        | 89233123CNA000311     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 500,000.00           | 11                              | -                                |  |  |
| METAPHASE CONSULTING LLC              | 89233125FNA400674     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,242,969.04         | 10.75                           | -                                |  |  |
| MONTECH INC.                          | 89233122CNA000272     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 301,728.82           | -                               | -                                |  |  |
|                                       |                       | Weapons Activities Program Direction                                                                |                                                        |                                            | \$ (5,000.00)           | -                               | -                                |  |  |
|                                       | 89233123CNA000313     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 1                               | -                                |  |  |
|                                       |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 20,000.00            | -                               | -                                |  |  |
| NAVARRO RESEARCH AND ENGINEERING, INC | 89233121FNA400384     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 791,021.25           | 0.7                             | -                                |  |  |
| NEW TECH SOLUTIONS INC                | 89233123FNA400503     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ (24,876.36)          | -                               | -                                |  |  |
| NUCLEAR FUEL SERVICES, INC            | 89233124CNA000371     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 5.1                             | -                                |  |  |
| PARSONS GOVERNMENT SERVICES INC       | 89233121FNA000085     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 0.75                            | -                                |  |  |
|                                       | 89233123FNA000109     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 27,597.27            | 1                               | -                                |  |  |
|                                       |                       | Naval Reactors Primary Fund (was NR)                                                                |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       | 89233123FNA000111     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,033,000.00         | 5                               | -                                |  |  |
|                                       | 89233123FNA000115     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ (196,359.10)         | 9                               | -                                |  |  |
|                                       | 89233123FNA000116     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,000,000.00         | 5                               | -                                |  |  |
|                                       | 89233123FNA000117     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,060,000.00         | 2.5                             | -                                |  |  |
|                                       | 89233123FNA000121     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,837,616.59         | 6                               | -                                |  |  |
|                                       | 89233123FNA000122     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                       |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 333,000.00           | -                               | -                                |  |  |

| Table 1                                        | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                                |                                                        |                                            |                         |                                 |                                  |  |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|
| Awardee Name/Vendor Name                       | Contract/Order Number                                                                               | Fund Description                                               | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |
| PARSONS GOVERNMENT SERVICES INC                | 89233121FNA000085                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ -                    | 0.75                            | -                                |  |
|                                                | 89233123FNA000124                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ -                    | 1.5                             | -                                |  |
|                                                | 89233123FNA000125                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ -                    | 3                               | -                                |  |
|                                                | 89233123FNA000126                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 2,568,526.24         | 17.5                            | -                                |  |
|                                                |                                                                                                     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ (34,389.20)          | -                               | -                                |  |
|                                                | 89233123FNA000132                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 110,000.00           | 2                               | -                                |  |
|                                                | 89233124FNA000145                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 600,000.00           | 3                               | -                                |  |
|                                                | 89233125FNA000175                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 8,650,000.00         | 3                               | -                                |  |
| PARSONS GOVERNMENT SERVICES INTERNATIONAL INC. | 89233124FNA400574                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 933,572.08           | 2                               | -                                |  |
|                                                | 89233124FNA400580                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 9,447,545.00         | -                               | -                                |  |
|                                                | 89233124FNA400648                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 2,123,349.00         | 4                               | -                                |  |
|                                                |                                                                                                     | Defense Nuclear Nonproliferation - International Contributions |                                                        |                                            | \$ 3,878,232.33         | -                               | -                                |  |
|                                                |                                                                                                     | DNN Ukraine Emerg. Sup. PL118-50                               |                                                        |                                            | \$ 5,743,912.67         | -                               | -                                |  |
|                                                | 89233125FNA400658                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 338,988.00           | 0.8                             | -                                |  |
|                                                | 89233125FNA400705                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 7,308,771.19         | 4                               | -                                |  |
| PORTSIDE INC                                   | 89233125PNA000204                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 27,494.52            | -                               | -                                |  |
| POWDER RIVER INDUSTRIES, LLC                   | 89233123CNA000302                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 9,428,516.00         | 40                              | -                                |  |
| PROJECT ENHANCEMENT CORPORATION                | 89233120FNA400303                                                                                   | Weapons Activities Program Direction                           | Expired requirement with a follow-on starting in FY25. | 89233125FNA400725                          | \$ (4,842.29)           | -                               | 7                                |  |
|                                                |                                                                                                     | Weapons Activities PD                                          |                                                        |                                            | \$ 1,593,982.73         | -                               | -                                |  |
|                                                | 89233121FNA400380                                                                                   | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)   |                                                        |                                            | \$ 21,203,676.44        | 56                              | -                                |  |
|                                                |                                                                                                     | DNN Ukraine Emerg. Sup. PL118-50                               |                                                        |                                            | \$ 7,245.00             | -                               | -                                |  |
|                                                | 89233121FNA400393                                                                                   | Federal Salaries and Expenses Primary Fund                     |                                                        |                                            | \$ -                    | 3.409                           | -                                |  |
|                                                |                                                                                                     | Federal Salaries and Expenses                                  |                                                        |                                            | \$ 1,092,076.00         | -                               | -                                |  |
| RADUS SOFTWARE LLC                             | 89233121CNA000189                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 591,123.00           | -                               | -                                |  |
| RHINOCORPS LTD CO                              | 89233121CNA000219                                                                                   | Weapons Activities (WA) Primary Fund (was TC)                  |                                                        |                                            | \$ 3,950,000.00         | 8                               | -                                |  |
| RIVIDIU INC.                                   | 89233124FNA400644                                                                                   | Federal Salaries and Expenses Primary Fund                     |                                                        |                                            | \$ (3,088.69)           | 13                              | -                                |  |
|                                                |                                                                                                     | Federal Salaries and Expenses                                  |                                                        |                                            | \$ 675,689.41           | -                               | -                                |  |

| Table 1                           |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                               |                            |  | Total FTEs<br>for Active<br>Contracts | Total FTEs<br>for Expired<br>Contracts |
|-----------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------|----------------------------|--|---------------------------------------|----------------------------------------|
| Awardee Name/Vendor Name          | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On<br>Contract/Order Number | Total FY 25<br>Obligations |  |                                       |                                        |
| RVET OPERATING, LLC               | 89233124PNA000183     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                               | \$ 22,780.00               |  | -                                     | -                                      |
| SEATECH GLOBAL SECURITY SOLUTIONS | 89233124FNA400575     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 1,173,776.40            |  | 2                                     | -                                      |
|                                   | 89233124FNA400649     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 5,641,550.00            |  | 4                                     | -                                      |
|                                   |                       | Defense Nuclear Nonproliferation - International Contributions                                      |                                                        |                                               | \$ 1,919,980.00            |  | -                                     | -                                      |
|                                   | 89233124FNA400650     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 286,711.83              |  | 4                                     | -                                      |
|                                   | 89233125FNA400659     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 449,592.00              |  | 0.8                                   | -                                      |
|                                   | 89233125FNA400716     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 1,820,434.42            |  | 4                                     | -                                      |
|                                   |                       | Defense Nuclear Nonproliferation - International Contributions                                      |                                                        |                                               | \$ 976,848.58              |  | -                                     | -                                      |
|                                   | 89233125FNA400722     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 1,691,537.00            |  | 4                                     | -                                      |
|                                   | 89233125FNA400737     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 2,279,757.00            |  | 4                                     | -                                      |
|                                   | 89233125FNA400740     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 2,670,958.00            |  | 4                                     | -                                      |
| SHOREPOINT INC                    | 89233122FNA400483     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                               | \$ 4,240,902.51            |  | 11                                    | -                                      |
| SIGMA SCIENCE INC                 | 89233121FNA400368     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 1,752,000.00            |  | -                                     | -                                      |
|                                   |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                               | \$ 8,340,000.00            |  | 29.3                                  | -                                      |
|                                   | 89233122FNA400430     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                               | \$ 1,026,455.33            |  | 4.68                                  | -                                      |
|                                   | 89233122FNA400452     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                               | \$ (41,501.28)             |  | -                                     | -                                      |
|                                   |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                               | \$ 4,415,091.34            |  | 24.6                                  | -                                      |
|                                   | 89233124FNA400585     | Federal Salaries and Expenses Primary Fund                                                          | Expired requirement with a follow-on starting in FY25. | 89233125FNA400671                             | \$ -                       |  | -                                     | 9                                      |
|                                   |                       | Federal Salaries and Expenses                                                                       |                                                        |                                               | \$ 191,160.00              |  | -                                     | -                                      |
|                                   | 89233124FNA400624     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                               | \$ 1,973,975.00            |  | 7                                     | -                                      |
| SOUTHWEST RESEARCH INSTITUTE      | 89233120CNA000127     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Expired requirement with a follow-on starting in FY24. | 89233124CNA000374                             | \$ -                       |  | -                                     | 6                                      |
|                                   | 89233124CNA000374     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        | Follow-on for FY25 expired contract.                   | 89233120CNA000127                             | \$ 6,000,000.00            |  | 6                                     | -                                      |



| Table 1                                                      |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |      |                                            |                         |                                 |                                  |  |  |  |
|--------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|--|
| Awardee Name/Vendor Name                                     | Contract/Order Number | Fund Description                                                                                    | Note | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |  |
| STRATIVIA LLC                                                | 89233121CNA000179     | Federal Salaries and Expenses Primary Fund                                                          |      |                                            | \$ -                    | 3                               | -                                |  |  |  |
|                                                              |                       | Federal Salaries and Expenses                                                                       |      |                                            | \$ 294,879.00           | -                               | -                                |  |  |  |
| STREET LEGAL INDUSTRIES, INC                                 | 89233121CNA000173     | Federal Salaries and Expenses Primary Fund                                                          |      |                                            | \$ (607.98)             | 6                               | -                                |  |  |  |
|                                                              |                       | Federal Salaries and Expenses                                                                       |      |                                            | \$ 611,826.00           | -                               | -                                |  |  |  |
| SYSTEMATIC MANAGEMENT SERVICES INC<br>TEAM B MARKETING, INC. | 89233122FNA400427     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |      |                                            | \$ 7,609,647.38         | 42                              | -                                |  |  |  |
|                                                              | 89233122CNA000248     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ -                    | -                               | -                                |  |  |  |
|                                                              | 89233125CNA000421     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 10,360,500.00        | -                               | -                                |  |  |  |
| TECHNOLOGY VENTURES INC                                      | 89233124CNA000364     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |      |                                            | \$ 908,522.48           | 6                               | -                                |  |  |  |
|                                                              |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |      |                                            | \$ (213.39)             | -                               | -                                |  |  |  |
| TECHNOMICS INC                                               | 89233123FNA400519     | Federal Salaries and Expenses Primary Fund                                                          |      |                                            | \$ (10,892.97)          | -                               | -                                |  |  |  |
|                                                              |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 876,277.59           | 8                               | -                                |  |  |  |
|                                                              |                       | Federal Salaries and Expenses                                                                       |      |                                            | \$ 1,498,003.39         | -                               | -                                |  |  |  |
|                                                              | 89233124FNA400591     | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |      |                                            | \$ 343,714.19           | -                               | -                                |  |  |  |
|                                                              |                       | Federal Salaries and Expenses Primary Fund                                                          |      |                                            | \$ (1,000.60)           | -                               | -                                |  |  |  |
|                                                              |                       | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 3,135,256.71         | 9.25                            | -                                |  |  |  |
| TECHSOURCE INC                                               | 89233120FNA400310     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 2,398,785.00         | 12                              | -                                |  |  |  |
|                                                              | 89233120FNA400321     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 3,381,000.00         | 15                              | -                                |  |  |  |
|                                                              |                       | WA RW with Non-Federal Entities (was 2T)                                                            |      |                                            | \$ 800,000.00           | -                               | -                                |  |  |  |
|                                                              | 89233121FNA400357     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 3,100,000.00         | 24                              | -                                |  |  |  |
|                                                              | 89233121FNA400375     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 2,858,463.00         | 11                              | -                                |  |  |  |
|                                                              | 89233122FNA400494     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 1,751,594.00         | 5                               | -                                |  |  |  |
|                                                              | 89233124FNA400597     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 11,370,000.00        | 31.5                            | -                                |  |  |  |
|                                                              | 89233124FNA400632     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 1,155,650.86         | 3.5                             | -                                |  |  |  |
|                                                              | 89233125FNA400727     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 4,319,233.00         | 50                              | -                                |  |  |  |
| TETRA TECH INC                                               | 89233125FNA000174     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 1,091,961.00         | 1.14                            | -                                |  |  |  |
|                                                              | 89233125FNA000182     | Weapons Activities (WA) Primary Fund (was TC)                                                       |      |                                            | \$ 2,553,409.44         | 5                               | -                                |  |  |  |

| Table 1                          |                       | Summary of NDAA Support Service Contracts FTEs and Obligations for All Active Contracts during FY25 |                                                        |                                            |                         |                                 |                                  |  |  |
|----------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|-------------------------|---------------------------------|----------------------------------|--|--|
| Awardee Name/Vendor Name         | Contract/Order Number | Fund Description                                                                                    | Note                                                   | Expired or Follow-On Contract/Order Number | Total FY 25 Obligations | Total FTEs for Active Contracts | Total FTEs for Expired Contracts |  |  |
| THE MITRE CORPORATION            | 89233124CNA000367     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,000,000.00         | 5                               | -                                |  |  |
| THUNDERCAT TECHNOLOGY, LLC       | 89233123FNA400554     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,802,616.77         | -                               | -                                |  |  |
| TI VERBATIM CONSULTING INC.      | 89233121FNA400390     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 2                               | -                                |  |  |
|                                  |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 233,134.00           | -                               | -                                |  |  |
|                                  | 89233124FNA400630     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 2                               | -                                |  |  |
|                                  |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 228,588.00           | -                               | -                                |  |  |
| TIERRA RIGHT OF WAY SERVICES LTD | 89233121PNA000112     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 10                              | -                                |  |  |
|                                  | 89233122PNA000166     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | 2                               | -                                |  |  |
| TKC GLOBAL SOLUTIONS, LLC        | 89233124CNA000329     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 6,380,341.28         | 74                              | -                                |  |  |
| TPGI CPA PLLC                    | 89233123CNA000317     | Federal Salaries and Expenses Primary Fund                                                          |                                                        |                                            | \$ -                    | 3                               | -                                |  |  |
|                                  |                       | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 582,313.76           | -                               | -                                |  |  |
|                                  | 89233124CNA000348     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                  |                       | Defense Environmental Cleanup Primary Fund                                                          |                                                        |                                            | \$ 44,499.83            | 3                               | -                                |  |  |
|                                  |                       | Defense Nuclear Nonproliferation (DNN) Primary Fund (was NS)                                        |                                                        |                                            | \$ 100,000.00           | -                               | -                                |  |  |
| VECTOR RESOURCE INC              | 89233121FNA400328     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 503,743.51           | 6                               | -                                |  |  |
|                                  | 89233121FNA400386     | Weapons Activities (WA) Primary Fund (was TC)                                                       | Expired requirement with a follow-on starting in FY25. | 89233125FNA400683                          | \$ -                    | -                               | 8                                |  |  |
|                                  | 89233123FNA000118     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 278,013.63           | 1.5                             | -                                |  |  |
|                                  |                       | Naval Reactors Primary Fund (was NR)                                                                |                                                        |                                            | \$ -                    | -                               | -                                |  |  |
|                                  | 89233123FNA400549     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 629,733.00           | 6                               | -                                |  |  |
|                                  | 89233124FNA400635     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,283,942.68         | 8.5                             | -                                |  |  |
|                                  | 89233124FNA400636     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 2,108,208.96         | 7                               | -                                |  |  |
|                                  | 89233125FNA400671     | Federal Salaries and Expenses                                                                       |                                                        |                                            | \$ 535,100.00           | 4                               | -                                |  |  |
|                                  | 89233125FNA400683     | Weapons Activities (WA) Primary Fund (was TC)                                                       | Follow-on for FY25 expired contract.                   | 89233121FNA400386                          | \$ 1,498,250.00         | 8                               | -                                |  |  |
| VMD SYSTEMS INTEGRATORS INC      | 89233123FNA400497     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 3,988,879.00         | 13                              | -                                |  |  |
| WEST PUBLISHING CORPORATION      | 89233124CNA000381     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 163,860.00           | -                               | -                                |  |  |
| WYANT DATA SYSTEMS, INC          | 89233124FNA400640     | Weapons Activities (WA) Primary Fund (was TC)                                                       |                                                        |                                            | \$ 1,994,786.34         | 6                               | -                                |  |  |
| Grand Total                      |                       |                                                                                                     |                                                        |                                            | \$ 525,752,574.46       | 2052                            | 73                               |  |  |

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# Federal Salaries and Expenses

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## Federal Salaries and Expenses

### Proposed Appropriation Language

For National Nuclear Security Administration (NNSA) Federal Salaries and Expenses (FSE), \$577,097,000, to remain available until September 30, 2028, including official reception and representation expenses not to exceed \$17,000.

### Explanation of Changes

Changes to the appropriation language consist of revisions to the overall amount and the two-year period of availability. The FY 2027 Budget Request for NNSA FSE is \$577,097,000, a \$52,097,000 (10 percent) increase above the FY 2026 Enacted level. Increase funds salaries, benefits, and other expenses for 1,992 federal full-time equivalents (FTEs), 1,958 paid from FSE and 34 paid through the Working Capital Fund. This includes an increase to FSE's share of the Department of Energy (DOE) Working Capital Fund for additional attaches under the Overseas Presence business line and building occupancy.

### Federal Salaries and Expenses (\$K)

|                                                  | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|--------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|-------------|
|                                                  |                    |                    |                    | (\$)                                  | (%)         |
| NNSA Federal Salaries and Expenses               | 521,410            | 525,000            | 577,097            | +52,097                               | +10%        |
| Use of Prior Year Balances                       | -21,410            | -                  | -                  | -                                     | -           |
| <b>Total, NNSA Federal Salaries and Expenses</b> | <b>500,000</b>     | <b>525,000</b>     | <b>577,097</b>     | <b>+52,097</b>                        | <b>+10%</b> |
| <b>FTEs</b>                                      | <b>1,967</b>       | <b>1,846</b>       | <b>1,992</b>       | <b>+146</b>                           | <b>+8%</b>  |

### Mission

Provides the specialized Federal workforce that is responsive to the dynamic geopolitical environment providing programmatic direction, leadership, and oversight for development and delivery of a modernized nuclear deterrent, nonproliferation and counterterrorism programs, foundational science capabilities, and recapitalization of the nuclear security enterprise infrastructure.

### Funding by Object Class

Salaries and Benefits: Provides \$482,603,000 for salaries and benefits for the majority of the NNSA Federal staff. It does not include funding for the federal staff supporting the Weapons Activities (WA) Secure Transportation Asset (STA) program or the Naval Reactors (NR) account, which are supported by separate Program Direction accounts.

NNSA staff is located throughout the United States, reflecting NNSA's work with the Nuclear Security Enterprise. The staff is geographically located in Washington, DC; Germantown, Maryland; Albuquerque, New Mexico; and at eight federal field offices: Kansas City Field Office (Missouri); Livermore Field Office

(California); Los Alamos Field Office (New Mexico); Nevada Field Office (Nevada); Pantex Field Office (Texas); Y-12 Field Office (Tennessee); Sandia Field Office (New Mexico); and Savannah River Field Office (South Carolina).

Travel: Provides \$14,123,000 for travel necessary to conduct NNSA business. Domestic travel provides management oversight, public outreach, travel related to training, and national security assistance and interface between NNSA Headquarters, NNSA Field Offices, DOE laboratories and production facilities, and local governments. International travel is a key element of NNSA's nonproliferation work to implement programs globally that make America safer, stronger, and more prosperous.

Support Services: Includes \$10,294,000 for management and professional services for headquarters support offices to achieve efficient and effective management and operation of activities and systems, including administrative support.

Other Related Expenses: Provides \$70,077,000 for the following items:

- Training: Provides \$3,060,000 to train and develop our workforce. Funding will address the current workforce development needs to retain a cadre of professionals to lead America's nuclear security enterprise. Training programs executed through the utilization of these funds include the NNSA Technical Qualification Program, supervisory training, leadership development, the learning management system, and other learning activities.
- Space and Occupancy: Provides \$13,797,000 to support office space costs at headquarters and operations costs at the field offices.
- Working Capital Fund (WCF): Provides \$49,310,000 for FSE's contribution to the Department of Energy's WCF. The FSE contribution includes funding for DOE's overseas presence for administrative and operational support to Departmental personnel. The Department's overseas presence business line funds 34 FTEs, including 32 FTEs in 21 diplomatic missions and 2 FTEs at DOE Headquarters for transition to and from overseas locations. This supports both federal employees and locally employed staff and reimburses the Department of State for International Cooperative Administrative Support Services and Capital Security Cost Sharing charges. The Department's WCF budget chapter included in Volume 2 provides details on all programs funded through the WCF.
- Other Expenses: Provides \$3,910,000 for Government Services Administration (GSA) vehicles at the sites, potential settlement agreements, conference fees, other miscellaneous procurements, and funding for Reception and Representation funds (\$17,000).

## **Highlights of the FY 2027 Request**

The FY 2027 Request is for a federal staff of 1,992 FTEs providing appropriate oversight to ensure NNSA can meet growing mission requirements and commitments. NNSA will continue to re-shape its workforce consistent with the principles of the Executive Order on Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative and subsequent guidance from the Office of Personnel Management. NNSA will use attrition, reductions, and streamlined mission support to allow for limited, targeted growth in its federal staffing to support nuclear modernization programs.

**Program Direction**  
**(\$K)**

|                                                             | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2027 Request vs<br/>FY 2026 Enacted</b> |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------------------|
| Salaries and Benefits                                       | 323,145                    | 314,114                    | 345,980                    | +31,867                                       |
| Travel                                                      | 7,383                      | 12,719                     | 12,972                     | +253                                          |
| Support Services                                            | 9,746                      | 10,091                     | 10,294                     | +203                                          |
| Other Related Expenses                                      | 37,195                     | 46,506                     | 57,101                     | +10,595                                       |
| <b>Total, Headquarters</b>                                  | <b>377,469</b>             | <b>383,430</b>             | <b>426,347</b>             | <b>+42,918</b>                                |
| <b>Total, Headquarters Full Time<br/>Equivalents (FTEs)</b> | <b>1,375</b>               | <b>1,283</b>               | <b>1,391</b>               | <b>+108</b>                                   |
| Salaries and Benefits                                       | 17,367                     | 16,281                     | 17,072                     | +791                                          |
| Travel                                                      | 93                         | 113                        | 116                        | +3                                            |
| Support Services                                            | 582                        | -                          | -                          | -                                             |
| Other Related Expenses                                      | 608                        | 1,074                      | 1,095                      | +21                                           |
| <b>Total, Livermore Field Office</b>                        | <b>18,650</b>              | <b>17,468</b>              | <b>18,283</b>              | <b>+815</b>                                   |
| <b>Total, Livermore Field Office FTEs</b>                   | <b>71</b>                  | <b>64</b>                  | <b>66</b>                  | <b>+2</b>                                     |
| Salaries and Benefits                                       | 20,053                     | 17,911                     | 19,709                     | +1,798                                        |
| Travel                                                      | 127                        | 197                        | 201                        | +4                                            |
| Support Services                                            | 612                        | -                          | -                          | -                                             |
| Other Related Expenses                                      | 415                        | 448                        | 457                        | +9                                            |
| <b>Total, Los Alamos Field Office</b>                       | <b>21,207</b>              | <b>18,556</b>              | <b>20,367</b>              | <b>+1,811</b>                                 |
| <b>Total, Los Alamos Field Office FTEs</b>                  | <b>85</b>                  | <b>73</b>                  | <b>79</b>                  | <b>+6</b>                                     |
| Salaries and Benefits                                       | 19,390                     | 18,791                     | 20,038                     | +1,248                                        |
| Travel                                                      | 85                         | 210                        | 214                        | +4                                            |
| Support Services                                            | 318                        | -                          | -                          | -                                             |
| Other Related Expenses                                      | 5,938                      | 7,571                      | 7,722                      | +151                                          |
| <b>Total, Sandia Field Office</b>                           | <b>25,731</b>              | <b>26,572</b>              | <b>27,974</b>              | <b>1,403</b>                                  |
| <b>Total, Sandia Field Office FTEs</b>                      | <b>88</b>                  | <b>82</b>                  | <b>86</b>                  | <b>+4</b>                                     |
| Salaries and Benefits                                       | 17,748                     | 15,677                     | 16,711                     | +1,035                                        |
| Travel                                                      | 77                         | 153                        | 156                        | +3                                            |
| Support Services                                            | 442                        | -                          | -                          | -                                             |
| Other Related Expenses                                      | 975                        | 953                        | 972                        | +19                                           |
| <b>Total, Nevada Field Office</b>                           | <b>19,242</b>              | <b>16,783</b>              | <b>17,839</b>              | <b>+1,057</b>                                 |
| <b>Total, Nevada Field Office FTEs</b>                      | <b>73</b>                  | <b>62</b>                  | <b>65</b>                  | <b>+3</b>                                     |
| Salaries and Benefits                                       | 15,656                     | 15,622                     | 16,556                     | +934                                          |
| Travel                                                      | 37                         | 129                        | 132                        | +3                                            |
| Support Services                                            | 229                        | -                          | -                          | -                                             |
| Other Related Expenses                                      | 996                        | 907                        | 925                        | +18                                           |
| <b>Total, Pantex Field Office</b>                           | <b>16,918</b>              | <b>16,658</b>              | <b>17,613</b>              | <b>+955</b>                                   |
| <b>Total, Pantex Field Office FTEs</b>                      | <b>74</b>                  | <b>71</b>                  | <b>74</b>                  | <b>3</b>                                      |

|                                                     | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2027 Request vs<br/>FY 2026 Enacted</b> |
|-----------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------------------|
| Salaries and Benefits                               | 18,182                     | 16,859                     | 18,764                     | +1,905                                        |
| Travel                                              | 30                         | 129                        | 132                        | +3                                            |
| Support Services                                    | 233                        | -                          | -                          | -                                             |
| Other Related Expenses                              | 1,014                      | 1,230                      | 1,255                      | +25                                           |
| <b>Total, Y-12 Field Office</b>                     | <b>19,459</b>              | <b>18,218</b>              | <b>20,151</b>              | <b>+1,933</b>                                 |
| <b>Total, Y-12 Field Office FTEs</b>                | <b>83</b>                  | <b>74</b>                  | <b>81</b>                  | <b>+7</b>                                     |
| Salaries and Benefits                               | 9,597                      | 10,203                     | 10,374                     | +171                                          |
| Travel                                              | 55                         | 102                        | 104                        | +2                                            |
| Support Services                                    | 99                         | -                          | -                          | -                                             |
| Other Related Expenses                              | 585                        | 502                        | 512                        | +10                                           |
| <b>Total, Kansas City Field Office</b>              | <b>10,336</b>              | <b>10,807</b>              | <b>10,990</b>              | <b>+183</b>                                   |
| <b>Total, Kansas City Field Office FTEs</b>         | <b>45</b>                  | <b>46</b>                  | <b>46</b>                  | <b>-</b>                                      |
| Salaries and Benefits                               | 12,223                     | 16,379                     | 17,400                     | +1,021                                        |
| Travel                                              | 47                         | 94                         | 96                         | +2                                            |
| Support Services                                    | -                          | -                          | -                          | -                                             |
| Other Related Expenses                              | 128                        | 37                         | 38                         | +1                                            |
| <b>Total, Savannah River Field Office</b>           | <b>12,398</b>              | <b>16,510</b>              | <b>17,534</b>              | <b>+1,024</b>                                 |
| <b>Total, Savannah River Field Office FTEs</b>      | <b>52</b>                  | <b>67</b>                  | <b>70</b>                  | <b>+3</b>                                     |
| Salaries and Benefits                               | 453,361                    | 441,835                    | 482,603                    | +40,768                                       |
| Travel                                              | 7,934                      | 13,846                     | 14,123                     | +277                                          |
| Support Services                                    | 12,261                     | 10,091                     | 10,294                     | +203                                          |
| Other Related Expenses                              | 47,854                     | 59,228                     | 70,077                     | +10,849                                       |
| <b>Subtotal, NNSA Federal Salaries and Expenses</b> | <b>521,410</b>             | <b>525,000</b>             | <b>577,097</b>             | <b>+52,097</b>                                |
| Use of Prior Year Balances                          | (21,410)                   | -                          | -                          | -                                             |
| <b>Total, NNSA Federal Salaries and Expenses</b>    | <b>500,000</b>             | <b>525,000</b>             | <b>577,097</b>             | <b>+52,097</b>                                |
| FTEs (paid from FSE)                                | 1,946                      | 1,822                      | 1,958                      | +136                                          |
| FTEs (paid from WCF)                                | 21                         | 24                         | 34                         | +10                                           |
| <b>Total FTEs</b>                                   | <b>1,967</b>               | <b>1,846</b>               | <b>1,992</b>               | <b>+146</b>                                   |

**Support Services and Other Related Expenses**  
**(\$K)**

|                                                 | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2027 Request vs<br/>FY 2026 Enacted</b> |
|-------------------------------------------------|----------------------------|----------------------------|----------------------------|-----------------------------------------------|
| <i>Management and Professional<br/>Services</i> | <i>12,261</i>              | <i>10,091</i>              | <i>10,294</i>              | <i>+203</i>                                   |
| Total, Support Services                         | 12,261                     | 10,091                     | 10,294                     | +203                                          |
| Training                                        | 1,776                      | 3,000                      | 3,060                      | +60                                           |
| Space and Occupancy Costs                       | 10,554                     | 13,526                     | 13,797                     | +271                                          |
| <i>Supplies</i>                                 | <i>483</i>                 | <i>517</i>                 | <i>289</i>                 | <i>-228</i>                                   |
| <i>Building Occupancy</i>                       | <i>14,116</i>              | <i>22,521</i>              | <i>25,388</i>              | <i>+2,867</i>                                 |
| <i>Corporate Training Services</i>              | <i>640</i>                 | <i>689</i>                 | <i>735</i>                 | <i>+46</i>                                    |
| <i>Corporate Business Systems</i>               | <i>2,235</i>               | <i>2,405</i>               | <i>2,405</i>               | <i>-</i>                                      |
| <i>Overseas Representation</i>                  | <i>11,496</i>              | <i>12,368</i>              | <i>20,103</i>              | <i>+7,735</i>                                 |
| <i>Health Services</i>                          | <i>342</i>                 | <i>368</i>                 | <i>390</i>                 | <i>+22</i>                                    |
| Total, Headquarters WCF                         | 29,312                     | 38,868                     | 49,310                     | +10,442                                       |
| <i>Other Services</i>                           | <i>6,195</i>               | <i>3,817</i>               | <i>3,893</i>               | <i>+76</i>                                    |
| <i>Reception and Representation</i>             | <i>17</i>                  | <i>17</i>                  | <i>17</i>                  | <i>-</i>                                      |
| Subtotal, Other Expenses                        | 6,212                      | 3,834                      | 3,910                      | +76                                           |
| <b>Total, Other Related Expenses</b>            | <b>47,854</b>              | <b>59,228</b>              | <b>70,077</b>              | <b>+10,849</b>                                |



**Program Direction  
Outyears (\$K)**

|                                                             | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Salaries and Benefits                                       | 352,900                    | 359,959                    | 367,159                    | 374,500                    |
| Travel                                                      | 13,231                     | 13,496                     | 13,766                     | 14,041                     |
| Support Services                                            | 10,500                     | 10,710                     | 10,924                     | 11,142                     |
| Other Related Expenses                                      | 58,243                     | 59,407                     | 60,595                     | 61,808                     |
| <b>Total, Headquarters</b>                                  | <b>434,874</b>             | <b>443,572</b>             | <b>452,444</b>             | <b>461,491</b>             |
| <b>Total, Headquarters Full Time<br/>Equivalents (FTEs)</b> | <b>1,396</b>               | <b>1,401</b>               | <b>1,407</b>               | <b>1,413</b>               |
| Salaries and Benefits                                       | 17,413                     | 17,761                     | 18,116                     | 18,479                     |
| Travel                                                      | 118                        | 120                        | 123                        | 125                        |
| Support Services                                            | -                          | -                          | -                          | -                          |
| Other Related Expenses                                      | 1,117                      | 1,139                      | 1,162                      | 1,185                      |
| <b>Total, Livermore Field Office</b>                        | <b>18,648</b>              | <b>19,021</b>              | <b>19,401</b>              | <b>19,789</b>              |
| <b>Total, Livermore Field Office FTEs</b>                   | <b>66</b>                  | <b>66</b>                  | <b>66</b>                  | <b>66</b>                  |
| Salaries and Benefits                                       | 20,103                     | 20,505                     | 20,915                     | 21,333                     |
| Travel                                                      | 205                        | 209                        | 213                        | 218                        |
| Support Services                                            | -                          | -                          | -                          | -                          |
| Other Related Expenses                                      | 466                        | 475                        | 485                        | 495                        |
| <b>Total, Los Alamos Field Office</b>                       | <b>20,774</b>              | <b>21,189</b>              | <b>21,613</b>              | <b>22,046</b>              |
| <b>Total, Los Alamos Field Office FTEs</b>                  | <b>79</b>                  | <b>79</b>                  | <b>79</b>                  | <b>79</b>                  |
| Salaries and Benefits                                       | 20,439                     | 20,848                     | 21,265                     | 21,690                     |
| Travel                                                      | 218                        | 222                        | 227                        | 231                        |
| Support Services                                            | -                          | -                          | -                          | -                          |
| Other Related Expenses                                      | 7,876                      | 8,034                      | 8,194                      | 8,358                      |
| <b>Total, Sandia Field Office</b>                           | <b>28,533</b>              | <b>29,104</b>              | <b>29,686</b>              | <b>30,279</b>              |
| <b>Total, Sandia Field Office FTEs</b>                      | <b>86</b>                  | <b>86</b>                  | <b>86</b>                  | <b>86</b>                  |
| Salaries and Benefits                                       | 17,045                     | 17,386                     | 17,734                     | 18,088                     |
| Travel                                                      | 159                        | 162                        | 165                        | 169                        |
| Support Services                                            | -                          | -                          | -                          | -                          |
| Other Related Expenses                                      | 991                        | 1,011                      | 1,031                      | 1,052                      |
| <b>Total, Nevada Field Office</b>                           | <b>18,195</b>              | <b>18,559</b>              | <b>18,930</b>              | <b>19,309</b>              |
| <b>Total, Nevada Field Office FTEs</b>                      | <b>65</b>                  | <b>65</b>                  | <b>65</b>                  | <b>65</b>                  |
| Salaries and Benefits                                       | 16,887                     | 17,225                     | 17,569                     | 17,921                     |
| Travel                                                      | 135                        | 138                        | 140                        | 143                        |
| Support Services                                            | -                          | -                          | -                          | -                          |
| Other Related Expenses                                      | 944                        | 963                        | 982                        | 1,002                      |
| <b>Total, Pantex Field Office</b>                           | <b>17,966</b>              | <b>18,325</b>              | <b>18,692</b>              | <b>19,066</b>              |
| <b>Total, Pantex Field Office FTEs</b>                      | <b>74</b>                  | <b>74</b>                  | <b>74</b>                  | <b>74</b>                  |

|                                                  | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|--------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Salaries and Benefits                            | 19,139                     | 19,522                     | 19,912                     | 20,310                     |
| Travel                                           | 135                        | 138                        | 140                        | 143                        |
| Support Services                                 | -                          | -                          | -                          | -                          |
| Other Related Expenses                           | 1,280                      | 1,306                      | 1,332                      | 1,358                      |
| <b>Total, Y-12 Field Office</b>                  | <b>20,554</b>              | <b>20,965</b>              | <b>21,384</b>              | <b>21,812</b>              |
| <b>Total, Y-12 Field Office FTEs</b>             | <b>81</b>                  | <b>81</b>                  | <b>81</b>                  | <b>81</b>                  |
| Salaries and Benefits                            | 10,582                     | 10,794                     | 11,010                     | 11,230                     |
| Travel                                           | 106                        | 108                        | 110                        | 112                        |
| Support Services                                 | -                          | -                          | -                          | -                          |
| Other Related Expenses                           | 522                        | 532                        | 543                        | 554                        |
| <b>Total, Kansas City Field Office</b>           | <b>11,210</b>              | <b>11,434</b>              | <b>11,663</b>              | <b>11,896</b>              |
| <b>Total, Kansas City Field Office FTEs</b>      | <b>46</b>                  | <b>46</b>                  | <b>46</b>                  | <b>46</b>                  |
| Salaries and Benefits                            | 17,748                     | 18,103                     | 18,465                     | 18,834                     |
| Travel                                           | 98                         | 100                        | 102                        | 104                        |
| Support Services                                 | -                          | -                          | -                          | -                          |
| Other Related Expenses                           | 39                         | 40                         | 41                         | 41                         |
| <b>Total, Savannah River Field Office</b>        | <b>17,885</b>              | <b>18,243</b>              | <b>18,608</b>              | <b>18,980</b>              |
| <b>Total, Savannah River Field Office FTEs</b>   | <b>70</b>                  | <b>70</b>                  | <b>70</b>                  | <b>70</b>                  |
| Salaries and Benefits                            | 492,256                    | 502,102                    | 512,145                    | 522,386                    |
| Travel                                           | 14,405                     | 14,693                     | 14,987                     | 15,287                     |
| Support Services                                 | 10,500                     | 10,710                     | 10,924                     | 11,142                     |
| Other Related Expenses                           | 71,478                     | 72,907                     | 74,365                     | 75,853                     |
| <b>Total, NNSA Federal Salaries and Expenses</b> | <b>588,639</b>             | <b>600,412</b>             | <b>612,421</b>             | <b>624,668</b>             |
| FTEs (paid from FSE)                             | 1,963                      | 1,968                      | 1,974                      | 1,980                      |
| FTEs (paid from WCF)                             | 34                         | 34                         | 34                         | 34                         |
| <b>Total FTEs</b>                                | <b>1,997</b>               | <b>2,002</b>               | <b>2,008</b>               | <b>2,014</b>               |

**Support Services and Other Related Expenses**  
**Outyears (\$K)**

|                                             | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|---------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <i>Management and Professional Services</i> | <i>10,500</i>              | <i>10,710</i>              | <i>10,924</i>              | <i>11,142</i>              |
| Total, Support Services                     | 10,500                     | 10,710                     | 10,924                     | 11,142                     |
| Training                                    | 3,121                      | 3,183                      | 3,247                      | 3,312                      |
| Space and Occupancy Costs                   | 14,073                     | 14,354                     | 14,641                     | 14,934                     |
| <i>Supplies</i>                             | <i>295</i>                 | <i>301</i>                 | <i>307</i>                 | <i>313</i>                 |
| <i>Building Occupancy</i>                   | <i>25,895</i>              | <i>26,413</i>              | <i>26,941</i>              | <i>27,480</i>              |
| <i>Corporate Training Services</i>          | <i>750</i>                 | <i>765</i>                 | <i>780</i>                 | <i>796</i>                 |
| <i>Corporate Business Systems</i>           | <i>2,453</i>               | <i>2,502</i>               | <i>2,552</i>               | <i>2,603</i>               |
| <i>Overseas Representation</i>              | <i>20,505</i>              | <i>20,915</i>              | <i>21,333</i>              | <i>21,760</i>              |
| <i>Health Services</i>                      | <i>398</i>                 | <i>406</i>                 | <i>414</i>                 | <i>422</i>                 |
| Total, Headquarters WCF                     | 50,296                     | 51,302                     | 52,328                     | 53,375                     |
| <i>Other Services</i>                       | <i>3,971</i>               | <i>4,051</i>               | <i>4,132</i>               | <i>4,215</i>               |
| <i>Reception and Representation</i>         | <i>17</i>                  | <i>17</i>                  | <i>17</i>                  | <i>17</i>                  |
| Subtotal, Other Expenses                    | 3,988                      | 4,068                      | 4,149                      | 4,232                      |
| <b>Total, Other Related Expenses</b>        | <b>71,478</b>              | <b>72,907</b>              | <b>74,365</b>              | <b>75,853</b>              |

**Federal Salaries and Expenses**  
**Program Direction**  
**Activities and Explanation of Changes**  
**(\$K)**

| <b>FY 2026 Enacted</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>FY 2027 Request</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Explanation of Changes<br/>FY 2027 Request vs FY 2026 Enacted</b>                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Salaries and Benefit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |
| <b>441,835</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>482,603</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>+40,768</b>                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>Provides support for an NNSA federal staff of 1,822 FTEs, not including 24 that are funded through the WCF.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>Provides support for an NNSA federal staff of 1,958 FTEs, not including 34 that are funded through the WCF.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>Reflects an increase of 136 FTEs for nuclear modernization</li> <li>Reflects 6% benefit escalation.</li> </ul>                                                                                                                                   |
| <i>Travel</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |
| <i>13,846</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>14,123</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>+277</i>                                                                                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>Supports domestic and foreign travel necessary as part of NNSA's mission.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Supports domestic and foreign travel necessary as part of NNSA's mission.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Reflects 2% escalation.</li> </ul>                                                                                                                                                                                                               |
| <i>Support Services</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |
| <i>10,091</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>10,294</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>203</i>                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>Includes management and professional services for headquarters support offices.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Includes management and professional services for headquarters support offices.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Reflects 2% escalation.</li> </ul>                                                                                                                                                                                                               |
| <i>Other Related Expenses</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                         |
| <i>59,228</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>70,077</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>+10,849</i>                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>Includes FSE's contribution to the DOE WCF (\$38,868,000).</li> <li>Provides funding to support office space costs and minor renovations at headquarters and operations costs at the field offices (\$13,526,000).</li> <li>Provides necessary training and skills maintenance of the NNSA federal staff to address workforce needs, advance employee competencies, and demonstrate NNSA's commitment to the strategic development of all employees (\$3,000,000).</li> <li>Includes funding for other related expenses including miscellaneous procurements (\$3,834,000).</li> </ul> | <ul style="list-style-type: none"> <li>Includes FSE's contribution to the DOE WCF (\$49,310,000).</li> <li>Provides funding to support office space costs and minor renovations at headquarters and operations costs at the field offices (\$13,797,000).</li> <li>Provides necessary training and skills maintenance of the NNSA federal staff to address workforce needs, advance employee competencies, and demonstrate NNSA's commitment to the strategic development of all employees (\$3,060,000).</li> <li>Includes funding for other related expenses including miscellaneous procurements (\$3,910,000).</li> </ul> | <ul style="list-style-type: none"> <li>WCF increase of \$10,442,000 reflects additional attaches under the Overseas Presence business line (\$7,735,000), building occupancy (\$2,867,000), and other adjustments (-\$160,000).</li> <li>Reflects 2% escalation (\$247,000).</li> </ul> |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
Federal Salaries and Expenses - FY 2027  
(Dollars in Thousands)

|                                                              | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Brookhaven National Laboratory</b>                        |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                          | 7                          | 7                          |
| <b>Total Brookhaven National Laboratory</b>                  | <b>-</b>                   | <b>7</b>                   | <b>7</b>                   |
| <b>Carlsbad Area Office</b>                                  |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                          | 1                          | 1                          |
| <b>Total Carlsbad Area Office</b>                            | <b>-</b>                   | <b>1</b>                   | <b>1</b>                   |
| <b>Chicago Operations Office</b>                             |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                          | 7                          | 7                          |
| <b>Total Chicago Operations Office</b>                       | <b>-</b>                   | <b>7</b>                   | <b>7</b>                   |
| <b>Kansas City Field Office</b>                              |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 10,336                     | 10,807                     | 10,990                     |
| <b>Total Kansas City Field Office</b>                        | <b>10,336</b>              | <b>10,807</b>              | <b>10,990</b>              |
| <b>Lawrence Livermore National Laboratory</b>                |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 1,043                      | 1,043                      | 1,043                      |
| <b>Total Lawrence Livermore National Laboratory</b>          | <b>1,043</b>               | <b>1,043</b>               | <b>1,043</b>               |
| <b>Livermore Field Office</b>                                |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 18,104                     | 16,922                     | 17,737                     |
| <b>Total Livermore Field Office</b>                          | <b>18,104</b>              | <b>16,922</b>              | <b>17,737</b>              |
| <b>Los Alamos Field Office</b>                               |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 21,207                     | 18,556                     | 20,367                     |
| <b>Total Los Alamos Field Office</b>                         | <b>21,207</b>              | <b>18,556</b>              | <b>20,367</b>              |
| <b>National Energy Technology Lab</b>                        |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 695                        | 695                        | 695                        |
| <b>Total National Energy Technology Lab</b>                  | <b>695</b>                 | <b>695</b>                 | <b>695</b>                 |
| <b>Nevada Field Office</b>                                   |                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 19,242                     | 16,783                     | 17,839                     |
| <b>Total Nevada Field Office</b>                             | <b>19,242</b>              | <b>16,783</b>              | <b>17,839</b>              |

**Federal Salaries and Expenses**

**FY 2027 Congressional Justification**

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
Federal Salaries and Expenses - FY 2027  
(Dollars in Thousands)

|                                                              | <b>FY 2025<br/>Enacted</b>                 | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------------|--------------------------------------------|----------------------------|----------------------------|
| <b>Nevada National Security Site</b>                         |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                                          | 3                          | 3                          |
| <b>Total Nevada National Security Site</b>                   | <b>-</b>                                   | <b>3</b>                   | <b>3</b>                   |
| <b>NNSA Albuquerque Complex</b>                              |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 5,900                                      | 5,900                      | 5,900                      |
| <b>Total NNSA Albuquerque Complex</b>                        | <b>5,900</b>                               | <b>5,900</b>               | <b>5,900</b>               |
| <b>Oak Ridge National Laboratory</b>                         |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                                          | 7                          | 7                          |
| <b>Total Oak Ridge National Laboratory</b>                   | <b>-</b>                                   | <b>7</b>                   | <b>7</b>                   |
| <b>Pantex Field Office</b>                                   |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 16,918                                     | 16,658                     | 17,613                     |
| <b>Total Pantex Field Office</b>                             | <b>16,918</b>                              | <b>16,658</b>              | <b>17,613</b>              |
| <b>Richland Operations Office</b>                            |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | -                                          | 7                          | 7                          |
| <b>Total Richland Operations Office</b>                      | <b>-</b>                                   | <b>7</b>                   | <b>7</b>                   |
| <b>Sandia Field Office</b>                                   |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 19,831                                     | 20,672                     | 22,074                     |
| <b>Total Sandia Field Office</b>                             | <b>19,831</b>                              | <b>20,672</b>              | <b>22,074</b>              |
| <b>Savannah River National Laboratory</b>                    |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 168                                        | 168                        | 168                        |
| <b>Total Savannah River National Laboratory</b>              | <b>168</b>                                 | <b>168</b>                 | <b>168</b>                 |
| <b>Savannah River Operations Office</b>                      |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 12,230                                     | 16,342                     | 17,366                     |
| <b>Total Savannah River Operations Office</b>                | <b>12,230</b>                              | <b>16,342</b>              | <b>17,366</b>              |
| <b>Washington Headquarters</b>                               |                                            |                            |                            |
| Program Direction - National Nuclear Security Administration | 354,867                                    | 382,204                    | 425,122                    |
| <b>Total Washington Headquarters</b>                         | <b>354,867</b>                             | <b>382,204</b>             | <b>425,122</b>             |
| <b>Federal Salaries and Expenses</b>                         | <b>FY 2027 Congressional Justification</b> |                            |                            |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
Federal Salaries and Expenses - FY 2027  
(Dollars in Thousands)

|                                                                    | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Y-12 Field Office</b>                                           |                            |                            |                            |
| Program Direction - National Nuclear Security<br>Administration    | 19,459                     | 18,218                     | 20,151                     |
| <b>Total Y-12 Field Office</b>                                     | <b>19,459</b>              | <b>18,218</b>              | <b>20,151</b>              |
| <b>Total Funding by Site for Federal<br/>Salaries and Expenses</b> | <b>500,000</b>             | <b>525,000</b>             | <b>577,097</b>             |

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# Weapons Activities

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**Weapons Activities**  
**(\$K)**

| FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted |      |
|--------------------|--------------------|-----------------|--------------------|----------------------------------------|------|
|                    |                    |                 |                    | \$                                     | %    |
| 19,293,000         | 20,378,000         | 3,885,000       | 27,441,159         | +7,063,159                             | +35% |

**Proposed Appropriation Language**

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for atomic energy defense weapons activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. § 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion, including the purchase, maintenance, and operation of not to exceed one aircraft, purchase of not to exceed four ambulances for replacement only, and purchase of not to exceed one passenger vehicle for replacement only, \$27,441,159,000, to remain available until expended: Provided, That of such amount, \$143,996,000 shall be available until September 30, 2028, for program direction.*

Public Law 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3.885 billion in funding to DOE/NNSA.

| ENACTED P.L.<br>119-21 Section Ref. | NNSA Programmatic Area                                                                                                         | Application of<br>Funding (\$M) |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Sec. 20008(b)(1)                    | "to perform National Nuclear Security Administration Phase 1 studies"                                                          | 200                             |
| Sec. 20008(b)(2)                    | "to address deferred maintenance and repair needs"                                                                             | 540                             |
| Sec. 20008(b)(3)                    | "to accelerate the construction of National Nuclear Security Administration facilities"                                        | 1,000                           |
| Sec. 20008(b)(4)                    | "to accelerate the development, procurement, and integration of the warhead for the nuclear-armed sea-launched cruise missile" | 400                             |
| Sec. 20008(b)(5)                    | "to accelerate primary capability modernization"                                                                               | 750                             |
| Sec. 20008(b)(6)                    | "to accelerate secondary capability modernization"                                                                             | 750                             |
| Sec. 20008(b)(7)                    | "to accelerate domestic uranium enrichment centrifuge deployment"                                                              | 120                             |
| Sec. 20008(b)(8)                    | "for NNSA evaluation of spent fuel reprocessing technology"                                                                    | 10                              |
| Sec. 20008(b)(9)                    | "to accelerate nuclear national security missions through AI "                                                                 | 115                             |
|                                     | <b>TOTAL</b>                                                                                                                   | <b>3,885</b>                    |

## Weapons Activities

### Overview

The FY 2027 Budget Request supports the current and future nuclear stockpile, production facilities and capabilities modernization efforts, the scientific tools necessary to execute these efforts, and recapitalization of physical infrastructure and essential facilities to ensure the deterrent remains robust. Weapons Activities provides for the maintenance, modernization, and production of nuclear weapons to continue sustained confidence in their safety, reliability, and military effectiveness; continued investment in scientific, engineering, and manufacturing capabilities to enable production and certification of the enduring nuclear weapons stockpile; and manufacture of nuclear weapon components. Weapons Activities also provides for continued maintenance and investment in the National Nuclear Security Administration (NNSA) nuclear complex to be more responsive and resilient.

NNSA's laboratories, plants, and sites employ approximately 60,000 people across the Nuclear Security Enterprise, primarily at eight geographical sites, to execute these programs managed by a Federal workforce composed of civilian staff supplemented with a small number of military assignees.

The FY 2027 Budget Request supports execution of seven simultaneous warhead modernization programs, including the B61-13 variant, while coordinating with Department of War (DoW) to plan for future systems; continues restoring and refurbishing production capability, including the capability to produce 80 pits per year as close to 2030 as possible; and expands Stockpile Research, Technology, and Engineering capabilities, including design, certification, and assessment infrastructure, that are used every day to execute NNSA programs.

### Highlights and Major Changes in the FY 2027 Budget

#### Stockpile Management

The mission of the Stockpile Management program office is to modernize, maintain, and manage a safe, secure, reliable, and effective nuclear weapons stockpile and to operate the production activities required for the stockpile. Through five major subprograms, NNSA program managers provide assurance that U.S. forces can deliver militarily effective weapons to deter the nation's adversaries and assure our allies. As part of this mission, NNSA is modernizing the existing nuclear stockpile, fielding new capabilities, and ensuring America's strategic deterrent remains unrivaled.

**Stockpile Modernization** will continue with B61-13 Phase 6.6 (*Full Scale Production*) activities and support all required deliveries to the DoW; obtain Phase 6.5 (*First Production*) authorization and achieve warhead First Production Unit (FPU) for the W80-4 Life Extension Program (LEP); continue Phase 6.3 (*Development Engineering*) activities for the W87-1 Modification Program; continue Phase 6.3 (*Development Engineering*) for the W80-5 Modification Program (funded using WFTC carryover); and commence Phase 3 (*Development Engineering*) for the W93. The B61-12 LEP and W88 Alteration (ALT) 370 completed transitions to Stockpile Operations in FY 2026. In FY 2027 Stockpile Modernization is planning to authorize new future concept programs for Phase 2/6.2.

**Stockpile Operations** will execute the activities necessary to maintain and manage a safe, secure, reliable, and effective stockpile. The Office of Stockpile Operations was formerly called the Office of Stockpile Sustainment; the duties and responsibilities remain the same, and the change in title more accurately reflects the scope of the office. Stockpile Operations will support planning, provisioning, and Limited Life Component (LLC) production activities, including continued expanded activities for service life extensions, acceleration of W88 ALT 376 activities, support for the B61-12 and W88 Alt 370 transitions to Stockpile Operations, and W76-1/2 Mk4B production. Stockpile Operations will improve digital product realization capabilities, sustain

Integrated Surety Architecture (ISA) capabilities, and develop then deploy the next generation Code Management System (CMS).

**Weapons Dismantlement and Disposition (WDD)** will recover critical components and materials to support existing weapon programs, Naval Reactors, and other national priority missions. The program manages the technical analysis necessary to safely store and securely dismantle nuclear weapons, then dispositions of legacy components to improve NNSA efficiency via removal of excess materials and components from constrained storage areas across the complex.

**Production Operations (PO)** will provide site-specific, production-enabling capabilities that are required for weapons production activities across the Nuclear Security Enterprise (NSE). PO ensures the necessary weapons production capabilities, which include equipment, trained workforce, and tools, are available, maintained, and qualified. Specific capabilities include war reserve component manufacturing, weapon assembly and disassembly, equipment maintenance, production data management, process improvements, and production calibration services. PO also maintains a breadth of tools and modeling capabilities to assess future production requirements and support risk reduction across stockpile services.

**Nuclear Enterprise Assurance (NEA)** will prevent, detect, and mitigate potential consequences of subversion, both to the stockpile and to the associated capabilities to design, produce, and test nuclear weapons. NEA will apply a System Security Engineering (SSE) approach that will address current and evolving adversarial threats and risks to nuclear weapons that enable responsible adoption of leading-edge technologies.

### **Production Modernization**

The Production Modernization program is responsible for modernizing the facilities, infrastructure, and equipment that produce materials and components to meet stockpile requirements and maintain the Nation's nuclear deterrent. The program encompasses six major subprograms that sustain and modernize the base production capabilities for the Nation's nuclear weapons stockpile.

Significant changes in the FY 2027 Request include:

1. Primary Capability Modernization's increase supports pit production capability modernization in accordance with DoW requirements. In addition, supports procures energetic material to meet the production needs of the B61-13, W80-4, W87-1, and W93.
2. The Secondary Capability Modernization increase reflects additional investment in mitigating continued risk areas at Y-12 to meet future mission demand and prevent near-term failures or bottlenecks in production. One major focus is reestablishing the High Purity Depleted Uranium (HPDU) supply chain required to support depleted uranium needs ahead of existing inventory exhaustion which requires a significant uplift in funding requirements. The program is also entering the production phase of its enriched uranium purification scope and is establishing a radiography capability at Y-12 to prevent a known production bottleneck in the near future. This budget also reflects the evolving lithium strategy, which includes leveraging partnerships with commercial industry, and pursuing more cost-effective approaches to construction.
3. The Tritium and Defense Fuels increase reflects additional investments to support SRS Tritium Extraction Facility, recycle and recovery projects, and strengthen the supply delivery of purified tritium for national security needs. The Defense Fuels funding also substantially expands the pursuit of enrichment technologies and demonstration efforts to help ensure future defense fuels inventories for tritium and naval reactor production. In addition, supports completion of conceptual design, submittal of an NRC license application, and advancement of manufacturing readiness to Manufacturing Readiness Level (MRL) 5 for the Domestic Uranium Enrichment Centrifuge Experiment (DUECE) pilot plant.

4. The Non-Nuclear Capability Modernization (NNCM) increase reflects supports completion of one project of the Kansas City Short Term Expansion Plan (KCSTEP) and supports procuring equipment for the Kansas City Non-Nuclear Expansion Transformation (KCNEXT).
5. Capability Based Investments (CBI) funding modernizes sub-critical testing capabilities used for stockpile assessment, NEP design, and weapon certification activities to support planned sub-critical testing schedules.
6. The Warhead Assembly Modernization (WAM) increase reflects implementing equipment solutions to support increased build-ahead lead times for weapon modernization components.

### **Primary Capability Modernization**

The Primary Capability Modernization program manages primary-stage material processing and component production capabilities in the National Nuclear Security Administration's (NNSA) Nuclear Security Enterprise (NSE). The program includes (1) Plutonium Modernization and (2) High Explosives and Energetics (HE&E) Modernization.

### **Secondary Capability Modernization**

The Secondary Capability Modernization program includes the strategic materials, production capabilities, facilities, and material processing operations required to produce nuclear weapon secondary stages. The program includes (1) Enriched Uranium Modernization, (2) Depleted Uranium Modernization, (3) Lithium Modernization, 4) Advanced Materials and Capabilities Modernization, and (5) Mission Delivery Modernization.

### **Major Subprogram Descriptions:**

**Enriched Uranium Modernization** stewards the existing United States inventory of weapons grade enriched uranium for Defense Programs, Defense Nuclear Nonproliferation, Naval Reactors, and Mutual Defense Agreement missions. The Program accomplishes this through ensuring material availability through uranium processing, recycle, and recovery; modernizing production capabilities and infrastructure; and developing and deploying new, safer, and resilient production technologies.

**Depleted Uranium Modernization** is reestablishing and modernizing lapsed capabilities so NNSA can produce radiation cases for imminent weapons delivery mission requirements. The Depleted Uranium Modernization program supports re-establishing a reliable supply of feedstock material, High Purity Depleted Uranium (HPDU) metal, before the current inventory is exhausted. Simultaneously, the program is restarting and maintaining the equipment to produce Depleted Uranium (DU) -niobium alloy, commonly called binary, at Y-12, while also modernizing the manufacturing capabilities needed to produce radiation case components. The program is increasing both capacity and reliability for HPDU and binary production in existing aging facilities to meet mission deliverables. The program is also developing and deploying new production technologies that will improve work safety, increase material efficiencies, and establish a resilient radiation case production capability to meet future demands.

**Lithium Modernization** is modernizing and operating NNSA's enriched lithium-6 processing capabilities to provide lithium weapons components for imminent mission requirements. Lithium Modernization re-capitalizes and operates chemical purification, metal production, and other lithium recycling processes to ensure a reliable lithium material inventory able to meet annual material requirements without necessitating hazardous and expensive enrichment.

**Advanced Materials and Capabilities Modernization** is developing and deploying modern production capabilities for new component technologies that will be used in future weapons. NNSA has either discontinued the legacy processes used to produce certain components due to safety concerns or has not used the process for over 30 years. These legacy materials and processes will be replaced with new technologies and materials that are less hazardous and more efficient than legacy capabilities.

**Mission Delivery Modernization** is modernizing Y-12 operations and facilities that affect multiple material programs including analytical chemistry operations in Building 9995 (known as the Plant Lab), General Manufacturing capability in Building 9201-1, a Manhattan Project-era facility, and the Assembly, Disassembly, Dismantlement, and Surveillance operations in Building 9204-2E. The program is also pursuing opportunities to reduce supply chain risk through the Critical Supplier Program, which leverages commercial vendor capabilities.

**Modification of Reporting Requirements for Uranium Capabilities Replacement Project**  
 Section 3123 of the FY 2024 NDAA requires DOE/NNSA to submit, concurrent with the submission of the budget of the President for FY 2025 and each fiscal year thereafter until termination, matrices on the technological maturity, scope, cost, and schedule of UPF. The following matrices are intended to meet this requirement.

**Section 3123 Uranium Processing Facility Technology Maturity Matrix**

| UPF Final Technology Readiness Report                                                                                          | Technology Readiness Level (TRL)-7 Definition; Technology Readiness Assessment Key Milestones and Development Events                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UPF Microwave Casting Technology Readiness Assessment (TRA) Report for TRL-7 was issued July 2017<br>RP-EX-801768-A018, Rev. 0 | TRL-7 is achieved when a full-scale prototype is demonstrated in a relevant operational environment, in accordance with U.S. Department of Energy (DOE) Guide DOE G 413.3-4A, Technology Readiness Assessment Guide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The TRA review team assessed the microwave casting and product data against the TRA criteria and were unanimous in the affirmative that all criteria were met for TRL-7. The TRA team concluded there continues to be a path for certification. The TRA Report for TRL-7 was issued in July 2017, and when the UPF Project achieved its baseline approval milestone in March 2018 technologies were assessed to be at TRL-7.                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                | An independent TRA team was formed to evaluate Microwave Technology against established TRL-7 criteria outlined in Y17-003, Technology Readiness Assessments. The team was led by the Y-12 National Security Complex (Y-12) Chief Scientist, and included subject matter experts (SMEs) from Y-12, UPF, Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Oak Ridge National Laboratory (ORNL).<br>In 2025, NNSA established the Microwave Readiness and Integration Team (MRIT). The MRIT is tasked with development and oversight of those activities necessary to ensure an efficient, low-risk transition to weapons component production in the UPF. The | Risks to process qualification were identified and informed the needs for further testing. This testing is essential to ensure microwave casting technology will meet Key Performance Parameters (KPPs) and Engineering Evaluation qualification requirements.<br>Tests completed in FY 2018 and 2019 included studies aimed at minimization of high reflected power interruptions, statistical chemistry analysis, tooling improvements, and run profile optimization.<br>Process optimization testing in FY 2018 demonstrated that plasmas could be effectively controlled and mitigated through the right combination of an argon-helium atmosphere and furnace pressure. A summary of the status of closed and open testing activities recommended by the |

| UPF Final Technology Readiness Report                                                                 | Technology Readiness Level (TRL)-7 Definition; Technology Readiness Assessment Key Milestones and Development Events                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                       | <p>MRIT is led by the Y-12 Chief Scientist and includes weapon design physicists and engineers from LLNL and LANL; Y-12 Production, Development, and UPF Project personnel; and casting and modeling experts from DOE/NNSA National Laboratories.</p> <p>In July 2025, NNSA and the MRIT developed RP 9202-F-0842 000 00, Microwave Cast Manufacturing Readiness Test Plan, which plans the manufacturing, process optimization, and operator training activities necessary to support full-rate production in UPF.</p> | <p>TRA team is available in PLN YAREA-F-0069 000 02, Microwave Casting Integrated Risk Reduction Plan, dated May 2023.</p> <p>Demonstration and process method development activities completed in FY 2024 and 2025 included part demonstration castings, two heating profile optimization castings, final carbon study casting generation, and quality optimization for multi-part pours (Shape 3).</p> <p>Manufacturing optimization activities planned for FY 2026 include environmental, aging, and compatibility testing for Microwave cast parts; kinetic, diffusion, fluid flow, structural, and stress modeling of microwave furnace and crucible; quality analysis of Microwave Cast Parts; and final casting report on multi-part castings (Shapes 2 &amp; 3).</p> |
| Specific Performance Goal Test Attributes (additional information available at higher classification) | Casting Attribute                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Basis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Microwave Performance</b>                                                                          | <b>Throughput</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | RP-EJ-801768-A230, (U) Casting Systems Dynamic Model Design Bases; DE-PE-801768-A042, (U) UPF Casting Systems Design Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                       | <b>Temperature Profile</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DE-PE-801768-A042, (U) UPF Casting Systems Design Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Casting Test Object Product Evaluation</b>                                                         | <b>Machining - Dimensional</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DD-T802302-0036, 0050, 0051                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                       | <b>Soundness - Radiography</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | OT-OP-801768-A0004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                       | <b>Chemical - Impurities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RM6K0003, Enriched Unalloyed Uranium Specification (U); For Hydrogen, RM6K0003 has only a target, TRL-7 criteria based on Design Authority agreement using historical data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                       | <b>Uranium Chemical Assay Density</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | RM6K0003, Enriched Unalloyed Uranium Specification (U)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                       | <b>Density</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RM252950, Uranium (U)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                       | <b>Weldability - Radiography</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DD-T802302-0050, 0051                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

**Scope, Cost, and Schedule Matrix -- Uranium Processing Facility (UPF), Main Process Building (MPB) and Salvage & Accountability Building (SAB) Subprojects**

| Requirement                                                                                                                                                                                  | Scope, Cost, and Schedule Descriptions and Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N/A, Overview                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• Building 9212 has historically provided highly enriched uranium (HEU) operations for the nuclear security enterprise, but does not meet modern building code, nuclear safety, and security standards.</li> <li>• The Uranium Processing Facility (UPF) will replace Building 9212 capabilities for HEU casting, special oxide production, chemical recovery, and decontamination, while incorporating modern capabilities and revised processes to increase the overall safety, security, and efficiency of HEU operations.</li> <li>• NNSA is maintaining Building 9212 and has taken steps to dramatically reduce the risks involved with continued production by removing material and replacing hazardous processes until UPF is available to ensure there is a reliable supply of enriched uranium capabilities.</li> <li>• The Level 0 Baseline Change Proposal was approved by the Deputy Secretary in December 2024 to increase the Total Project Cost to \$10.35B and extend the CD-4 Completion date to January 2032.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (i) causes of cost growth and schedule slippage, if any, for the project referred to in subsection (a), including challenges relating to construction, procurement, and supply chain issues; | <p>The cost increases and schedule delays to the UPF project codified in the December 2024 Level 0 BCP were driven by a combination of external factors (contractor performance, COVID and post-COVID supply chain issues, labor shortages, and inflation) and internal factors (overly optimistic assumptions and planning estimates, insufficient forecasting). External factors also influenced increased subcontract and equipment delivery costs and timelines. NNSA acknowledges the need to improve its project management and forecasting ability. As a result, the Administrator instituted bi-monthly construction briefings and NNSA provides quarterly construction briefings to Congressional committees of jurisdiction to ensure that the lines of communication on this topic remain open. A full list of causes and factors included:</p> <ul style="list-style-type: none"> <li>• Global supply chain challenges</li> <li>• Vendor nuclear quality infrastructure has degraded resulting in material delivery delays for key equipment</li> <li>• Material costs were higher than expected</li> <li>• Workforce availability resulted in the use of hourly and travel incentives</li> <li>• Inadequate intermediate and long-term planning resulted in understated costs and duration for planning packages</li> <li>• Late delivery of major items of equipment and material delayed construction schedules and increased Level of Effort costs</li> <li>• Construction subcontractor costs increased due to interface issues with craft, quantity changes and design changes</li> <li>• Initial cost overruns and schedule delays indicate that the contractor's priorities may have been misaligned with the customer's priorities</li> </ul> |

| Requirement                                                                                              | Scope, Cost, and Schedule Descriptions and Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                          | <ul style="list-style-type: none"> <li>• Fixed price subcontracts and vendors packages did not include schedule incentives or liquidated damages clauses resulting in late delivery of services and procurements</li> <li>• Design confirmation activities cost more and took longer than planned</li> <li>• Project planning, scheduling and cost estimating was weak</li> <li>• Inadequate cost and schedule forecasting due to failure to incorporate trends in a timely manner</li> <li>• Overuse of Management Reserve (MR) masked the Cost Performance Index</li> <li>• Frequent re-planning and under planning masked performance</li> <li>• COVID-19 impacts. Additional direct costs for improved social distancing and enhanced cleaning to include additional busses and drivers, staggered reporting and lunch times, and direct costs associated with COVID-19 paid leave. Inefficiencies also occurred during peak periods of COVID-19 absenteeism due to time off for testing, illness, and recovery, and contact tracing.</li> </ul> <p>However, since the December 2024 rebaseline, activities are proceeding on schedule and within updated cost estimates.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| (ii) the impact of such cost and schedule problems on current and planned weapons modernization efforts; | <ul style="list-style-type: none"> <li>• Building 9212 has historically provided highly enriched uranium (HEU) operations for the nuclear security enterprise, but does not meet modern building code, nuclear safety, and security standards.</li> <li>• The Uranium Processing Facility (UPF) will replace Building 9212 capabilities for HEU casting, special oxide production, chemical recovery, and decontamination while incorporating modern capabilities and revised processes to increase the overall safety, security, and efficiency of HEU operations.</li> <li>• NNSA is maintaining Building 9212 until UPF is available to ensure there is a reliable supply of enriched uranium capabilities.</li> <li>• The W87-1 Modification (Mod) Program is currently relying upon Building 9212 and will transition into UPF when the facility is available.</li> <li>• While the W87-1 Mod Program is not currently realizing significant negative impacts from the UPF Project's revised schedule, continued delays would extend the time that the program is operating under inefficiencies that drive risk to the W87-1's cost and schedule.</li> <li>• The W93 program is in Phase 2a, Design Definition and Cost Study, and has not yet developed a complete design definition. Impacts from UPF Project delays cannot be adequately assessed until weapon designs are further developed and can inform facility demand requirements.</li> <li>• Significantly larger UPF Project delays would extend the time that the W93 Program would operate under Building 9212 inefficiencies that drive risk to the program's cost and schedule.</li> <li>• The impact of extended UPF Project delays has not been assessed for future modernization programs.</li> </ul> |



| Requirement                                                                                                                                                                                                                                                                                                   | Scope, Cost, and Schedule Descriptions and Factors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(iii) the scope, cost, and schedule of activities funded by the uranium modernization program for the period of fiscal years 2024 through 2028 as set forth in the corresponding future-years nuclear security program submitted to Congress pursuant to section 2453 of title 10, United States Code.</p> | <ul style="list-style-type: none"> <li>Increases to cost and schedule consume resources that are then unavailable for other urgent infrastructure needs.</li> </ul> <p><b>2026 Highlights</b></p> <p>Continued activities that will allow NNSA to phase out mission dependency on Building 9212 by supporting the transition of enriched uranium capabilities into existing facilities and UPF and deactivating out-of-service systems in Building 9212 include the following:</p> <ul style="list-style-type: none"> <li>Receive startup authorization for the calciner in Building 9212 to process low-enrichment uranium solutions and begin operating the electrorefining capability in Building 9215 to purify uranium metal.</li> <li>Conclude pre-operational testing and transition the direct chip melt front loading furnace to production in Building 9215 and advance the direct chip melt bottom loading furnace subprojects.</li> <li>Reestablish a uranium oxide-to-metal conversion capability.</li> <li>Achieve Operational Release for the Electrorefining process in Building 9215.</li> <li>Maintain working inventory levels of material to reduce safety and security risks in enduring facilities and optimize the material composition of the uranium inventory.</li> <li>Continue to implement a strategy to optimize limited space in enriched uranium facilities.</li> <li>Develop, sustain, and increase the reliability of uranium analytical and manufacturing capabilities to reduce risks.</li> <li>Extend the operational life of enduring enriched uranium facilities.</li> <li>Reduce material inventory, deactivate systems, and process and disposition of legacy materials to phase out mission dependency on Building 9212.</li> </ul> |
|                                                                                                                                                                                                                                                                                                               | <p><b>2026-2028 Uranium Modernization Program Key Milestones</b></p> <ul style="list-style-type: none"> <li>Begin installation activities for the Direct Chip Melt Bottom Loading Furnaces Chip Compaction Subproject in Building 9215 to expand the chip processing capacity.</li> <li>Continue developing technologies to reestablish the capability to convert uranium oxide to metal at Y-12.</li> <li>Improve the manufacturing readiness of casting enriched uranium parts using microwave technology to ensure an efficient, low-risk transition to full-rate production in the UPF.</li> <li>Maintain Target Working Inventory, the minimum amount needed, within enduring facilities to enhance the safety of existing facilities that will be operational through the 2040s.</li> <li>Bridge the oxide-to-metal conversion capability.</li> <li>Optimize quantity and quality of purified metal production through the electrorefining process.</li> <li>Update Y-12 facility capabilities to accommodate UPF needs.</li> </ul> <p>Enriched Uranium Modernization Program (Uranium Modernization) budget based on the Budget Request:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Requirement | Scope, Cost, and Schedule Descriptions and Factors                                                                                 |
|-------------|------------------------------------------------------------------------------------------------------------------------------------|
|             | FY 2027- \$474,675,000<br>FY 2028 - \$505,471,000<br>FY 2029 - \$421,390,000<br>FY 2030 - \$456,698,000<br>FY 2031 - \$410,706,000 |

### **Tritium and Defense Fuels Program**

The Tritium Modernization and The Defense Fuels program is responsible for producing tritium and supplying unobligated low-enriched uranium to support national security needs. The program includes (1) *Tritium Sustainment and Modernization* and (2) *The Defense Fuels Program*.

**Tritium Sustainment and Modernization** operates the national capability for producing tritium. The program irradiates tritium-producing burnable absorber rods (TPBARs) to produce new tritium while maintaining a flexible supply chain capability and capacity to meet national security requirements. NNSA produces tritium by irradiating TPBARs in two Tennessee Valley Authority (TVA) reactors during standard 18-month operating cycles. Produced tritium is extracted from the TPBARs at the Tritium Extraction Facility (TEF) at SRS. The tritium inventory supports limited-life component exchanges of tritium reservoirs that are deployed in the stockpile. The program establishes tritium production schedules based on detailed computational models and annual tritium projections to maintain required tritium inventories including reserve quantities. Production planning takes into consideration the material that is constantly being recovered and recycled from deployed reservoirs including those from weapon dismantlement. The program also supports tritium science and technology initiatives to maintain a reliable tritium supply chain.

**The Defense Fuels (DF) Program** is responsible for ensuring a reliable supply of unobligated enriched uranium for defense mission requirements including low-enriched uranium (LEU) for tritium production and highly enriched uranium (HEU) for naval nuclear propulsion. Since 2013, the United States has lacked the capability to produce enriched uranium free of peaceful use obligations (i.e., unobligated). NNSA currently possesses sufficient unobligated LEU for tritium production through the early 2040s and sufficient unobligated HEU for naval nuclear propulsion into the 2050s. The DF Program has extended the availability of its unobligated LEU supply through the early 2040s by down-blending HEU considered not suitable for weapons use. The DF Program must establish a new domestic uranium enrichment capability to provide new material beyond these need dates. The Program intends to meet these defense mission requirements by incrementally deploying an enrichment capability using one or more gas centrifuge technologies, including the smaller-scale Domestic Uranium Enrichment Centrifuge Experiment (DUECE) being developed at Oak Ridge National Laboratory (ORNL), and the AC100 large centrifuge.

### **Non-Nuclear Capability Modernization**

The Non-Nuclear Capability Modernization (NNCM) program executes modernization projects to ensure the enduring availability of non-nuclear capabilities for multiple weapon systems. Non-nuclear components provide critical warhead functions using a wide range of components, including radiation-hardened microelectronics, neutron generators, gas transfer systems, power sources, electrical assemblies, cables, connectors, structural elements, pads/cushions, and a multitude of other parts that are incorporated into the systems that support or weaponize the NEP. The NNCM program modernizes the extensive suite of infrastructure and equipment required to support the non-nuclear component lifecycle inclusive of design, development, qualification, production, and surveillance. These capabilities ensure that components can survive environments encountered throughout the stockpile to the target sequence and over the life of the weapon.

The NNCM program also executes long-term planning and OPC activities to modernize production capabilities for non-nuclear components through line-item projects, including the Power Sources Capability (PSC), Product Realization Infrastructure for Stockpile Modernization (PRISM), MESA Photolithography Capability (MPC), and Microelectronic Components Capability (MC2) projects.

### **Capability Based Investments**

The Capability Based Investments (CBI) program funds active risk mitigation projects, primarily capital equipment procurements, to reduce risks to core enterprise capabilities extending beyond any single weapon system need. These projects address capability gaps across all eight NNSA sites in weapon production, development, surveillance, and certifications. CBI prioritizes the highest risk to mission needs with emphasis on addressing single point failures, choke points, discontinued or failed equipment, and pivotal enabling capabilities. CBI projects are discrete, short-duration, and non-complex to allow for rapid response to emerging risks.

### **Warhead Assembly Modernization**

The Warhead Assembly Modernization (WAM) program modernizes the capabilities needed to execute warhead assembly/disassembly operations for weapons modernization, surveillance, and dismantlement programs. The WAM program is responsible for modernization activities supporting multiple weapon programs. WAM identifies and implements cross cutting enhancements that provide benefit to all weapon operations executed at Pantex to ensure future mission demand can be achieved.

### **Stockpile Research, Technology, and Engineering**

NNSA's Stockpile Research, Technology, and Engineering (SRT&E) conducts weapons design, certification, and assessment activities in support of the nuclear stockpile. SRT&E provides the foundation for science-based stockpile decisions; delivers advanced capabilities to support DoW requirements and counter emerging threats; and innovates across the nuclear security enterprise (NSE) to improve productivity, efficiency, and responsiveness. These activities ensure confidence in the nuclear stockpile of today and tomorrow.

A key activity supported by SRT&E includes the annual assessment and report to the President and Congress regarding the reliability of the United States' nuclear weapons stockpile. This assessment represents a significant effort leveraging the experimental facilities, weapons modeling codes and high-performance computational hardware, and the NNSA's subject matter expertise to deliver a comprehensive, engineering-based determination on the safety, security, and military effectiveness of the nuclear deterrent.

SRT&E activities are also essential to a responsive enterprise, among them the development and maturation of new materials, physics and engineering models, novel technologies, and processes to modernize nuclear systems and the production complex. Rapid development is essential to provide timely delivery of advanced systems to the DoW to meet emerging requirements or urgent needs. Under NNSA's Rapid and Advanced Capabilities, a new subprogram in FY 2027 composed of four existing activities from other SRT&E subprograms, SRT&E is pursuing design, prototyping, and accelerated testing to deliver integrated and proven system concepts to Stockpile Modernization for acquisition and fielding, as directed by the Nuclear Weapons Council.

The subprograms are:

1. Assessment Science (AS)
2. Engineering
3. Rapid & Advanced Capabilities (RAC)
4. Inertial Confinement Fusion (ICF)
5. Advanced Simulation and Computing (ASC)
6. Weapon Technology and Manufacturing Maturation (WTMM)

## **Assessment Science**

The Assessment Science (AS) program provides the knowledge and expertise needed to maintain confidence in the nuclear stockpile. The experimental and testing equities developed and maintained in the AS program support the entire nuclear security enterprise. The AS program provides: (1) the scientific foundation required to conduct annual assessments of weapon performance and the certification of Life Extension Programs (LEPs), the modernization programs, and future systems being considered now to address emerging threats; (2) the scientific insight to inform our understanding on the impacts of surveillance findings, ensuring the nuclear stockpile remains safe, secure, and effective; and (3) the core technical expertise and experimental tools required to be responsive to technical developments and geopolitical drivers. AS personnel and test equities facilitate the assessment of current weapon and weapon component lifetimes, the development and qualification of modern materials and manufacturing processes, the exploration of concepts for component reuse, and the development of modern safety concepts for sustainment.

## **Engineering**

The Engineering program is responsible for ensuring system survivability in present and future stockpile-to-target sequences (STS) through three key mission areas: (1) strengthening the science, technology, and engineering base; (2) providing tools for qualifying weapon components and certifying weapons without nuclear explosive testing; and (3) supporting annual stockpile assessments through improved weapons surveillance technologies and warhead component aging assessments.

## **Rapid & Advanced Capabilities**

Rapid and Advanced Capabilities (RAC) ensures a responsive nuclear deterrent through collaborative partnerships, proactive integration to include prototyping activities, and assessments. This program supports three key mission areas: (1) strengthening the science, technology, and engineering base; (2) providing tools for qualifying weapon components and certifying weapons without nuclear explosive testing; and (3) supporting and accelerating the development of future weapon systems.

## **Inertial Confinement Fusion**

The Inertial Confinement Fusion (ICF) program provides High Energy Density (HED) science capabilities and expertise that support research and testing across the range of NNSA's stockpile and national security missions. ICF meets the immediate and emerging HED science needs to support today's deterrent while advancing R&D capabilities required to meet future deterrent needs. Since most of the energy in a nuclear weapon detonation is generated by matter in the HED regime, understanding the behavior of matter and energy in this regime is critical to predicting the performance of both nuclear weapon primaries and secondaries, as well as the response of weapon components to extreme hostile radiation environments.

## **Advanced Simulation and Computing**

The Advanced Simulation and Computing (ASC) program provides high-end simulation and computing capabilities (e.g., modeling codes, platforms, and supporting infrastructure) to meet the requirements of the SSP. Modeling the complexity of nuclear weapons systems is essential to maintaining confidence in the performance of the nation's stockpile. The ASC program creates, maintains, and optimizes the weapon codes that provide integrated assessment capability, supporting annual assessment and future sustainment program qualification, and certification of the stockpile. ASC's capabilities also inform decision-making related to the sustainment of the nuclear stockpile. The program coordinates with other NNSA program offices and government agencies, including the Intelligence Community, to support nonproliferation, emergency response, nuclear forensics, and attribution activities.

## **Weapon Technology and Manufacturing Maturation**

The Weapon Technology and Manufacturing Maturation (WTMM) program is responsible for providing technical solutions to realized risks that impact the programs of record in terms of cost, schedule or performance, developing agile, affordable, assured, and responsive technologies for the future nuclear stockpile, incorporating novel materials, and production technologies into the nuclear enterprise.

## **Infrastructure and Operations (I&O)**

The Infrastructure and Operations program maintains, operates, and modernizes the NNSA infrastructure in a safe, secure, and cost-effective manner to support all NNSA programs. The program also plans, prioritizes, and constructs mission-enabling facilities and infrastructure.

The Operations of Facilities program provides the funding required to operate NNSA facilities in a safe and secure manner. Operations of Facilities is fundamental to achieving NNSA's plutonium, uranium, tritium, lithium, high explosives, and other mission objectives.

The Safety and Environmental Operations program provides funding to support the Department's Nuclear Criticality Safety Program (NCSP) subprogram, Nuclear Safety Research and Development (NSR&D) subprogram, Packaging subprogram, Nuclear Materials Integration (NMI) subprogram, and Environmental Operations (EO) subprogram.

The Maintenance and Repair of Facilities program (Maintenance) provides direct-funded maintenance activities across the NNSA enterprise for the recurring day-to-day work required to sustain and preserve NNSA facilities. These efforts include predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems. The Recapitalization program is key to modernizing NNSA's infrastructure. The Recapitalization program modernizes NNSA infrastructure by prioritizing investments including the acquisition of new facilities or executing discrete projects to improve the condition and extend the life of structures, capabilities, and systems. Recapitalization investments help achieve operational efficiencies and reduce safety, security, environmental, and program risk.

Infrastructure and Operations line-item construction projects are critical to revitalizing the infrastructure. These projects will replace obsolete, unreliable facilities and infrastructure to reduce safety and program risk while improving responsiveness, capacity, and capabilities.

## **Secure Transportation Asset**

The Secure Transportation Asset (STA) enables the accelerated modernization of the nuclear weapon stockpile by providing safe, secure transport of the Nation's nuclear weapons, weapon non-nuclear components, and special nuclear material throughout the NSE in support of the stockpile and future deterrence needs. Nuclear weapon life-extension programs, limited-life component exchanges, surveillance, dismantlement, nonproliferation activities, and experimental programs rely on STA activities to ensure safe, secure, and on-schedule transport. The FY 2027 Request supports the transportation infrastructure that enables safety and security to employees, communities and stakeholders. Including mission essential agent equipment, specialized transportation assets, including life extension of the Safeguards Transporter until it is replaced by the Mobile Guardian Transporter; vehicle sustainment; replacement one aircraft, armored tractors, escort, and support vehicles; development, procurement and testing of Counter Uncrewed Aircraft System (CUAS); and continued development and testing of the Mobile Guardian Transporter. The first Mobile Guardian Transporter production unit is planned for completion in FY 2029 and will begin a phased in approach to replace the current Safeguard Transporter. Program Direction resources in this account provide salaries/benefits, travel and expenses for the secure transportation workforce, including Federal Agents, Pilots and CUAS operators. STA continues to implement Federal Agent recruitment and retention initiatives to cultivate a high-quality mission

critical workforce capacity to sustain readiness and deployment requirements necessary to execute the nuclear deterrence mission within scheduled requirements.

### **Defense Nuclear Security**

The Defense Nuclear Security (DNS) program leads, develops, and implements the National Nuclear Security Administration's (NNSA) security program, enabling its nuclear security enterprise (NSE) missions. DNS protects NNSA personnel, facilities, nuclear weapons, and special nuclear materials from a full spectrum of threats, ranging from minor security incidents to acts of terrorism, at its national laboratories, production plants, processing facilities, Nevada National Security Site, and satellite facilities for federal staff. Employing more than 2,200 Protective Force (PF) officers, DNS secures more than 6,000 buildings and protects more than 60,091 personnel. Today, the program is charting a course of transformative change to ensure DNS's mission-enabling function keeps pace with the expanding work scope across all elements of the NNSA mission in future years.

The Budget Request supports increased security needs from known mission growth across the NSE, including pit production at Los Alamos National Laboratory (LANL) and the Savannah River Plutonium Production Facility (SRPPF), Kansas City expansion efforts, and Uranium Processing Facility (UPF) testing and transition to operations. The request includes substantial investments in deploying next-generation Counter Unmanned Aircraft Systems (NexGen CUAS) and in comprehensive research, development, testing, and evaluation. In addition, the request continues to support the initiative to replace the aging Argus system with a modern security system (Caerus), as well as continuous improvement initiatives through the Center for Security Technology, Analysis, Response, and Testing system and PSCOE activities, and the capability to adapt to rapidly evolving technologies. This request also includes funding SIRP projects, addressing critical security systems, and related security infrastructure and equipment refresh needs.

### **Information Technology and Cybersecurity**

The IT and Cybersecurity program supports IT and cybersecurity services and solutions, which include continuous monitoring, cloud-based technologies, and enterprise security technologies (i.e., identity, credential, and access management). The program ensures and enables the availability of a secure infrastructure for mission activities and information sharing for NNSA and its mission partners. The FY 2027 Request enables the development and execution of integrated IT initiatives that provide an effective and secure technology infrastructure across the enterprise.

### **Legacy Contractor Pensions and Settlement Payments**

This budget line also continues to include the Weapons Activities share of the DOE/NNSA's annual reimbursement made to the University of California (UC) Retirement Plan (UCRP) for former UC employees and annuitants who worked at the Lawrence Livermore National Laboratory (LLNL) and Los Alamos National Laboratory (LANL). The annual reimbursement is based on the actuarial valuation report and an annual assessment provided by UC and is covered by the terms described in the contracts. These contracts are paid through the Legacy Contractor Pensions and Settlement Payments line item.

The Weapons Activities share of these costs in the FY 2027 Budget is \$40,869,000.

### **Entry Level Hires**

NNSA supports a variety of programs to help train and recruit the next generation of leaders in managing the nuclear stockpile, nonproliferation, nuclear security, and international security, such as the NNSA Graduate Fellowship Program (NGFP). These programs foster the pipeline of qualified professionals who will sustain expertise in these areas through future employment within the NNSA nuclear security enterprise. In FY 2027, the Weapons Activities appropriation projects providing \$9,500,000 for NGFP support and development activities.

## DOE Working Capital Fund (WCF) Support

NNSA Weapons Activities appropriation projected contribution to the DOE WCF for FY 2027 is \$48,488,000. This funding covers certain shared enterprise activities including managing enterprise-wide systems, data, and telecommunications and supporting the integrated acquisition environment.

### Weapons Activities Funding by Budget Control (\$K)

|                                                                             | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding <sup>1</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|-----------------------------------------------------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|-------------|
|                                                                             |                    |                    |                              |                    | \$                                    | %           |
| <i>B61-12 LEP</i>                                                           | 27,500             | 16,000             | -                            | -                  | -16,000                               | -100%       |
| <i>B61-13</i>                                                               | 16,000             | 49,357             | -                            | 46,428             | -2,929                                | -6%         |
| <i>W88 ALT 370</i>                                                          | 63,700             | -                  | -                            | -                  | -                                     | -           |
| <i>W80-4 LEP</i>                                                            | 1,194,750          | 1,259,048          | -                            | 1,048,340          | -210,708                              | -17%        |
| <i>W80-5 Modification Program</i>                                           | 100,000            | 186,000            | 400,000                      | -                  | -186,000                              | -100%       |
| <i>W87-1 Modification Program</i>                                           | 1,016,331          | 649,096            | -                            | 913,231            | +264,135                              | +41%        |
| <i>W93 Program</i>                                                          | 455,776            | 806,797            | -                            | 1,106,106          | 299,309                               | 37%         |
| <i>Future Programs</i>                                                      | -                  | -                  | -                            | 99,794             | 99,794                                | N/A         |
| <b>Total, Stockpile Modernization</b>                                       | <b>2,874,057</b>   | <b>2,966,298</b>   | <b>400,000</b>               | <b>3,213,899</b>   | <b>247,601</b>                        | <b>+8%</b>  |
| <b>Stockpile Operations</b>                                                 | <b>1,376,260</b>   | <b>1,720,200</b>   | <b>-</b>                     | <b>1,885,290</b>   | <b>+165,090</b>                       | <b>+10%</b> |
| <b>Weapons Dismantlement and Disposition</b>                                | <b>56,000</b>      | <b>82,367</b>      | <b>-</b>                     | <b>90,760</b>      | <b>+8,393</b>                         | <b>+10%</b> |
| <b>Production Operations</b>                                                | <b>816,567</b>     | <b>1,020,243</b>   | <b>-</b>                     | <b>1,146,586</b>   | <b>+126,343</b>                       | <b>+12%</b> |
| <b>Nuclear Enterprise Assurance</b>                                         | <b>75,002</b>      | <b>117,193</b>     | <b>-</b>                     | <b>121,015</b>     | <b>+3,822</b>                         | <b>+3%</b>  |
| <b>Total, Stockpile Management</b>                                          | <b>5,197,886</b>   | <b>5,906,301</b>   | <b>400,000</b>               | <b>6,457,550</b>   | <b>+551,249</b>                       | <b>+9%</b>  |
| <i>Los Alamos Pit Production</i>                                            | 984,611            | 833,263            | -                            | 1,460,791          | +627,528                              | +75%        |
| <i>21-D-512 Plutonium Pit Production Project, LANL</i>                      | 470,000            | 457,900            | -                            | 812,100            | +354,200                              | +77%        |
| <i>15-D-302 TA-55 Reinvestments Project Phase 3, LANL</i>                   | 39,475             | 7,942              | -                            | -                  | -7,942                                | -100%       |
| <i>07-D-220-04 Transuranic Liquid Waste Facility, LANL</i>                  | -                  | 5,865              | -                            | 10,000             | +4,135                                | +71%        |
| <i>04-D-125 Chemistry and Metallurgy Research Replacement Project, LANL</i> | -                  | -                  | -                            | 110,000            | +110,000                              | N/A         |
| <b>Total, Los Alamos Plutonium Modernization</b>                            | <b>1,494,086</b>   | <b>1,304,970</b>   | <b>-</b>                     | <b>2,392,891</b>   | <b>+1,087,921</b>                     | <b>+83%</b> |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTCA) provided \$3.885 billion in funding to DOE/NNSA. The \$10 million appropriated under WFTCA Section 20008(b)(8) “for evaluation of spent fuel reprocessing technology” is unallocated in the table. DOE/NNSA is determining the correct execution method consistent with congressional intent.

|                                                                           | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding <sup>1</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |        |
|---------------------------------------------------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|--------|
|                                                                           |                    |                    |                              |                    | \$                                    | %      |
| <i>Savannah River Pit Production</i>                                      | 75,332             | 75,486             | -                            | 302,000            | +226,514                              | +300%  |
| <i>21-D-511 Savannah River<br/>Plutonium Processing Facility,<br/>SRS</i> | 800,000            | 1,130,000          | 728,000                      | 1,946,523          | +816,532                              | +72%   |
| Total, Savannah River Plutonium<br>Modernization                          | 875,332            | 1,205,486          | 728,000                      | 2,248,523          | +1,043,037                            | +87%   |
| Enterprise Pit Production<br>Support                                      | 121,964            | 122,094            | -                            | 270,897            | +148,803                              | +122%  |
| Total, Plutonium Modernization                                            | 2,491,382          | 2,632,550          | 728,000                      | 4,912,311          | +2,279,761                            | +87%   |
| <i>High Explosives &amp; Energetics</i>                                   | 131,675            | 132,023            | 22,000                       | 251,765            | +119,742                              | +901%  |
| <i>21-D-510 HE Synthesis<br/>Formulation and Production, PX</i>           | -                  | -                  | 350,000                      | -                  | -                                     | N/A    |
| <i>15-D-301 HE Science &amp;<br/>Engineering Facility, PX</i>             | 15,000             | -                  | -                            | -                  | -                                     | -      |
| Total, High Explosives &<br>Energetics                                    | 146,675            | 132,023            | 372,000                      | 251,765            | +119,742                              | +91%   |
| Total, Primary Capability<br>Modernization                                | 2,638,057          | 2,764,573          | 1,100,000                    | 5,164,076          | +2,399,503                            | +87%   |
| Secondary Capability<br>Modernization                                     | 770,353            | 649,686            | -                            | 1,728,546          | +1,078,860                            | +166%  |
| 18-D-690 Lithium Processing<br>Facility, Y-12                             | 210,000            | 270,000            | 500,000                      | -                  | -270,000                              | -100%  |
| 06-D-141 Uranium Processing<br>Facility, Y-12                             | 800,000            | 730,000            | 250,000                      | 290,000            | -440,000                              | -60%   |
| Total, Secondary Capability<br>Modernization                              | 1,780,353          | 1,649,686          | 750,000                      | 2,018,546          | +368,860                              | +22%   |
| Tritium and Defense Fuels<br>Program                                      | 581,738            | 520,034            | 120,000                      | 880,781            | +360,747                              | +69%   |
| 18-D-650 Tritium Finishing<br>Facility, SRS                               | -                  | -                  | 437,000                      | -                  | -                                     | N/A    |
| Total, Tritium and Defense Fuels<br>Program                               | 581,738            | 520,034            | 557,000                      | 880,781            | +360,747                              | +79%   |
| Non-Nuclear Capability<br>Modernization                                   | 141,300            | 190,588            | -                            | 258,008            | +67,420                               | +35%   |
| 26-D-511 MESA<br>Photolithography Capability<br>(MPC), SNL                | -                  | -                  | -                            | 51,000             | +51,000                               | N/A    |
| 22-D-513 Power Sources<br>Capability, SNL                                 | 50,000             | 5,000              | 100,000                      | 140,000            | +135,000                              | +2700% |
| Total, Non-Nuclear Capability<br>Modernization                            | 191,300            | 195,588            | 100,000                      | 449,008            | +223,420                              | +130%  |

## Weapons Activities

## FY 27 Congressional Justification



|                                                                                                                | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding <sup>1</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |               |
|----------------------------------------------------------------------------------------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|---------------|
|                                                                                                                |                    |                    |                              |                    | \$                                    | %             |
| Capability Based Investments                                                                                   | 153,244            | 162,996            | -                            | 203,163            | +40,167                               | +25%          |
| Warhead Assembly Modernization                                                                                 | 34,000             | 34,336             | -                            | 47,965             | +13,629                               | +40%          |
| 18-D-680 Material Staging<br>Capability, PX                                                                    | -                  | -                  | -                            | 22,500             | +22,500                               | N/A           |
| Total, Warhead Assembly<br>Modernization                                                                       | 34,000             | 34,336             | -                            | 70,465             | +36,129                               | +105%         |
| <b>Total, Production Modernization</b>                                                                         | <b>5,378,692</b>   | <b>5,327,213</b>   | <b>2,507,000</b>             | <b>8,786,039</b>   | <b>+3,458,826</b>                     | <b>+65%</b>   |
| Assessment Science                                                                                             | 862,609            | 955,791            | -                            | 1,243,267          | +277,476                              | +29%          |
| 26-D-512 LANSCE<br>Modernization Project (LAMP),<br>LANL                                                       | -                  | 20,000             | -                            | 15,200             | -4,800                                | -24%          |
| 24-D-513 Z-pinch Experimental<br>Underground System (ZEUS) Test<br>Bed Facilities Improvement<br>(ZTBFI), NNSS | -                  | -                  | -                            | 91,700             | +91,700                               | N/A           |
| 17-D-640 U1a Complex<br>Enhancements Project, NNSS                                                             | 73,083             | -                  | 53,000                       | 154,142            | +154,142                              | N/A           |
| Total, Assessment Science                                                                                      | 935,692            | 975,791            | 53,000                       | 1,504,309          | +528,518                              | +54%          |
| Engineering                                                                                                    | 227,883            | 187,836            | -                            | 230,043            | +42,207                               | +23%          |
| 26-D-513 Combined Radiation<br>Environments for Survivability<br>Testing, SNL                                  | -                  | 52,248             | -                            | 105,000            | +52,752                               | +101%         |
| Total, Engineering                                                                                             | 227,883            | 240,084            | -                            | 335,043            | +94,959                               | +40%          |
| Rapid & Advanced Capabilities<br>Inertial Confinement Fusion                                                   | 211,182            | 145,241            | 160,000                      | 499,209            | +353,968                              | +243.7%       |
| 26-D-514 NIF Enhanced Fusion<br>Yield Capability, LLNL                                                         | 699,830            | 803,000            | -                            | 829,736            | +26,736                               | +3.3%         |
| 26-D-514 NIF Enhanced Fusion<br>Yield Capability, LLNL                                                         | -                  | 26,000             | -                            | 84,000             | +58,000                               | +223.1%       |
| Total, Inertial Confinement Fusion                                                                             | 699,830            | 829,000            | -                            | 913,736            | +84,736                               | +10.2%        |
| Advanced Simulation and<br>Computing                                                                           | 850,000            | 865,995            | 115,000                      | 909,765            | +43,770                               | +5.1%         |
| Weapon Technology and<br>Manufacturing Maturation                                                              | 273,189            | 253,979            | 40,000                       | 405,413            | +151,434                              | +59.6%        |
| <b>Total, Stockpile Research,<br/>Technology, and Engineering</b>                                              | <b>3,197,776</b>   | <b>3,310,090</b>   | <b>368,000</b>               | <b>4,567,475</b>   | <b>+1,257,385</b>                     | <b>+38.0%</b> |
| <b>Academic Programs</b>                                                                                       | <b>115,000</b>     | <b>100,000</b>     | <b>-</b>                     | <b>-</b>           | <b>-100,000</b>                       | <b>-100%</b>  |
| Operations of Facilities                                                                                       | 1,378,725          | 1,615,605          | -                            | 1,752,310          | +136,705                              | +8.5%         |
| Safety and Environmental<br>Operations                                                                         | 154,970            | 194,360            | -                            | 217,902            | +23,542                               | +12.1%        |
| Maintenance and Repair of<br>Facilities                                                                        | 919,600            | 830,500            | 400,000                      | 1,384,323          | +553,823                              | +66.7%        |
| Recapitalization                                                                                               | 741,671            | 707,628            | 140,000                      | 1,203,127          | +495,499                              | +70.0%        |
| Total, Operating                                                                                               | 3,194,966          | 3,348,093          | 540,000                      | 4,557,662          | +1,209,569                            | 36.1%         |

## Weapons Activities

## FY 27 Congressional Justification

|                                                               | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding <sup>1</sup> | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|---------------------------------------------------------------|--------------------|--------------------|------------------------------|--------------------|---------------------------------------|-------------|
|                                                               |                    |                    |                              |                    | \$                                    | %           |
| 27-D-512 Plutonium Engineering<br>Support Building; LANL      | -                  | -                  | -                            | 88,700             | +88,700                               | N/A         |
| 25-D-511 PULSE New Access,<br>NNSS                            | 5,000              | -                  | -                            | 50,000             | +50,000                               | N/A         |
| 25-D-510 Plutonium Mission<br>Safety & Quality Building, LANL | 48,500             | -                  | -                            | -                  | -                                     | N/A         |
| 24-D-510 Analytic Gas<br>Laboratory, PX                       | 36,000             | -                  | -                            | -                  | -                                     | N/A         |
| 23-D-517 Electrical Power<br>Capacity Upgrade, LANL           | 70,000             | -                  | 60,000                       | 65,000             | +65,000                               | N/A         |
| Total, Mission Enabling<br>Construction                       | 159,500            | -                  | 60,000                       | 203,700            | 203,700                               | -           |
| <b>Total, Infrastructure and<br/>Operations</b>               | <b>3,354,466</b>   | <b>3,348,093</b>   | <b>600,000</b>               | <b>4,761,362</b>   | <b>1,413,269</b>                      | <b>42%</b>  |
| Operations and Equipment                                      | 236,160            | 299,541            | -                            | 443,075            | +143,534                              | +48%        |
| Program Direction                                             | 118,056            | 149,244            | -                            | 143,996            | -5,248                                | -4%         |
| <b>Total, Secure Transportation Asset</b>                     | <b>354,216</b>     | <b>448,785</b>     | <b>-</b>                     | <b>587,071</b>     | <b>+138,286</b>                       | <b>31%</b>  |
| Operations & Maintenance                                      | 1,030,085          | 1,245,418          | -                            | 1,305,793          | +60,375                               | +5%         |
| 17-D-710 West End Protected Area<br>Reduction Project, Y-12   | 54,000             | -                  | -                            | -                  | -                                     | N/A         |
| <b>Total, Defense Nuclear Security</b>                        | <b>1,084,085</b>   | <b>1,245,418</b>   | <b>-</b>                     | <b>1,305,793</b>   | <b>+60,375</b>                        | <b>+5%</b>  |
| <b>Information Technology and<br/>Cybersecurity</b>           | <b>598,379</b>     | <b>688,000</b>     | <b>-</b>                     | <b>935,000</b>     | <b>+247,000</b>                       | <b>+36%</b> |
| Legacy Contractor Pensions and<br>Settlement Payments         | 12,500             | 4,100              | -                            | 40,869             | 36,769                                | +897%       |
| <b>Total, Weapons Activities</b>                              | <b>19,293,000</b>  | <b>20,378,000</b>  | <b>3,875,000</b>             | <b>27,441,159</b>  | <b>+7,063,159</b>                     | <b>+35%</b> |

**Weapons Activities**  
**Outyear Funding by Budget Control (SK)**

|                                                                             | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-----------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <i>B61-13</i>                                                               | 2,933                      | -                          | -                          | -                          |
| <i>W80-4 LEP</i>                                                            | 1,066,334                  | 878,548                    | 853,193                    | 861,980                    |
| <i>W80-5 Modification Program</i>                                           | 76,940                     | 269,180                    | 236,428                    | 268,801                    |
| <i>W87-1 Modification Program</i>                                           | 931,496                    | 950,126                    | 969,129                    | 988,512                    |
| <i>W93 Program</i>                                                          | 1,275,823                  | 1,359,405                  | 1,457,703                  | 1,540,388                  |
| Total, Stockpile Modernization                                              | 3,353,526                  | 3,457,259                  | 3,516,453                  | 3,659,681                  |
| Stockpile Operations                                                        | 1,957,057                  | 1,944,783                  | 1,975,293                  | 1,932,135                  |
| Weapons Dismantlement and Disposition                                       | 87,489                     | 90,691                     | 92,276                     | 96,036                     |
| Production Operations                                                       | 1,130,914                  | 1,161,886                  | 1,201,228                  | 1,231,725                  |
| Nuclear Enterprise Assurance                                                | 133,016                    | 140,624                    | 145,896                    | 150,194                    |
| <b>Total, Stockpile Management</b>                                          | <b>6,662,002</b>           | <b>6,795,243</b>           | <b>6,931,146</b>           | <b>7,069,771</b>           |
| <i>Los Alamos Pit Production</i>                                            | 1,480,867                  | 1,735,648                  | 1,747,038                  | 1,784,019                  |
| <i>21-D-512 Plutonium Pit Production Project, LANL</i>                      | 688,500                    | 509,955                    | 520,664                    | 531,078                    |
| <i>04-D-125 Chemistry and Metallurgy Research Replacement Project, LANL</i> | 112,200                    | 76,100                     | -                          | -                          |
| Total, Los Alamos Plutonium Modernization                                   | 2,281,567                  | 2,321,703                  | 2,267,702                  | 2,315,097                  |
| <i>Savannah River Pit Production</i>                                        | 173,400                    | 176,868                    | 180,405                    | 184,013                    |
| <i>21-D-511 Savannah River Plutonium Processing Facility, SRS</i>           | 2,274,600                  | 2,320,092                  | 2,366,494                  | 2,413,824                  |
| Total, Savannah River Plutonium Modernization                               | 2,448,000                  | 2,496,960                  | 2,546,899                  | 2,597,837                  |
| Enterprise Pit Production Support                                           | 277,352                    | 282,899                    | 288,557                    | 294,328                    |
| Total, Plutonium Modernization                                              | 5,006,919                  | 5,101,562                  | 5,103,158                  | 5,207,262                  |
| <i>High Explosives &amp; Energetics</i>                                     | 198,852                    | 192,073                    | 221,816                    | 232,809                    |
| <i>21-D-510 HE Synthesis Formulation and Production, PX</i>                 | -                          | 85,500                     | 21,207                     | 12,500                     |
| Total, High Explosives & Energetics                                         | 198,852                    | 277,573                    | 243,023                    | 245,309                    |
| Total, Primary Capability Modernization                                     | 5,205,761                  | 5,379,135                  | 5,346,181                  | 5,452,571                  |
| Secondary Capability Modernization                                          | 1,848,141                  | 1,812,626                  | 1,777,319                  | 1,798,803                  |
| 18-D-690 Lithium Processing Facility, Y-12                                  | -                          | 112,080                    | 212,242                    | 216,487                    |
| 06-D-141 Uranium Processing Facility, Y-12                                  | 486,000                    | 290,000                    | 117,000                    | -                          |
| Total, Secondary Capability Modernization                                   | 2,334,141                  | 2,214,706                  | 2,106,561                  | 2,015,290                  |
| Tritium and Defense Fuels Program                                           | 910,136                    | 966,755                    | 1,236,249                  | 1,394,173                  |
| 18-D-650 Tritium Finishing Facility, SRS                                    | -                          | -                          | 118,200                    | 208,487                    |
| Total, Tritium and Defense Fuels Program                                    | 910,136                    | 966,755                    | 1,354,449                  | 1,602,660                  |
| Non-Nuclear Capability Modernization                                        | 258,068                    | 274,664                    | 288,601                    | 297,977                    |
| 26-D-511 MESA Photolithography Capability (MPC), SNL                        | 52,020                     | 53,060                     | 111,980                    | 72,840                     |
| 22-D-513 Power Sources Capability, SNL                                      | 23,713                     | -                          | -                          | -                          |
| Total, Non-Nuclear Capability Modernization                                 | 333,801                    | 327,724                    | 400,581                    | 370,817                    |

|                                                                         | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Capability Based Investments                                            | 207,226                    | 211,371                    | 270,505                    | 298,441                    |
| Warhead Assembly Modernization                                          | 48,824                     | 49,701                     | 85,322                     | 102,812                    |
| 18-D-680 Material Staging Capability, PX                                | -                          | -                          | -                          | -                          |
| Total, Warhead Assembly Modernization                                   | 48,824                     | 49,701                     | 85,322                     | 102,812                    |
| <b>Total, Production Modernization</b>                                  | <b>9,039,899</b>           | <b>9,149,392</b>           | <b>9,563,599</b>           | <b>9,842,591</b>           |
| Assessment Science                                                      | 1,086,555                  | 1,055,691                  | 1,054,604                  | 1,038,722                  |
| 27-D-511 Defense Materials Science Sector (DMSS), ANL                   | 36,842                     | 36,978                     | 39,369                     | 45,138                     |
| 26-D-512 LANSCE Modernization Project (LAMP), LANL                      | 88,000                     | 119,760                    | 122,156                    | 104,599                    |
| Total, Assessment Science                                               | 1,211,397                  | 1,212,429                  | 1,216,129                  | 1,188,459                  |
| Engineering                                                             | 232,372                    | 237,020                    | 241,760                    | 246,595                    |
| 26-D-513 Combined Radiation Environments for Survivability Testing, SNL | 176,000                    | 210,572                    | 247,866                    | 302,177                    |
| Total, Engineering                                                      | 408,372                    | 447,592                    | 489,626                    | 548,772                    |
| Rapid & Advanced Capabilities                                           | 462,059                    | 476,100                    | 475,422                    | 484,930                    |
| Inertial Confinement Fusion                                             | 813,832                    | 821,635                    | 848,924                    | 865,902                    |
| 26-D-514 NIF Enhanced Fusion Yield Capability, LLNL                     | 148,480                    | 115,000                    | 52,000                     | 55,000                     |
| Total, Inertial Confinement Fusion                                      | 962,312                    | 936,635                    | 900,924                    | 920,902                    |
| Advanced Simulation and Computing                                       | 973,094                    | 989,546                    | 1,008,937                  | 1,031,115                  |
| Weapon Technology and Manufacturing Maturation                          | 414,871                    | 416,971                    | 377,140                    | 384,683                    |
| <b>Total, Stockpile Research, Technology, and Engineering</b>           | <b>4,032,105</b>           | <b>4,479,273</b>           | <b>4,468,178</b>           | <b>4,558,861</b>           |
| <b>Academic Programs</b>                                                | <b>26,000</b>              | <b>46,000</b>              | <b>66,000</b>              | <b>66,000</b>              |
| Operations of Facilities                                                | 1,801,759                  | 1,830,118                  | 1,873,028                  | 1,944,436                  |
| Safety and Environmental Operations                                     | 221,240                    | 225,665                    | 230,178                    | 234,782                    |
| Maintenance and Repair of Facilities                                    | 1,426,009                  | 1,466,250                  | 1,477,252                  | 1,511,514                  |
| Recapitalization                                                        | 1,250,590                  | 1,324,098                  | 1,257,871                  | 1,215,709                  |
| Total, Operating                                                        | 4,699,598                  | 4,846,131                  | 4,838,329                  | 4,906,441                  |

|                                                                    | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|--------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 31-D-XXX Protective Forces Support Facility,<br>LANL               | -                          | -                          | -                          | 98,700                     |
| 31-D-XXX 138 kV Back Loop Transmission<br>System Replacement, NNSS | -                          | -                          | -                          | 98,700                     |
| 30-D-XXX TA-46 Protective Force Facility,<br>LANL                  | -                          | -                          | 98,700                     | -                          |
| 30-D-XXX Plutonium Program Accounting<br>Building, LANL            | -                          | -                          | 98,700                     | -                          |
| 29-D-XXX Plutonium Production Building,<br>LANL                    | -                          | 98,700                     | -                          | -                          |
| 25-D-511 PULSE New Access, NNSS                                    | 140,000                    | 90,000                     | 20,000                     | -                          |
| 23-D-517 Electrical Power Capacity Upgrade,<br>LANL                | 62,674                     | 52,430                     | -                          | -                          |
| Total, Mission Enabling Construction                               | 202,674                    | 241,130                    | 217,400                    | 197,400                    |
| <b>Total, Infrastructure and Operations</b>                        | <b>4,902,272</b>           | <b>5,087,261</b>           | <b>5,055,729</b>           | <b>5,103,841</b>           |
| Operations and Equipment                                           | 409,754                    | 442,763                    | 439,836                    | 408,440                    |
| Program Direction                                                  | 162,911                    | 163,825                    | 177,804                    | 186,794                    |
| <b>Total, Secure Transportation Asset</b>                          | <b>572,665</b>             | <b>606,588</b>             | <b>617,640</b>             | <b>595,234</b>             |
| Operations & Maintenance                                           | 1,331,909                  | 1,358,547                  | 1,385,718                  | 1,413,432                  |
| <b>Total, Defense Nuclear Security</b>                             | <b>1,331,909</b>           | <b>1,358,547</b>           | <b>1,385,718</b>           | <b>1,413,432</b>           |
| <b>Information Technology and Cybersecurity</b>                    | <b>983,700</b>             | <b>987,774</b>             | <b>992,229</b>             | <b>1,012,074</b>           |
| Legacy Contractor Pensions and Settlement<br>Payments              | 35,235                     | 33,098                     | 31,042                     | 31,804                     |
| <b>Total, Weapons Activities</b>                                   | <b>27,985,787</b>          | <b>28,543,176</b>          | <b>29,111,281</b>          | <b>29,693,608</b>          |

## Stockpile Management

### Overview

The mission of the Stockpile Management program is to modernize, maintain, and manage a safe, secure, reliable, and effective nuclear weapons stockpile and to operate the production activities required for the stockpile. Through five major subprograms, NNSA program managers provide assurance that U.S. forces can deliver militarily effective weapons to deter the nation's adversaries and assure our allies. As part of this mission, NNSA is modernizing the existing nuclear stockpile, fielding new capabilities, and ensuring America's strategic deterrent remains unrivaled.

**Stockpile Modernization** will continue with B61-13 Phase 6.6 (*Full Scale Production*) activities and support all required deliveries to the Department of War (DoW); obtain Phase 6.5 (*First Production*) authorization and achieve warhead First Production Unit (FPU) for the W80-4 Life Extension Program (LEP); continue Phase 6.3 (*Development Engineering*) activities for the W87-1 Modification Program; continue Phase 6.3 (*Development Engineering*) for the W80-5 Modification Program; and commence Phase 3 (*Development Engineering*) for the W93. The B61-12 LEP and W88 Alteration (ALT) 370 completed transitions to Stockpile Operations in FY 2026. In FY 2027 Stockpile Modernization is planning to authorize new future concept programs for Phase 2/6.2.

**Stockpile Operations** (formerly Stockpile Sustainment) will execute the activities necessary to maintain and manage a safe, secure, reliable, and effective stockpile. Stockpile Operations will support planning, provisioning, and Limited Life Component (LLC) production activities, including continued expanded activities for service life extensions, acceleration of W88 ALT 376 activities, support for the B61-12 and W88 Alt 370 transitions to Stockpile Operations, and W76-1/-2 Mk4B production. Stockpile Operations will improve digital product realization capabilities, develop, implement, and sustain Integrated Surety Architecture (ISA) capabilities, and develop then deploy the next generation Code Management System (CMS).

**Weapons Dismantlement and Disposition (WDD)** will recover critical components and materials to support existing weapon programs, Naval Reactors, and other national priority missions. The program manages the technical analysis necessary to safely store and securely dismantle nuclear weapons, and dispositions legacy components to improve NNSA efficiency via removal of excess materials and components from constrained storage areas across the complex.

**Production Operations (PO)** will provide site-specific production-enabling capabilities that are required for weapons production activities across the Nuclear Security Enterprise (NSE). PO ensures the necessary weapons production capabilities, which include equipment, trained workforce, and tools, are available, maintained, and qualified. Specific capabilities include war reserve component manufacturing, weapon assembly and disassembly, equipment maintenance, production data management, process improvements, and production calibration services. PO also maintains a breadth of tools and modeling capabilities to assess future production requirements and support risk reduction across stockpile services.

**Nuclear Enterprise Assurance (NEA)** will prevent, detect, and mitigate potential consequences of subversion, both to the stockpile and the design, production, and weapon component testing capabilities. NEA will apply a System Security Engineering (SSE) approach that adopts leading-edge technologies to address current and evolving adversarial threats and risks to the country's nuclear weapon stockpile.

**Stockpile Management  
Funding by Budget Control (\$K)<sup>1</sup>**

|                                                  | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted <sup>2</sup> |             |
|--------------------------------------------------|--------------------|--------------------|-----------------|--------------------|----------------------------------------------------|-------------|
|                                                  |                    |                    |                 |                    | \$                                                 | %           |
| <i>B61-12 LEP</i>                                | 27,500             | 16,000             | -               | -                  | -16,000                                            | -100%       |
| <i>B61-13</i>                                    | 16,000             | 49,357             | -               | 46,428             | -2,929                                             | -6%         |
| <i>W88 ALT 370</i>                               | 63,700             | -                  | -               | -                  | -                                                  | -           |
| <i>W80-4 LEP</i>                                 | 1,194,750          | 1,259,048          | -               | 1,048,340          | -210,708                                           | -17%        |
| <i>W80-5 Modification Program</i>                | 100,000            | 186,000            | 400,000         | -                  | -186,000                                           | -100%       |
| <i>W87-1 Modification Program</i>                | 1,016,331          | 649,096            | -               | 913,231            | +264,135                                           | +41%        |
| <i>W93 Program</i>                               | 455,776            | 806,797            | -               | 1,106,106          | +299,309                                           | +37%        |
| <i>Future Programs</i>                           | -                  | -                  | -               | 99,794             | +99,794                                            | N/A         |
| <b>Total, Stockpile Modernization</b>            | <b>2,874,057</b>   | <b>2,966,298</b>   | <b>400,000</b>  | <b>3,213,899</b>   | <b>+247,601</b>                                    | <b>+8%</b>  |
| <i>B61 Stockpile Systems</i>                     | 159,276            | 261,200            | -               | 283,416            | +22,216                                            | +9%         |
| <i>W76 Stockpile Systems</i>                     | 232,378            | 242,379            | -               | 260,029            | +17,650                                            | +7%         |
| <i>W78 Stockpile Systems</i>                     | 90,390             | 109,538            | -               | 122,892            | +13,354                                            | +12%        |
| <i>W80 Stockpile Systems</i>                     | 76,767             | 94,781             | -               | 111,713            | +16,932                                            | +18%        |
| <i>B83 Stockpile Systems</i>                     | 17,164             | 22,440             | -               | 20,686             | -1,754                                             | -8%         |
| <i>W87 Stockpile Systems</i>                     | 123,057            | 140,360            | -               | 188,623            | +48,263                                            | +34%        |
| <i>W88 Stockpile Systems</i>                     | 150,669            | 216,236            | -               | 156,637            | -59,599                                            | -28%        |
| <i>Multi-Weapon Systems</i>                      | 526,559            | 633,266            | -               | 741,294            | +108,028                                           | +17%        |
| <b>Total, Stockpile Operations</b>               | <b>1,376,260</b>   | <b>1,720,200</b>   | <b>-</b>        | <b>1,885,290</b>   | <b>+165,090</b>                                    | <b>+10%</b> |
| <b>Weapons Dismantlement and<br/>Disposition</b> | <b>56,000</b>      | <b>82,367</b>      | <b>-</b>        | <b>90,760</b>      | <b>+8,393</b>                                      | <b>+10%</b> |
| <b>Production Operations</b>                     | <b>816,567</b>     | <b>1,020,243</b>   | <b>-</b>        | <b>1,146,586</b>   | <b>+126,343</b>                                    | <b>+12%</b> |
| <b>Nuclear Enterprise Assurance</b>              | <b>75,002</b>      | <b>117,193</b>     | <b>-</b>        | <b>121,015</b>     | <b>+3,822</b>                                      | <b>+3%</b>  |
| <b>Total, Stockpile Management</b>               | <b>5,197,886</b>   | <b>5,906,301</b>   | <b>400,000</b>  | <b>6,457,550</b>   | <b>+551,249</b>                                    | <b>+9%</b>  |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 in funding to DOE/NNSA. From this funding, Stockpile Management received \$400,000,000 to support the W80-5 Modification Program activities. Of that amount, \$272,316,000 will support FY 2026 requirements for the W80-5. The remaining WFTC funds of \$127,684,000 will be obligated to the W80-5 no later than FY 2027.

<sup>2</sup> Deltas reflect discretionary funding only.

**Stockpile Management  
Outyear Funding (\$K)**

|                                       | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|---------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <i>B61-12 LEP</i>                     | -                          | -                          | -                          | -                          |
| <i>B61-13</i>                         | 2,933                      | -                          | -                          | -                          |
| <i>W88 ALT 370</i>                    | -                          | -                          | -                          | -                          |
| <i>W80-4 LEP</i>                      | 1,066,334                  | 878,548                    | 853,193                    | 861,980                    |
| <i>W80-5 Modification Program</i>     | 76,940                     | 269,180                    | 236,428                    | 268,801                    |
| <i>W87-1 Modification Program</i>     | 931,496                    | 950,126                    | 969,129                    | 988,512                    |
| <i>W93 Program</i>                    | 1,275,823                  | 1,359,405                  | 1,457,703                  | 1,540,388                  |
| <i>Future Programs</i>                | -                          | -                          | -                          | -                          |
| Total, Stockpile Major Modernization  | 3,353,526                  | 3,457,259                  | 3,516,453                  | 3,659,681                  |
| <i>B61 Stockpile Systems</i>          | 357,336                    | 396,987                    | 397,925                    | 329,544                    |
| <i>W76 Stockpile Systems</i>          | 229,066                    | 196,942                    | 199,423                    | 180,295                    |
| <i>W78 Stockpile Systems</i>          | 103,799                    | 118,898                    | 129,069                    | 123,537                    |
| <i>W80 Stockpile Systems</i>          | 108,011                    | 108,548                    | 124,838                    | 150,024                    |
| <i>B83 Stockpile Systems</i>          | 23,950                     | 22,341                     | 22,275                     | 20,575                     |
| <i>W87 Stockpile Systems</i>          | 195,422                    | 202,304                    | 206,562                    | 173,936                    |
| <i>W88 Stockpile Systems</i>          | 179,761                    | 154,475                    | 124,134                    | 252,446                    |
| <i>Multi-Weapon Systems</i>           | 759,712                    | 744,288                    | 771,067                    | 701,778                    |
| Total, Stockpile Operations           | 1,957,057                  | 1,944,783                  | 1,975,293                  | 1,932,135                  |
| Weapons Dismantlement and Disposition | 87,489                     | 90,691                     | 92,276                     | 96,036                     |
| Production Operations                 | 1,130,914                  | 1,161,886                  | 1,201,228                  | 1,231,725                  |
| Nuclear Enterprise Assurance          | 133,016                    | 140,624                    | 145,896                    | 150,194                    |
| <b>Total, Stockpile Management</b>    | <b>6,662,002</b>           | <b>6,795,243</b>           | <b>6,931,146</b>           | <b>7,069,771</b>           |



## **Stockpile Management Stockpile Modernization**

### **Overview**

Stockpile Modernization includes major alterations, modification of existing nuclear weapons, and provides new warhead capabilities. This ensures the nuclear deterrent remains safe, secure, reliable and effective to meet current requirements and pacing threats.

NNSA, in conjunction with DoW, executes stockpile modernization following the Phase X/6.X process guidelines, which provide a framework to conduct and manage development and production activities for new or existing weapons. Phase 1/6.1 (*Concept Assessment*) should provide sufficient information for the Nuclear Weapons Council (NWC) to authorize Phase 2/6.2 (*Feasibility Study and Design Options*). Follow-on phases include Phase 2A/6.2A (*Design Definition and Cost Study*), Phase 3/6.3 (*Development Engineering*), Phase 4/6.4 (*Production Engineering*), Phase 5/6.5 (*First Production*) and Phase 6/6.6 (*Full-Scale Production*).

### **B61-13**

The B61-13 is a modern variant of the B61 nuclear gravity bomb. The B61-13 includes modern safety, security, and accuracy features of the B61-12 and replaces some of the B61-7s in the current stockpile. The B61-13 was authorized as a program of record in FY 2024 and began a modified Phase 6.X process. In May of FY 2025, the program achieved Phase 6.5 FPU. Phase 6.6 was approved in FY 2025, and the program has begun delivering weapons to the United States Air Force (USAF). The program will transition to Stockpile Operations in FY 2028.

### **W80-4 LEP**

The W80-4 LEP extends the life of the legacy W80 warhead for use in the USAF Long Range Standoff (LRSO) cruise missile. The LRSO is the replacement for the current, aging Air-Launched Cruise Missile (ALCM). The life extension program will integrate the warhead with the replacement missile platform and address warhead component aging concerns as well as military requirements for reliability, service life, field maintenance, and surety. The program established key design requirements for this LEP to include using insensitive high explosives for the primary, enhancing surety, and developing the warhead/missile interface parallel with the USAF. Phase 6.4 Production Engineering started in Quarter 2 FY 2023. Phase 6.5 authorization is scheduled for Quarter 3 FY 2027 and FPU is scheduled to be achieved by September FY 2027.

### **W80-5 Modification Program**

The W80-5 Modification Program is the warhead portion of the Navy's Nuclear-Armed, Sea-Launched Cruise Missile (SLCM-N) Program. The Program will provide the DoW with a sea-launched cruise missile capability using the W80 warhead family. Initial Operational Capability (IOC) is planned no later than September 2034, with limited operational deployment prior to IOC no later than September 2032. The aggressive program schedule dictates a design selection that highly leverages fielded weapon designs and requires limited testing and analysis to validate that the design meets all requirements. Scope includes design, development, qualification, production, and surveillance of the chosen option, along with all necessary attributes of a fielded system (e.g., trainers, handling gear, spares, etc.). The NWC authorized entrance to Phase 6.3 in FY 2026. In FY 2027, the W80-5 Modification Program will continue executing Phase 6.3 activities, including release of the Baseline Cost Report (BCR).

### **W87-1 Modification Program**

The W87-1 Modification Program will replace the W78 warhead and support fielding on the Air Force Sentinel missile system. The W78 is one of the oldest warheads in the stockpile and the W87-1 Modification Program provides improvement in warhead security, safety, and use control. The W87-1 Modification Program is based on a modified design of the W87-0 and will be fielded in the Mk21A reentry vehicle. The program received Phase 6.3 authorization in Quarter 3 FY 2023 and is executing Phase 6.3 activities. Phase 6.4 authorization is scheduled for Quarter 2 FY 2028 and FPU is scheduled in FY 2033.

### **W93 Program**

The W93 Program was established to meet requirements set by the DoW to augment Navy forces with a survivable weapon deployable on the Ohio-class and Columbia-class submarines. In FY 2022, the W93 program concluded Phase 1 that evaluated warhead architecture and available technologies against potential range of desired attributes, draft military characteristics, and known constraints. In FY 2023, work commenced on Phase 2 to further refine design and production concepts. The program began to conduct technical trade analyses, evaluating component down-selects based on refined Military Characteristics, NNSA and DoW requirements, resources, and timelines. FY 2024 feasibility assessments informed the W93 system architecture and DoW development activities associated with the Mk7 reentry body. In FY 2025, major subsystem designs and components were selected further refining the system architecture, and costing activities commenced with the program's entrance into Phase 2A. FY 2026 will begin production of some lower-level components and will baseline the program's cost and schedule leading to formal entry into Phase 3 at the start of FY 2027. The W93 and Mk7 teams are collaborating with the United Kingdom in a parallel design, development, and production of the A21/Mk7.

### **Future Programs**

NNSA continues work scope evaluation and requests funding to support these new programs starting in FY 2027. These programs are being evaluated in conjunction with the DoW as part of special studies including authorized Phase 1 activities. This nuclear deterrence scope is expected to be authorized as Phase X or Phase 6.X programs in FY 2027. Future programs include long-lead production and qualification activities associated with rapid capabilities developed as part of the Nuclear Deterrent Rapid Capabilities Team (ND RCT). Future Programs will be evaluating critical path scope to support DoW requirements and establish accurate cost projections. The concept of requirements post FY 2027 have not yet been locked down. FY 2027 requirements are established. After FY 2027 there is not enough clarity to make an informed request. As those requirements are developed, out year funding requests for FY 2028 and beyond will be established.

### **Highlights of the FY 2027 Budget Request**

#### **B61-13**

- Continue Ultimate User (UU) builds at Pantex.
- Continue weapon deliveries to the DoW.
- Complete planned Retrofit Evaluation Systems Tests (REST).

#### **W80-4 LEP**

- Receive Phase 6.5 authorization.
- Achieve warhead FPU.
- Complete Final Development Review and Acceptance Group (FDRAAG).
- Begin First Generation Training (FGT) events.
- Begin REST surveillance activities.

### **W80-5 Modification Program**

- Continue executing Phase 6.3 activities.
- Release the BCR.

### **W87-1 Modification Program**

- Continue component Final design reviews (FDRs).
- Conduct joint testing with USAF and Mk21A programs.
- Continue Phase 6.3 and advance design maturity and manufacturing readiness levels.
- Continue coordination and participation with USAF to Preliminary Design Review and Acceptance Group (PDRAAG).

### **W93 Program**

- Commence Phase 3.
- Conduct Component Conceptual Design Reviews (CDR) and the Conceptual Design Gates.
- Continue experimental test campaigns: hydrodynamic, ground, NNSA and Navy flight tests.

### **Future Programs**

- Establish Federal Program Offices for new programs.
- Begin Phase 2/6.2 activities.

### **Explanation of Change**

#### **Stockpile Modernization (+\$247.601 million)**

The increase in funding is driven primarily by the additional development and production activities across the stockpile modernization portfolio as most of the programs are successfully advancing through Phase 3/6.3 through to Phase 5/6.5. A portion of the increase is also associated with the start of new Phase 2/6.2 programs expected in FY 2027 for future concept programs.

- **B61-12 LEP (-\$16.000 million):** The decrease represents the transition to Stockpile Operations.
- **B61-13 (-\$2.929 million):** The decrease represents a shift in funding needed for program close out in FY 2028. The FY 2027 request supports an accelerated program schedule to achieve early LPU and maintains DoW shipments.
- **W80-4 LEP (-\$210.708 million):** The decrease represents the program's use of carry over dollars and the scheduled transition to FPU, while still supporting full rate production schedule, and supports all additional requirements in the FY 2025 Requirements and Planning Document (RPD).
- **W80-5 Modification Program (-\$186.000 million):** The decrease reflects the availability of carryover of both discretionary and mandatory funding to cover FY 2027 requirements. Funding supports the program's ramp-up associated with Phase 6.3 activities, progress to Phase 6.4 in FY 2028, and supports Congressional schedule requirements for FY 2032 and FY 2034.
- **W87-1 Modification Program (+\$264.135 million):** The increase represents a re-alignment with the USAF Mk21A Program in an alternative qualification strategy, an increase in the Weapon Development Cost Report (WDCR) due to additional scope including D-Test and hardware quantities, Pantex tooling, and other required testing activities to support a planned FY 2033 FPU.
- **W93 Program (+\$299.309 million):** The Increase represents the program's plan to ramp-up for Phase 3 activities and additional ramp to support a planned FPU in FY 2035.
- **Future Programs (+\$99.794 million):** The Increase represents the start of one new Phase 6.X program, currently known as Phase 1 Nuclear Deterrent System-Air-delivered (NDS-A), as well as supporting production assessments for two new Rapid Capability Team (RCT) projects.

## **Stockpile Management Stockpile Operations**

### **Overview**

The Stockpile Operations program directly executes maintenance, limited life component exchanges (LLCE), minor alterations, surveillance, assessment, surety studies and capability development, and management activities for all enduring weapons systems in the stockpile. The program includes the B61, W76, W78, W80, B83, W87, W88, and Multi-Weapon Systems (MWS). As required by 10 U.S.C. § 6117, safety, reliability, performance, and effectiveness assessments are performed to determine whether the systems can continue to be certified without the need for an underground nuclear explosive testing.

### **B61 Stockpile Systems**

The B61 gravity bombs are aircraft-delivered and deployed by the Air Force. The B61 gravity bomb family includes two modifications, B61-11 and the B61-12. Stockpile Operations will begin (non-REST) surveillance of the B61-13 in FY27. The B61 program directly executes weapon maintenance, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for B61 gravity bombs.

### **W76 Stockpile Systems**

The W76-0/1/2 are integrated into the Trident II D5 Strategic Weapon System as part of the Submarine-Launched Ballistic Missile (SLBM) force. The W76 family includes three modifications, the W76-0/Mk4, W76-1/Mk4A, and W76-2/Mk4A. This program directly executes weapon maintenance, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for the W76 warheads.

### **W78 Stockpile Systems**

The W78/Mk12A re-entry vehicle is deployed on the Minuteman III (MMIII) Intercontinental Ballistic Missile (ICBM). This program directly executes weapon maintenance, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for the W78 warheads. This weapon will be replaced by the W87-1.

### **W80 Stockpile Systems**

The W80-1 warhead is used in the Air Launched Cruise Missile (ALCM) deployed by the USAF. This program executes weapon maintenance activities, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for the sustainment of the W80-1. The program supports W80-4 and W80-5 activities and is preparing for the W80-4 transition to W80 Stockpile Systems in FY 2030.

### **B83 Stockpile Systems**

The B83 is an aircraft-delivered, strategic gravity bomb deployed by the USAF. This program directly executes weapon maintenance, surveillance, assessment, capability development and management activities until all B83 gravity bombs are retired and dismantled, pursuant to Presidential guidance.

### **W87-0 Stockpile Systems**

The W87-0/Mk21 re-entry vehicle is deployed on the Minuteman III ICBM and will be deployed on the Sentinel ICBM. This program directly executes weapon maintenance, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for the W87-0 warheads. It also supports development and qualification activities for Sentinel integration.

## **W88 Stockpile Systems**

The W88 is integrated into the Trident II D5 strategic weapon system as part of the SLBM force. This program directly executes weapon maintenance, limited life component exchanges, minor alterations, surveillance, assessment, capability development and management activities for the W88 warheads.

## **Multi-Weapon Systems**

Multi-Weapon Systems (MWS) is a multi-weapon, multi-site product-based program that enhances the integration and efficiency of the NSE. The activities within MWS are cross-cutting among sites and/or weapons or cannot be funded by specific weapons programs due to classification restrictions. This program provides multi-weapon products to the NSE supporting surveillance, reliability, maintenance, product realization, digital engineering, nuclear explosive safety, military liaison, integrated surety architecture, and use control for both the current and modernized stockpile.

## **Major activities within each Stockpile Operations area**

- (1) Weapon Maintenance:** Includes production of LLCs including gas transfer systems (GTS), neutron generators (NG), and other designated limited-life components as required by guidance and directive schedules, day-to-day stockpile maintenance and repair activities, production, and delivery of components for each weapon type, refurbishment, and replacement of aging components to sustain stockpile life and rebuilds.
- (2) Weapon Surveillance:** Includes Joint Test Assembly (JTA) flight test vehicle and ground testbed builds, new material laboratory and flight tests, retrofit evaluation system laboratory and flight tests, stockpile laboratory tests, stockpile flight tests, quality evaluations, special testing, and component and material evaluation to support assessment of the safety, security, and effectiveness of the nuclear weapons stockpile. Data from these tests contribute to the Annual Assessment Reports and the Report on Stockpile Assessments to the President.
- (3) Weapon Assessment:** Includes activities associated with management of fielded weapon systems. Provides systems and component engineering support, support to planning, resolution, and documentation of Stockpile Finding Investigations (SFIs) to include assessment of root cause, extent of condition, and impact to system effectiveness or safety. Also includes activities associated with planning, developing, and updating the technical basis for the materials, components, and weapons and performing the weapon assessments. Finally, this includes activities associated with preparation, writing, and coordination of Annual Assessment Reports (AARs) and Weapon Reliability Reports (WRRs), as well as activities needed to assess and resolve system-specific weapon response issues and to provide support to the Nuclear Explosive Safety Study Groups (NESSGs) and the Nuclear Weapon System Surety Groups (NWSSGs) as required. Within MWS, activities in this area include use control studies and assessment, as well as surety capability design, development, qualification, production, and integration for the legacy and modern stockpile.
- (4) Development Studies/Capability Improvements:** Includes activities associated with improvements in surveillance capabilities, technical basis improvements in support of weapon service life extensions, weapon specific technology maturation for insertion or replacement, JTA development/refresh, and system/surety studies.
- (5) Weapon Program Planning/Support:** Includes activities associated with management of fielded weapon systems. Provides systems and component engineering support for planning, issue resolution, and documentation. Within MWS, included are those activities needed to operate, maintain, and

develop products, tools, and applications supporting enterprise product realization through an integrated digital environment and activities associated with external production liaison missions, weapon response, nuclear explosive safety, and technical basis.

- (6) Digital Engineering (MWS only):** Development of a digital, seamless, and secure workflow for optimal design, qualification, and certification of weapon systems, including a virtual representation of physical items (simulations, experiments, etc.) with a full health profile of data and analysis products tied to the performance of that item.

## Current U.S. nuclear weapons and associated delivery systems

| <i><b>Warheads—Strategic Ballistic Missile Platforms</b></i>                                                                                                              |                                              |                                                                              |                            |                       |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------|----------------------------|-----------------------|-------------------------------|
| <i><b>Type<sup>1</sup></b></i>                                                                                                                                            | <i><b>Description</b></i>                    | <i><b>Carrier</b></i>                                                        | <i><b>Laboratories</b></i> | <i><b>Mission</b></i> | <i><b>Military</b></i>        |
| W78                                                                                                                                                                       | Reentry vehicle warhead                      | Minuteman III Intercontinental Ballistic Missile                             | LANL/SNL                   | Surface to surface    | Air Force                     |
| W87-0                                                                                                                                                                     | Reentry vehicle warhead                      | Minuteman III Intercontinental Ballistic Missile                             | LLNL/SNL                   | Surface to surface    | Air Force                     |
| W76-0/1/2                                                                                                                                                                 | Reentry body warhead                         | Trident II D5 Strategic Weapon System (Submarine Launched Ballistic Missile) | LANL/SNL                   | Underwater to surface | Navy                          |
| W88                                                                                                                                                                       | Reentry body warhead                         | Trident II D5 Strategic Weapon System (Submarine Launched Ballistic Missile) | LANL/SNL                   | Underwater to surface | Navy                          |
| <i><b>Bombs—Aircraft Platforms</b></i>                                                                                                                                    |                                              |                                                                              |                            |                       |                               |
| <i><b>Type<sup>1</sup></b></i>                                                                                                                                            | <i><b>Description</b></i>                    | <i><b>Carrier</b></i>                                                        | <i><b>Laboratories</b></i> | <i><b>Mission</b></i> | <i><b>Military</b></i>        |
| B61-11                                                                                                                                                                    | Strategic bomb                               | B-2 bomber                                                                   | LANL/SNL                   | Air to surface        | Air Force                     |
| B61-12                                                                                                                                                                    | Strategic & Non-strategic bomb               | F-15, F-16, F-35A, B-2 bomber, certified NATO aircraft                       | LANL/SNL                   | Air to surface        | Air Force/ Select NATO forces |
| B61-13                                                                                                                                                                    | Strategic bomb                               | B-2 bomber                                                                   | LANL/SNL                   | Air to surface        | Air Force                     |
| B83-1                                                                                                                                                                     | Strategic bomb                               | B-2 bomber                                                                   | LLNL/SNL                   | Air to surface        | Air Force                     |
| <i><b>Warheads—Cruise Missile Platforms</b></i>                                                                                                                           |                                              |                                                                              |                            |                       |                               |
| <i><b>Type<sup>1</sup></b></i>                                                                                                                                            | <i><b>Description</b></i>                    | <i><b>Carrier</b></i>                                                        | <i><b>Laboratories</b></i> | <i><b>Mission</b></i> | <i><b>Military</b></i>        |
| W80-1                                                                                                                                                                     | Air-launched cruise missile strategic weapon | B-52 bomber                                                                  | LLNL/SNL                   | Air to surface        | Air Force                     |
| LANL = Los Alamos National Laboratory<br>LLNL = Lawrence Livermore National Laboratory<br>NATO = North Atlantic Treaty Organization<br>SNL = Sandia National Laboratories |                                              |                                                                              |                            |                       |                               |

<sup>1</sup> The suffix associated with each warhead or bomb type (e.g., “-0/1” for the W76) represents the multiple modifications associated with the respective weapon.

## **Highlights of the FY 2027 Budget Request**

### **Stockpile Operations – NNSA plans to continue to execute this as a single portfolio with visibility into lower-level program elements.**

- Complete development, qualification, production, and delivery of all scheduled LLCs for the enduring systems. LLCs include gas transfer systems, neutron generators, and alteration kits delivered to sustain the nuclear weapons stockpile.
- Conduct surveillance program activities for all weapon systems using data collection from flight tests, laboratory tests, and component evaluations to assess stockpile reliability, performance, and safety.
- Conduct Annual Assessment activities for all weapon systems including the in-depth testing and analysis of systems, subsystems, and components.
- Analyze, evaluate, and close high priority SFIs in accordance with the currently approved plans.
- Analyze and execute legacy component builds on legacy equipment for life of program needs.
- Develop and deploy digital engineering and digital product realization capabilities.
- Implement Nuclear Weapon Information Management risk management framework.

#### **B61**

- Continue procurements and production of B61-12 GTS second cycle and Joint Test Assembly (JTA) components for transition activities.
- Execute the B61-12 insensitive high explosive qualification activities that support life of program requirements.
- Begin (non-REST) surveillance of B61-13.
- Execution of additional activities supporting the B61-12 stockpile service life extension.
- Conduct ALT 375 activities.
- Continue electronic assembly (EA2) production activities for B61-12 planned maintenance.
- Continue production of B61 Multi-Application Transportation Attachment Device (MTAD) ISA components for planned maintenance cycles.

#### **W76**

- Produce GTS LLC for W76-1/2.
- Conduct development for the new W76-1 Joint Test Assembly-3 (JTA3) flight test body, a new design replacing the sunseting instrumented W76-1 JTA1.
- Continued production readiness for ALT 939 ISA implementation on the W76-1/2 Mk4B.
- Receive Phase 6.6 authorization for full scale production of the W76-1/2 Mk4B program.
- Deliver W76-1/2 Mk4B units to the Navy to establish initial operational capability.
- Continue D5 life extension two (LE2) ground and flight test body development.

#### **W78**

- Conduct W78 repair activities.
- Maintain lifetime sustainment activities for the W78 program.
- Procure and produce additional JTA hardware, to support Minuteman III (MMIII) flight test extension.
- Produce LLC components for W78 stockpile sustainment.
- Conduct a weapon response refresh supporting nuclear explosive operations.



**W80**

- Commence W80-4 transition to stockpile activities.
- Continue W80-1 high explosive performance assessments and modeling verification.
- Execute abnormal thermal evaluation testing.
- Restart W80-1 ISA Enhanced Capability Shipping Configuration (ECSC).

**B83**

- Continue execution of electrostatic discharge (Phase IV) quantitative analysis for B83 weapon response.
- Execute B83 surveillance activities.

**W87**

- Execute W87-0 repairs and rebuild activities to meet USAF requirements.
- Develop and produce stockpile and JTA hardware, including firing set assemblies (FSA) and Canned Subassembly Simulator (CSASim) for the W87-0.
- Continue lifetime sustainment activities for the W87-0 program.
- Continue integration of W87-0 with the USAF Sentinel program and the Mk21 Fuze.
- Produce W87-0 ground test hardware to support Sentinel missile integration and qualification.

**W88**

- Produce GTS and NG for W88 ALT 370 to support stockpile operations.
- Continue 1E38 Detonator Lot 3811 production for the W88.
- Continue D5 life extension two (LE2) ground and flight test body development
- Conduct non-destructive evaluations of canned subassemblies (CSAs).
- Execute surveillance, assessment, and sustainment activities for the W88 ALT 370.
- Execute ALT 376 CSA conversion planning, development, and production readiness.

**MWS**

- Sustain current product realization digital tools foundational to all sustainment and modernization programs.
- Modernize digital engineering (DE) capabilities and associated engineering practices to deliver an integrated, NSE-wide digital engineering thread and associated engineering performance improvements.
- Manage ISA logistics hub operations for NNSA transportation in accordance with requirements and schedules.
- Sustain and recapitalize multi-system ISA components.
- Sustain and modernize multi-system code management systems.
- Provide base technical capabilities for evaluating stockpile returns for surveillance and annual assessment.
- Deliver weapon reliability reporting to the DoW.
- Sustain and modernize multi-system surveillance testers via the Surveillance Tester Sustainment Initiative.
- Complete engineering support to qualify a third centrifuge at the Weapons Evaluation Test Laboratory (WETL) Pantex.
- Provide engineering support for Tonopah Test Range radar recapitalization.
- Conduct multi-system use control system studies and assessments.
- Design, develop, qualify, and produce surety capabilities aligned with weapon schedules and enduring stockpile refresh opportunities.

- Manage weapon logistics and accountability, including sustaining and modernizing logistics and accountability digital tools.
- Characterize commercial off-the-shelf electronic components for inclusion in sustainment and modernization programs via the Electronic Parts Program.
- Provide multi-system weapon response and nuclear explosive safety analysis capabilities ensuring safe nuclear explosive operations.
- Provide multi-system Design Agency support resident at Production Agencies to quickly resolve sustainment and modernization challenges.

## Explanation of Change

### Stockpile Operations (+\$165.090 million)

The information for each weapon system within Stockpile Operations is being provided for transparency. The overall increase represents expanded activities necessary to extend the service life of the current stockpile, developing and deploying improved digital engineering capabilities to accelerate product realization, developing a new code management system aligned with National Security Agency (NSA) requirements, and developing and sustaining improved surety capabilities.

- **B61 (+\$22.216 million):** The increase represents execution of B61-12 stockpile lifetime extension activities, ALT 375, insensitive high-explosives (IHE) qualification activities, GTS cycle 2, JTA production, surety sustainment, as well as introduction of B61-13 surveillance execution within stockpile.
- **W76 (+\$17.650 million):** The increase represents a growth in JTA3 development and production, production of Mk4B retrofit, increased LLC production, and ISA ALT 939 development and production. It also represents increased planning and provisioning activities to support directed weapon service life extension.
- **W78 (+\$13.354 million):** The increase represents additional JTA production and associated component builds to support extended MMIII flight testing. It also represents additional aging and surveillance studies that support directed weapon service life extension.
- **W80 (+\$16.932 million):** The increase represents restarting W80-1 ISA activities as well as additional activities supporting W80-4 transition to Stockpile Operations.
- **B83 (-\$1.754 million):** The decrease represents the reduction in technical basis studies.
- **W87 (+\$48.263 million):** The increase represents continued FSA production to meet USAF requirements, development of a JTA to support Sentinel surveillance, and Sentinel qualification. It also represents increased planning and provisioning activities to support directed weapon service life extension.
- **W88 (-\$59.599 million):** The decrease represents receiving additional funding in FY 2026 to support the acceleration of W88 ALT 376 FPU as briefed to the NWC. FY 2027 is a carryover informed request, and the scope remains consistent year to year.
- **MWS (+\$108.028 million):** The increase represents developing and deploying next generation Code Management System (CMS) aligned with NSA requirements, sustainment of ISA capabilities and associated Enhanced Capability Shipping Configuration (ECSC), increased surveillance capabilities and capacities aligned to weapon transitions to the stockpile, and accelerated deployment of digital engineering capabilities across the enterprise.

## **Stockpile Management Weapons Dismantlement and Disposition**

### **Overview**

The Weapons Dismantlement and Disposition (WDD) program recovers critical components and materials for existing weapon sustainment programs, modernization programs, Naval Reactors, and other national priority missions, and improves nuclear security enterprise efficiency by removing excess materials and components from constrained classified and hazardous storage spaces. The program also manages the technical analysis necessary to safely store and securely dismantle nuclear weapons and components and maintaining the increasing legacy component disposition.

WDD is a critical element of NNSA's integrated effort to transform the enterprise and the stockpile. The Program focuses on the safe and secure dismantlement of excess nuclear weapons and components. Specific activities include weapons disassembly, recycling of material and hardware for stockpile programs, disposition of retired warhead system components, and ensuring components are available for safety testing. Other supporting activities, specific to retired warheads, include conducting hazard assessments, issuing safety analysis reports, conducting laboratory and production plant safety studies, and declassification plus sanitization of component parts.

The WDD program has four major activities:

- (1) Disassembly** – WDD enables the dismantlement of weapons and canned subassemblies and is a significant supplier of material for future nuclear weapons production and Naval Reactors.
- (2) Component Disposition** – WDD identifies material streams for permanent disposition of weapon components.
- (3) Weapons Systems Management** – WDD enables safety studies that ensure weapons awaiting dismantlement remain safe while in DoW custody.
- (4) Component Characterization** – WDD ensures that all potential hazards contained in weapon components are characterized to allow the weapons complex to safely work with individual weapon components.

### **Highlights of the FY 2027 Budget Request**

- Execute a weapon dismantlement program consistent with the priorities established in the NNSA Production and Planning Directive.
- Provide enriched uranium, lithium, and components to stockpile programs and external customers.
- Execute legacy component disposition which improves overall efficiency by removing excess materials and components from constrained storage areas across the complex.
- Complete Known State Last Dismantlement Unit (LDU).

### **Explanation of Change**

#### **Weapons Dismantlement and Disposition (+\$8.393 million)**

The increase represents acceleration of legacy component disposition, freeing urgently needed staging capacity across the enterprise while also reducing risks from legacy hardware storage.

## Stockpile Management Production Operations

### Overview

Productions Operations (PO) is a multi-weapon system manufacturing-based program that drives individual Site production capabilities and capacity for Stockpile Operations and Modernization programs, including limited life component production and weapon assembly and disassembly operations. PO scope covers sustainment of labor required for weapon systems capabilities that enable individual weapon production and are not specific to one material stream. PO also provides production equipment maintenance and calibration services for manufacturing operations to meet DoW War Reserve requirements. Facility major modernization and construction activities are not part of this budget subprogram and are covered in other parts of the Weapons Activities account.

PO provides a multifaceted and skilled labor force with focus areas in engineering, manufacturing labor, quality assurance, and programmatic equipment maintenance support for the manufacturing base that enables the individual site capability and capacity to sustain NNSA's production mission. The Program also refreshes and replaces production capabilities and supports programmatic equipment maintenance to improve efficiency and ensure manufacturing operations meet future DoW requirements. PO requires close coordination with several NNSA Offices to ensure the correct capabilities are in place on time to support stockpile demands.

- **Base Manufacturing:** Provides the foundational, cross-cutting manufacturing capabilities (e.g., programmatic equipment maintenance, supply chain logistics, manufacturing management systems) and capacity for modernization and enduring stockpile production, weapon assembly, and weapon disassembly required to meet NNSA schedules and meet DoW delivery schedules.
- **Neutron Generator Assemblies:** Supports the development, qualification, and production of Neutron Generator Assemblies (NGA) shippable items and shelf-life units.
- **Nuclear Reference Material Program:** In FY 2026, the New Brunswick Laboratory (NBL) has been renamed to Nuclear Reference Material Program (NRMP). NRMP is dedicated to supporting the nation's national security, international safeguards, and nonproliferation programs while supporting industry and research organizations. This is accomplished by producing nuclear reference materials (RMs) and conducting measurement proficiency testing (PTs). NRMP provides uranium, plutonium, thorium, and other materials to support production quality, material control and accountability, criticality safety, nuclear forensics analysis, environmental and bioassay, and fundamental research. RMs and PTs are the core mission of the program.

### Production Operations major activities include the following:

- **Engineering & Integration** – Activities associated with the process and documentation for the development and production of components.
- **Equipment and Project Support** – Activities associated with equipment procurements and project support.
- **Manufacturing Capability Sustainment** – Activities associated with the comprehensive management and operational support required to enable and sustain production floor processes, including quality control, manufacturing operations, and the planning and control of manufacturing systems.
- **Modeling & Analysis** – Activities associated with site production health data collection and sustainment, and commodity/capacity analysis to support Defense Programs demand excursions (e.g. COAs).

- **Nuclear Reference Material Program (NRMP)** – Activities that support the storage, packing, shipping, and routine maintenance of Certified Reference Materials.
- **Programmatic Equipment Maintenance** – Activities associated with metrology, calibrations, and maintenance of programmatic tools and equipment.
- **Program Management** – Activities required to support, manage, control, and report on the overall program.
- **Supplier, Shipping, and Material Management** – Activities associated with the support for vendors, packaging, stores, shipping, and site logistics.

### **Highlights of the FY 2027 Budget Request**

- Sustain and execute critical programmatic equipment maintenance activities and critical spare parts procurements.
- Complete final unit testing/qualification for the Savannah River Site's new mass spectrometer.
- Provide critical support labor to ensure multiple product lines within the Detonator Production Enterprise for the weapon systems and associated alteration programs.
- Provide critical labor, tools, and equipment for the neutron generator enterprise to ensure yearly average production of approximately 950 units.
- Continue supporting Occupancy Design and Occupancy projects in B23 as part of KCSTEP.
- Continue Rolling Mill corrective maintenance activities to improve functionality and reliability while buying down risk of this single point of failure capability.
- Enable capabilities for Special Material Facility (SMF) operations and equipment transition.
- Execute and process waste inventory backlog generated by multiple weapon programs.
- Sustain lithium and uranium component manufacturing operations.
- Sustain and execute enterprise-wide production capability modeling and analysis.

### **Explanation of Change**

#### **Production Operations (+\$126.343 million)**

The increase represents the expanded requirements critical to sustaining cross-cutting capabilities needed to ensure operational readiness. With Modernization Programs transitioning to Stockpile Operations, the increase is needed to support the expanding stockpile requirements for equipment service contracts, procurement of critical spare parts, tooling, and equipment that reduces risk of increasing equipment failures and production downtime. Furthermore, expanded Enterprise capability and capacity modeling is necessary to understand and forecast the demand signal on NNSA's production enterprise. This will enable NNSA to make informed decisions in preparation for the increase of Stockpile Modernization requirements.

## **Stockpile Management Nuclear Enterprise Assurance**

### **Overview**

The Nuclear Enterprise Assurance (NEA) Program proactively safeguards the integrity and reliability of the nation's U.S. nuclear deterrent against sophisticated adversarial subversion. The Program assembles and deploys specialized counter-subversion expertise across the NSE, with the explicit objective of ensuring that nuclear weapons, their critical NW-enabling capabilities (such as testers, production equipment, and operational technologies), and foundational crosscutting functions and programs (including infrastructure, physical security, and information technologies) are demonstrably free from adversarial subversion. NEA collaborates with Counterintelligence and Intelligence officials to understand and anticipate evolving threats. NEA also learns from organizations responsible for developing lawful offensive capabilities how to deprive an adversary's basic needs (e.g., information, access, technical ability, detection evasion) to deliver a successful subversion.

NEA develops and institutionalizes a preventative assurance mindset among NNSA's federal program managers and technical staff. The NEA Program uses National Institute for Standards and Technology (NIST) processes to define requirements for proactively integrating adversarial subversion risk management into the existing highly effective NSE engineering processes. This Systems Security Engineering (SSE) approach is specifically designed to preempt the existential threat posed by sophisticated nation-state adversaries who seek to infiltrate the supply chain and/or cyber technologies embedded within U.S. nuclear weapon systems. Such infiltration could lead to the denial of authorized use or the deliberate unauthorized use of nuclear weapons. The NEA Program directly addresses these critical risks by proactively guiding program managers to discover potential vulnerabilities, conduct thorough mission impact analyses, and develop the requisite tools, processes, and mitigation capabilities to detect and neutralize these highly complex threats before they can impact the U.S.

The NEA program is organized around four major activities:

- (1) Assurance Evaluations and Recommendations** – Cross-site, multi-disciplinary teams of subject matter experts from all NNSA sites who rapidly perform vulnerability risk assessments; develop and mature assurance methods; and provide recommended mitigations and implementation plans across NNSA programs. These activities also address non-program-specific NEA risks (e.g., supply chain integrity) through cross-cutting capabilities and process development.
- (2) Tools and Capabilities** – Cross-cutting and non-program-specific tools and capabilities that assist in vulnerability discovery, consequence analysis, and mitigation implementation.
- (3) Policy, Requirements, and Oversight** – Activities include developing and informing NNSA and DOE policies, orders, and directives to ensure integrated governance and compliance with federal law; coordination with DoW and other government partners; and establishing quantifiable metrics to assess the performance of NEA policies, requirements, and NSE execution.
- (4) Workforce Standards** – Creates standards and processes for NSE-wide NEA awareness, training, and skills development. Activities include integrating SSE into weapons development and associated design, production, and testing capabilities throughout the NSE.

### **Highlights of the FY 2027 Budget Request**

- Conduct comprehensive subversion risk assessments across all weapon system lifecycles. This includes NNSA Phase 1 programs, rapid capabilities programs, all weapons undergoing modernization, and those in sustainment, ensuring continuous assurance from conception through retirement.
- Assess critical and mission-impacting enabling capabilities and crosscutting functions systemically. This expanded scope will target key infrastructure, physical security, and information technologies at all

NNSA laboratories, plants, and sites, ensuring they are demonstrably free from adversarial subversion risks.

- Apply an SSE approach to existing engineering processes that will address current and evolving adversarial threats and risks to nuclear weapons while enabling responsible adoption of leading-edge technologies.

### **Explanation of Change**

#### **Nuclear Enterprise Assurance (+\$3.822 million)**

The increase represents continuation of NEA Program transitioning from foundational development to its next phase of comprehensive operational implementation. Funding directly supports the expansion of counter-subversion efforts to provide enterprise-wide coverage. This increase is a strategic scaling intended to institutionalize proactive subversion risk management across the entire NSE, ensuring the safety, security, and reliability of the nation's deterrent as mandated by recent legislation.

**Stockpile Management  
Capital Equipment Summary (\$K)**

|                                                     | <b>Total</b>   | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------|----------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>              |                |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC <\$10M)        | N/A            | N/A                    | 47,535                     | 48,486                     | 49,455                     |
| Automated Reservoir Management System (ARMS) 3, SRS | 46,600         | -                      | -                          | -                          | 8,600                      |
| 9201-5N Dye Pent/Ultrasonic Tanks, Y-12             | 18,000         | -                      | 18,000                     | -                          | -                          |
| Component Canning Box, Y-12                         | 15,000         | -                      | -                          | -                          | 15,000                     |
| DSW 9204-2E Mill, Y-12                              | 10,000         | -                      | -                          | 10,000                     | -                          |
| DSW 9215 EU Jig Borer, Y-12                         | 13,500         | -                      | 2,000                      | -                          | 11,500                     |
| <b>Total, Capital Equipment</b>                     | <b>103,100</b> | <b>-</b>               | <b>67,535</b>              | <b>58,486</b>              | <b>84,555</b>              |

**Stockpile Management  
Outyear Capital Equipment Summary (\$K)**

|                                                     | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|-----------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>              |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment (TEC <\$10M)        | 50,445                     | 51,453                     | 52,482                     | 53,532                     | N/A             |
| Automated Reservoir Management System (ARMS) 3, SRS | 38,000                     | -                          | -                          | -                          | -               |
| 9201-5N Dye Pent/Ultrasonic Tanks, Y-12             | -                          | -                          | -                          | -                          | -               |
| Component Canning Box, Y-12                         | -                          | -                          | -                          | -                          | -               |
| DSW 9204-2E Mill, Y-12                              | -                          | -                          | -                          | -                          | -               |
| DSW 9215 EU Jig Borer, Y-12                         | -                          | -                          | -                          | -                          | -               |
| <b>Total, Capital Equipment</b>                     | <b>88,445</b>              | <b>51,453</b>              | <b>52,482</b>              | <b>53,532</b>              | <b>-</b>        |



## **Production Modernization**

### **Overview**

The Production Modernization program is responsible for modernizing the facilities, infrastructure, and equipment that produce materials and components to meet stockpile requirements and maintain the Nation's nuclear deterrent. The program encompasses six major subprograms that sustain and modernize the base production capabilities for the Nation's nuclear weapons stockpile.

### **Primary Capability Modernization**

The Primary Capability Modernization program manages primary-stage material processing and component production capabilities in the National Nuclear Security Administration's (NNSA) Nuclear Security Enterprise (NSE). The program includes (1) Plutonium Modernization and (2) High Explosives and Energetics (HE&E) Modernization.

### **Secondary Capability Modernization**

The Secondary Capability Modernization program includes the strategic materials, production capabilities, facilities, and material processing operations required to produce nuclear weapon secondary stages. The program includes (1) Enriched Uranium Modernization, (2) Depleted Uranium Modernization, (3) Lithium Modernization, (4) Advanced Materials and Capabilities Modernization, and (5) Mission Delivery Modernization.

### **Tritium and Defense Fuels Program**

The Tritium and Defense Fuels (DF) program consists of two parts: (1) Tritium Modernization produces, recovers, and recycles tritium to support national security requirements and (2) DF will reestablish a reliable supply of unobligated enriched uranium to support future U.S. national security needs, including tritium production and nuclear naval propulsion requirements.

### **Non-Nuclear Capability Modernization**

The Non-Nuclear Capability Modernization (NNCM) program modernizes the capabilities needed for the design, qualification, production, and surveillance of non-nuclear components for all weapon systems. NNCM activities include modernizing existing equipment and infrastructure, developing new capabilities, providing additional capacity, and implementing strategies to increase efficiency.

### **Capability Based Investments**

The Capability Based Investments (CBI) program executes projects for equipment, tools, supporting facilities, and infrastructure directly related to enduring, multi-program weapon activity capabilities, mission deliverables, and reduction of programmatic risks across the NSE.

### **Warhead Assembly Modernization**

The Warhead Assembly Modernization (WAM) program modernizes and optimizes the capabilities needed to execute warhead assembly/disassembly operations for weapons modernization, surveillance, and dismantlement programs.

## Line-Item Construction

Production Modernization line-item construction projects are critical to revitalizing the program-specific capabilities that directly support the nuclear weapons programs. These projects ensure the strategic material industrial base necessary for stockpile modernization is constructed for the NSE and will provide the base materials for component production. These projects will also replace obsolete, unreliable facilities and infrastructure to reduce safety and program risk while improving responsiveness, capacity, and capabilities necessary to support the U.S. nuclear deterrent.

### Production Modernization<sup>1</sup> Funding (\$K)

|                                                                                                   | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTCA<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted <sup>2</sup> |               |
|---------------------------------------------------------------------------------------------------|--------------------|--------------------|------------------|--------------------|-----------------------------------------------------|---------------|
|                                                                                                   |                    |                    |                  |                    | \$                                                  | %             |
| Los Alamos Pit Production<br>21-D-512 Plutonium Pit<br>Production Project, LANL                   | 984,611            | 833,263            | -                | 1,460,791          | +627,528                                            | +75%          |
| 15-D-302 TA-55 Reinvestments<br>Project Phase 3, LANL                                             | 470,000            | 457,900            | -                | 812,100            | +354,200                                            | +77%          |
| 07-D-220-04 Transuranic<br>Liquid Waste Facility, LANL                                            | 39,475             | 7,942              | -                | -                  | -7,942                                              | -100%         |
| 04-D-125 Chemistry and<br>Metallurgy Research<br>Replacement Project, LANL                        | -                  | 5,865              | -                | 10,000             | +4,135                                              | +71%          |
|                                                                                                   | -                  | -                  | -                | 110,000            | +110,000                                            | N/A           |
| <b>Total, Los Alamos Plutonium<br/>Modernization</b>                                              | <b>1,494,086</b>   | <b>1,304,970</b>   | <b>-</b>         | <b>2,392,891</b>   | <b>+1,087,921</b>                                   | <b>+83%</b>   |
| Savannah River Pit Production<br>21-D-511 Savannah River<br>Plutonium Processing Facility,<br>SRS | 75,332             | 75,486             | -                | 302,000            | +226,514                                            | +300%         |
| <b>Total, Savannah River Plutonium<br/>Modernization</b>                                          | <b>875,332</b>     | <b>1,205,486</b>   | <b>728,000</b>   | <b>2,248,523</b>   | <b>+1,043,037</b>                                   | <b>+86.5%</b> |
| Enterprise Pit Production Support                                                                 | 121,964            | 122,094            | -                | 270,897            | +148,803                                            | +122%         |
| <b>Total, Plutonium Modernization</b>                                                             | <b>2,491,382</b>   | <b>2,632,550</b>   | <b>728,000</b>   | <b>4,912,311</b>   | <b>+2,279,761</b>                                   | <b>+87%</b>   |
| High Explosives & Energetics<br>21-D-510 HE Synthesis<br>Formulation and Production, PX           | 131,675            | 132,023            | 22,000           | 251,765            | +119,742                                            | +91%          |
| 15-D-301 HE Science &<br>Engineering Facility, PX                                                 | -                  | -                  | 350,000          | -                  | -                                                   | -             |
|                                                                                                   | 15,000             | -                  | -                | -                  | -                                                   | -             |
| <b>Total, High Explosives &amp;<br/>Energetics</b>                                                | <b>146,675</b>     | <b>132,023</b>     | <b>372,000</b>   | <b>251,765</b>     | <b>+119,742</b>                                     | <b>+91%</b>   |
| <b>Total, Primary Capability<br/>Modernization</b>                                                | <b>2,638,057</b>   | <b>2,764,573</b>   | <b>1,100,000</b> | <b>5,164,076</b>   | <b>+2,399,503</b>                                   | <b>+87%</b>   |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTCA) provided \$3.885 billion in funding to DOE/NNSA, of which \$2.507 billion is for Production Modernization programs and projects.

<sup>2</sup> Deltas reflect discretionary funding only.

|                                                            | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTCA<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted <sup>1</sup> |              |
|------------------------------------------------------------|--------------------|--------------------|------------------|--------------------|-----------------------------------------------------|--------------|
|                                                            |                    |                    |                  |                    | \$                                                  | %            |
| Secondary Capability<br>Modernization                      | 770,353            | 649,686            | -                | 1,728,546          | +1,078,860                                          | +166%        |
| 18-D-690 Lithium Processing<br>Facility, Y-12              | 210,000            | 270,000            | 500,000          | -                  | -270,000                                            | -100%        |
| 06-D-141 Uranium Processing<br>Facility, Y-12              | 800,000            | 730,000            | 250,000          | 290,000            | -440,000                                            | -60%         |
| <b>Total, Secondary Capability<br/>Modernization</b>       | <b>1,780,353</b>   | <b>1,649,686</b>   | <b>750,000</b>   | <b>2,018,546</b>   | <b>+368,860</b>                                     | <b>+22%</b>  |
| Tritium and Defense Fuels<br>Program                       | 581,738            | 520,034            | 120,000          | 880,781            | +360,747                                            | +69%         |
| 18-D-650 Tritium Finishing<br>Facility, SRS                | -                  | -                  | 437,000          | -                  | -                                                   | -            |
| <b>Total, Tritium and Defense Fuels<br/>Program</b>        | <b>581,738</b>     | <b>520,034</b>     | <b>557,000</b>   | <b>880,781</b>     | <b>+360,747</b>                                     | <b>+69%</b>  |
| Non-Nuclear Capability<br>Modernization                    | 141,300            | 190,588            | -                | 258,008            | +67,420                                             | +35%         |
| 26-D-511 MESA<br>Photolithography Capability<br>(MPC), SNL | -                  | -                  | -                | 51,000             | +51,000                                             | N/A          |
| 22-D-513 Power Sources<br>Capability, SNL                  | 50,000             | 5,000              | 100,000          | 140,000            | +135,000                                            | +2700%       |
| <b>Total, Non-Nuclear Capability<br/>Modernization</b>     | <b>191,300</b>     | <b>195,588</b>     | <b>100,000</b>   | <b>449,008</b>     | <b>+253,420</b>                                     | <b>+130%</b> |
| <b>Capability Based Investments</b>                        | <b>153,244</b>     | <b>162,996</b>     | <b>-</b>         | <b>203,163</b>     | <b>+40,167</b>                                      | <b>+25%</b>  |
| Warhead Assembly<br>Modernization                          | 34,000             | 34,336             | -                | 47,965             | +13,629                                             | +40%         |
| 18-D-680 Material Staging<br>Capability, PX                | -                  | -                  | -                | 22,500             | +22,500                                             | N/A          |
| <b>Total, Warhead Assembly<br/>Modernization</b>           | <b>34,000</b>      | <b>34,336</b>      | <b>-</b>         | <b>70,465</b>      | <b>+36,129</b>                                      | <b>+105%</b> |
| <b>Total, Production Modernization</b>                     | <b>5,378,692</b>   | <b>5,327,213</b>   | <b>2,507,000</b> | <b>8,786,039</b>   | <b>+3,458,826</b>                                   | <b>+65%</b>  |

**Production Modernization  
Outyears Funding (\$K)**

|                                                                         | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Los Alamos Pit Production                                               | 1,480,867                  | 1,735,648                  | 1,747,038                  | 1,784,019                  |
| 21-D-512 Plutonium Pit Production Project, LANL                         | 688,500                    | 509,955                    | 520,664                    | 531,078                    |
| 15-D-302 TA-55 Reinvestments Project Phase 3, LANL                      | -                          | -                          | -                          | -                          |
| 07-D-220-04 Transuranic Liquid Waste Facility, LANL                     | -                          | -                          | -                          | -                          |
| 04-D-125 Chemistry and Metallurgy Research<br>Replacement Project, LANL | 112,200                    | 76,100                     | -                          | -                          |
| <b>Total, Los Alamos Plutonium Modernization</b>                        | <b>2,281,567</b>           | <b>2,321,703</b>           | <b>2,267,702</b>           | <b>2,315,097</b>           |
| Savannah River Pit Production                                           | 173,400                    | 176,868                    | 180,405                    | 184,013                    |
| 21-D-511 Savannah River Plutonium Processing Facility,<br>SRS           | 2,274,600                  | 2,320,092                  | 2,366,494                  | 2,413,824                  |
| <b>Total, Savannah River Plutonium Modernization</b>                    | <b>2,448,000</b>           | <b>2,496,960</b>           | <b>2,546,899</b>           | <b>2,597,837</b>           |
| Enterprise Pit Production Support.                                      | 277,352                    | 282,899                    | 288,557                    | 294,328                    |
| <b>Total, Plutonium Modernization</b>                                   | <b>5,006,919</b>           | <b>5,101,562</b>           | <b>5,103,158</b>           | <b>5,207,262</b>           |
| High Explosives & Energetics                                            | 198,852                    | 192,073                    | 221,816                    | 232,809                    |
| 21-D-510 HE Synthesis Formulation and Production, PX                    | -                          | 85,500                     | 21,207                     | 12,500                     |
| 15-D-301 HE Science & Engineering Facility, PX                          | -                          | -                          | -                          | -                          |
| <b>Total, High Explosives &amp; Energetics</b>                          | <b>198,852</b>             | <b>277,573</b>             | <b>243,023</b>             | <b>245,309</b>             |
| <b>Total, Primary Capability Modernization</b>                          | <b>5,205,771</b>           | <b>5,379,135</b>           | <b>5,346,181</b>           | <b>5,452,571</b>           |
| Secondary Capability Modernization                                      | 1,848,141                  | 1,812,626                  | 1,777,319                  | 1,798,803                  |
| 18-D-690 Lithium Processing Facility, Y-12                              | -                          | 112,080                    | 212,242                    | 216,487                    |
| 06-D-141 Uranium Processing Facility, Y-12                              | 486,000                    | 290,000                    | 117,000                    | -                          |
| <b>Total, Secondary Capability Modernization</b>                        | <b>2,334,141</b>           | <b>2,214,706</b>           | <b>2,106,561</b>           | <b>2,015,290</b>           |
| Tritium and Defense Fuels Program                                       | 910,136                    | 966,755                    | 1,236,249                  | 1,394,173                  |
| 18-D-650 Tritium Finishing Facility, SRS                                | -                          | -                          | 118,200                    | 208,487                    |
| <b>Total, Tritium and Defense Fuels Program</b>                         | <b>910,136</b>             | <b>966,755</b>             | <b>1,354,449</b>           | <b>1,602,660</b>           |
| Non-Nuclear Capability Modernization                                    | 258,068                    | 274,664                    | 288,601                    | 297,977                    |
| 26-D-511 MESA Photolithography Capability (MPC), SNL                    | 52,020                     | 53,060                     | 111,980                    | 72,840                     |
| 22-D-513 Power Sources Capability, SNL                                  | 23,713                     | -                          | -                          | -                          |
| <b>Total, Non-Nuclear Capability Modernization</b>                      | <b>333,801</b>             | <b>327,724</b>             | <b>400,581</b>             | <b>370,817</b>             |
| <b>Capability Based Investments</b>                                     | <b>207,226</b>             | <b>211,371</b>             | <b>270,505</b>             | <b>298,441</b>             |
| Warhead Assembly Modernization                                          | 48,824                     | 49,701                     | 85,322                     | 102,812                    |
| 18-D-680 Material Staging Capability, PX                                | -                          | -                          | -                          | -                          |
| <b>Total, Warhead Assembly Modernization</b>                            | <b>48,824</b>              | <b>49,701</b>              | <b>85,322</b>              | <b>102,812</b>             |
| <b>Total, Production Modernization</b>                                  | <b>9,039,899</b>           | <b>9,149,392</b>           | <b>9,563,599</b>           | <b>9,842,591</b>           |

## **Production Modernization Primary Capability Modernization**

### **Overview**

The Plutonium Modernization program provides funding for efforts across the NSE to restore the Nation's capability to produce 80 pits per year (ppy). NNSA will provide additional details regarding Plutonium Modernization activities to Congressional staff through quarterly pit production briefings, in line with the Joint Explanatory Statement accompanying the Fiscal Year (FY) 2020 Energy and Water Development and Related Agencies Appropriations Act. NNSA remains committed to achieving the pit production capability goals on the path to 80 ppy, including the capability to produce not less than 30 ppy at Los Alamos National Laboratory (LANL), while also building on this strategy to pursue to the goal of producing 100 pits of diverse types using streamlined production processes by the end of 2028.

Plutonium Modernization activities include the following:

**Los Alamos Plutonium Modernization:** Activities include Los Alamos Pit Production, which provides for the operational expenses needed to meet pit production requirements at LANL, including activities to hire, train, qualify, and retain required pit production personnel; recapitalization of equipment for war reserve (WR) pit production; pit production process qualification and certification activities for new equipment being installed; plutonium material supply chain activities; tooling design and fabrication; and Plutonium Modernization's share of operational expenses for PF-4. This funding also supports the manufacturing of precision plutonium devices for science-related evaluation. Los Alamos Pit Production also funds key enabling activities and safety management programs in PF-4, including a radiological control program, programmatic equipment maintenance, a criticality safety program, shipping and receiving, authorization basis, work control documentation, training and qualification, legacy disposition, waste management, material, recycle, recovery and storage support to plutonium supply chain activities, and facility availability to maintain plutonium capabilities. In addition, the FY 2027 request for Los Alamos Pit Production funds the transition of the Advanced Recovery and Integrated Extraction System (ARIES) capability from Defense Nuclear Nonproliferation to support pit production.

Los Alamos Plutonium Modernization also includes four line-item projects at LANL. The Los Alamos Plutonium Pit Production Project (LAP4), 21-D-512, funds capital acquisitions required to increase production capacity at PF-4 to 30 ppy, as well as associated infrastructure investments at LANL to support increased rates of pit production. Funds for the TA-55 Reinvestment Project, Phase 3, 15-D-302, pay for construction activities to modernize fire alarm panels providing a vital safety function in PF-4. Funding for the Transuranic Liquid Waste Facility (TLW), 07-D-220-04, project supports finalizing the construction of a new hazard category 3 nuclear facility to house processing equipment capable of treating transuranic (TRU) liquid waste, a TRU liquid influent storage, and necessary utilities. Funds for the Chemistry and Metallurgy Research Replacement Project, 04-D-125, pay for construction activities to improve TA-55 and PF-4 personnel and vehicular ingress/egress, levels of worker preparation/staging and warehousing for relocated Analytical Chemistry and Materials Characterization (AC/MC) operations and personnel, and procurement and installation of equipment.

**Savannah River Plutonium Modernization:** Supports the continued establishment of a program office at Savannah River Site (SRS) to enable pit production development efforts, train and hire future production staff, and support future production and operations planning. Program plans and processes will continue to be developed and matured across 13 functional areas to support production competency. Until the High-Fidelity Training and Operations Center (HFTOC) training center is fully operational, SRS will use existing facilities at SRS, LANL, and Lawrence Livermore National Laboratory (LLNL) to conduct and support training activities

and leverage SRS capabilities to enable LANL's near-term acceleration of pit production. This includes the addition of scope from the former Surplus Disposition Project (SPD) to aid in plutonium metal availability in both K Area Plutonium Metal Preparation, as well as a feasibility assessment on restart of HB-Line Aqueous Recovery. Workforce development activities will continue expanding engagement with LANL through the Knowledge Transfer program and with LANL and LLNL through the Mutual Support program, as well as expansion of university engagement to increase opportunities specific to workforce needs.

Additionally, the Savannah River Plutonium Processing Facility (SRPPF) project, 21-D-511, repurposes the partially completed Mixed Oxide Fuel Fabrication Facility (MFFF) to achieve a production capability of no fewer than 50 ppy consistent with the NNSA's recommended alternative for pit production.

**Enterprise Pit Production Support:** Provides funding for activities that support pit production across the NSE, including Kansas City National Security Campus (KCNSC) production for non-nuclear components, certification activities, issuance of a vendor contract to standup a new capability for production of special materials, management of the plutonium pit Product Realization Team (PRT) at LLNL, plutonium material supply chain activities at Pantex (PX), and material management and supporting staging activities at the Nevada National Security Site (NNSS).

### **Highlights of the FY 2027 Budget Request**

- Support pit production capability modernization in accordance with Department of War (DoW) requirements.
- Pursue opportunities at LANL to accelerate production of 100 pits by 2028.
- Begin construction for K-Area Metal Production subproject of SRPPF, including initial modifications to repurposed SPD gloveboxes and facilities that will be used to support pit production.
- Install additional production equipment and recapitalize end-of-life equipment in PF-4 to reduce pit production mission risk.
- Perform certification work required to qualify new equipment for WR production.
- Begin development activities for a second pit type to support DoW requirements.
- Hire, train, and qualify staff to ramp up future pit production.
- Improve PF-4 vault facilities efficiency through inventory work-off and optimization of footprint to support the transition to plutonium production and improve Material at Risk (MAR) posture.
- Chemistry and Metallurgy Research (CMR) de-inventory activities in support of the CMR Facility Exit Strategy.
- Provide storage/staging and inventory management capabilities in support of the plutonium pit production mission.
- Execute Device Assembly Facility (DAF) Enhanced Staging Program to support increased pit production at LANL by providing staging support for materials currently located at LANL.
- Mature the SRS Plutonium Modernization Program, to include expanded knowledge transfer and training, that supports near-term acceleration of pit production at LANL.
- Invest in the SRS Manufacturing Technology Center (MTC) to support production competency and modern manufacturing development ahead of SRPPF project completion.
- Invest in the Weapons Support Building (WSB), formerly known as the Waste Solidification Building, to support operations, training, and competency development.
- Continue full-scale construction of Main Process Buildings, HFTOC, and Administrative Building Subprojects.

## Explanation of Changes

### **Los Alamos Plutonium Modernization (+\$1,087.921 million)**

- **Los Alamos Pit Production (+\$627.528 million):** Funding will support the increased pace of equipment purchases and installation activities and the hiring, training, qualification, and retention of additional staff needed to support the war reserve (WR) pit production ramp-up. Rate production will increase to 30 ppy as soon as FY 2028 in parallel with the completion of construction activities in PF-4. Funding is also included for initial development and certification activities for pits for the W93 program to support First Production Unit (FPU) in the 2030s; the transition of the ARIES capability in PF-4 from Defense Nuclear Nonproliferation to support pit production; and a pilot project for a containerized system to make plutonium metal.
- **21-D-512 Plutonium Pit Production Project, LANL (+\$354.200 million):** Funds the project plans for baselined subprojects and pre-CD-2 project plan for the Training and Development Center.

**15-D-302 TA-55 Reinvestments Project, Phase 3, LANL (-\$7.942 million):** Decreased funding consistent with the plan to complete construction funding in FY 2027 and prepare for CD-4.

**07-D-220-04 Transuranic Liquid Waste Facility, LANL (+\$4.135 million):** Increased funding is necessary for final construction activities to achieve CD-4.

**04-D-125 Chemistry and Metallurgy Research Replacement Project, LANL (+\$110.000 million):** Increase continues procurement and construction activities for various projects within the PEI2 subproject.

### **Savannah River Plutonium Modernization (+\$1,043.037 million)**

- **Savannah River Pit Production (+\$226.514 million):** Funding provides resources necessary to sustain growth in staffing, training, and the continued development of manufacturing competencies, processes, and procedures necessary to build production competency, establish the pit production capability, and optimize the schedule from SRPPF CD-4 approval to full rate production to meet DoW requirements. Funding also prioritizes use of SRS capabilities to enable LANL's near-term acceleration of pit production.
- **21-D-511 Savannah River Plutonium Processing Facility, SRS (+\$816.523 million):** Increase supports full-scale construction for all three subprojects. Increase also supports all ongoing activities to transition SPD scope from Defense Nuclear Nonproliferation to establish a plutonium metal production capability in SRS's K-Area to supply feed material for SRPPF and LANL's PF4. The delta does not account for the \$728 million in mandatory funding provided by Working Families Tax Cut Act that will be obligated in FY 2026.

**Enterprise Pit Production Support (+\$148.803 million):** Increase supports minor construction projects at the NNSS Device Assembly Facility; modernization of equipment at LLNL needed for continued support for pit production and certification; continued non-nuclear component production at the KCNSC, including issuance of a vendor contract to stand up a new capability for production of special materials; and plutonium material supply chain activities at Pantex.

## Primary Capability Modernization High Explosives and Energetics

### Overview

The High Explosives and Energetics (HE&E) program is responsible for the production of high explosives (HE) and energetic materials required for an effective stockpile, including the main charge, boosters, detonators, actuators, timer/drivers, spin rockets, and the materials necessary to achieve nuclear weapon safety and security.

#### The HE&E modernization program will do the following:

- Manage the HE&E supply chain risk portfolio to ensure an internal nuclear security enterprise and external vendor base to maintain, manufacture, and deploy Mark Quality HE and energetics in support of weapons production.
- Define and monitor the qualification standards of HE and energetic material.
- Support the future development and production of novel HE and energetic material.
- Define and ensure infrastructure capital investment strategies meet both HE&E material and component requirements to sustain and modernize the stockpile.

#### Highlights of the FY 2027 Budget Request

- Procure energetic material to meet the production needs of the B61-12/13, W80-4/5, W87-1, and W93.
- Stabilize the supply chain and enable material/manufacturing maturation to meet the energetic material requirements of the current and future stockpile modernization programs.
- Develop an alternate vendor for the manufacturing of a drop-in replacement binder for FK-800 for future insensitive high explosive (IHE) production requirements.
- Refine manufacturing techniques for new HE and mock formulations.
- Develop Triaminotrinitrobenzene (TATB) synthesis and optimize capability at the Naval Surface Warfare Center, Indian Head Division.
- Reconstitute legacy production materials, such as titanium hydride and potassium perchlorate (THKP) and Recrystallized pentaerythritol tetranitrate (PETN).
- Procure first WR lots of polymer-bonded explosives (PBX) 9502 with new TATB.
- Initiate in-situ monitoring and process and environmental control upgrades at Holston to achieve more reliable production of both PBX 9502 and PBX 9501.
- Complete main works final acceptance and readiness verification activities for HE Science & Engineering (HESE) facility.
- Start construction activities for HESFP, including site preparation, funded by Working Families Tax Cut Act.

#### Explanation of Changes

##### High Explosives and Energetics (+\$119.742 million)

- **High Explosives and Energetics (+\$119.742 million):** Increase reflects synthesis facility construction completion at the Naval Surface Warfare Center - Indian Head Division and commencement of optimization activities, vendor qualification for a new FK-800 binder replacement, process maturation and development efforts for new molecules, and critical infrastructure investments. The delta does not account for the \$22 million in mandatory funding that will be obligated in FY 2026.
- **21-D-510 HE Science Synthesis Formulation and Production, PX (+\$0.000 million):** No change in discretionary resources reflects the obligation of \$350 million in mandatory funding in FY 2026 that will cover construction activities through FY 2028.



## **Production Modernization**

### **Secondary Capability Modernization**

#### **Overview**

The Secondary Capability Modernization program maintains, reconstitutes, and upgrades capabilities and capacity to provide a robust, flexible, and responsive capability to produce the secondary stage of a nuclear weapon by:

- Assuring a continuous and reliable supply of nuclear weapon components and strategic materials.
- Undertaking construction and acquisition projects to house processes in facilities that can support forecasted requirements.
- Extending the life of existing facilities and equipment.
- Maturing and inserting new production technologies for better, safer, more efficient processes.
- Partnering with commercial industry to accelerate capability deployment and reduce production risk.

**Enriched Uranium Modernization** stewards the existing United States inventory of weapons grade enriched uranium for Defense Programs, Defense Nuclear Nonproliferation, Naval Reactors, and Mutual Defense Agreement missions. The Program accomplishes this through ensuring material availability through uranium processing, recycle, and recovery; modernizing production capabilities and infrastructure; and developing and deploying new, safer, and resilient production technologies.

Building 9212, an 80-year-old Manhattan Project era facility located at Y-12, contains the most hazardous enriched uranium operations and does not meet modern nuclear safety and security standards. The Enriched Uranium Modernization program is decreasing mission dependency on Building 9212 by transitioning capabilities into enduring Y-12 facilities and the Uranium Processing Facility (UPF). The program is leveraging opportunities to modernize equipment and processes during these capability relocations by deploying new technologies to reduce costs and improve manufacturing for nuclear weapon materials.

The program supplies the current stockpile with purified enriched uranium metal, while enabling the transition to new capabilities (e.g., Microwave Casting, Electrorefining, and Direct Chip Melt). It is also contracting with a commercial vendor to bridge an oxide-to-metal capability gap, reducing risk during a period of significant technology transition at Y-12 and increasing the resiliency and responsiveness of enriched uranium operations.

**Depleted Uranium Modernization** is reestablishing and modernizing lapsed capabilities so NNSA can produce radiation cases for imminent weapons delivery mission requirements. The Depleted Uranium Modernization program is re-establishing a reliable supply of feedstock material, High Purity Depleted Uranium (HPDU) metal, before the current inventory is exhausted. Simultaneously, the program is restarting and maintaining the equipment to produce Depleted Uranium (DU) -niobium alloy, commonly called binary, at Y-12, while also modernizing the manufacturing capabilities needed to produce radiation case components. The program is increasing both capacity and reliability for HPDU and binary production in existing aging facilities to meet mission deliverables. The program is also developing and deploying new production technologies that will improve work safety, increase material efficiencies, and establish a resilient radiation case production capability to meet future demands. The program is modernizing these capabilities and the associated infrastructure by developing the Agile Radiation Case Capability (ARCC) campus at Y-12.

**Lithium Modernization** is modernizing and operating NNSA's enriched lithium-6 processing capabilities to provide lithium weapons components for imminent mission requirements. Lithium Modernization re-capitalizes and operates chemical purification, metal production, and other lithium recycling processes to ensure

a reliable lithium material inventory able to meet annual material requirements without necessitating hazardous and expensive enrichment.

Lithium operations currently take place in Building 9204-2 (Beta-2) at Y-12, an aging facility that is Y-12's number one infrastructure risk. NNSA is executing a comprehensive strategy to reduce facility risk and relocate capabilities over the immediate-, medium-, and long-term. The program is implementing targeted infrastructure mitigations, accelerating technology maturation efforts to streamline the production process, leveraging partnerships with commercial industry, and pursuing more cost-effective approaches to construction. This strategy emphasizes a multi-pronged approach that is more responsive to cost and schedule conditions and provides more flexible options to meet mission requirements.

**Advanced Materials and Capabilities Modernization** is developing and deploying modern production capabilities for new component technologies that will be used in future weapons. NNSA has either discontinued the legacy processes used to produce certain components due to safety concerns or has not used the process for over 30 years. These legacy materials and processes will be replaced with new technologies and special materials that are less hazardous and more efficient than legacy capabilities.

**Mission Delivery Modernization** is modernizing Y-12 operations and facilities that affect multiple material programs including analytical chemistry operations in Building 9995 (known as the Plant Lab), General Manufacturing capability in Building 9201-1, a Manhattan Project-era facility, and the Assembly, Disassembly, Dismantlement, and Surveillance operations in Building 9204-2E. The program is also pursuing opportunities to reduce supply chain risk through the Critical Supplier Program, which leverages commercial vendor capabilities.

#### **Highlights of the FY 2027 Budget Request**

- Maintain castable inventory of enriched uranium; modernize production capabilities and infrastructure; and deploy new, safer, and resilient production technologies to phase out mission dependency on Y-12's Building 9212.
- Establish an enriched uranium oxide-to-metal conversion capability and begin operations at a commercial vendor to bridge a capability gap.
- Complete construction of the Uranium Processing Facility (UPF) Main Processing Building and the Salvage and Accountability Building, while exploring options to accelerate facility commissioning or demonstrate early casting.
- Support a long-term reliable HPDU supply chain to address the potential run out date in FY 2029.
- Modernize Depleted Uranium production using streamlined technology, such as Direct Cast, reducing the risks of equipment failure, decreasing material waste, and improving process efficiency.
- Produce and maintain sufficient lithium material supply, while maintaining operability of Y-12's Beta-2 facility.
- Advance the technology readiness levels necessary for safer, more-efficient lithium processing capabilities.
- Continue to mature Special Materials technologies and establish equipment and facilities required for production.
- Modernize the analytical chemistry, general manufacturing, and assembly and disassembly operations.
- Execute procurements and refine models and plans to modernize equipment and infrastructure in Y-12's Buildings 9204-2E and 9201-1.

## Explanation of Changes

### Secondary Capability Modernization (+\$368.860 million)

- **Secondary Capability Modernization (+\$1,078.860 million):** Increase reflects additional investment in mitigating continued risk areas at Y-12 to meet future mission demand and prevent near-term failures or bottlenecks in production. One major focus is reestablishing the HPDU supply chain required to support depleted uranium needs ahead of existing inventory exhaustion which requires a significant uplift in funding requirements. The program is also entering the production phase of its enriched uranium purification scope, and is establishing a radiography capability at Y-12 to prevent a known production bottleneck in the near future. This budget also reflects the evolving lithium strategy, which includes leveraging partnerships with commercial industry, and pursuing more cost-effective approaches to construction.
- **18-D-690 Lithium Processing Facility, Y-12 (-\$270.000 million):** The decrease reflects discretionary funding only. Combined with \$500 million in mandatory funding, the project will have sufficient funding on hand while developing a revised strategy to address enduring lithium processing capabilities through broader program investments, following significant cost and schedule growth in the LPF project.
- **06-D-141 Uranium Processing Facility, Y-12 (-\$440.000 million):** The decrease reflects discretionary funding only. Combined with \$250 million in mandatory funding that will be obligated in FY 2026, the project will have sufficient funding to maintain its schedule.

## **Production Modernization Tritium and Defense Fuels Program**

### **Overview**

**Tritium Sustainment and Modernization** operates the national capability for producing tritium to meet stockpile requirements. The program irradiates tritium-producing burnable absorber rods (TPBARs) to produce new tritium while maintaining a flexible supply chain capability and capacity. NNSA produces tritium by irradiating TPBARs in two Tennessee Valley Authority (TVA) reactors during standard 18-month operating cycles. Produced tritium is extracted from the TPBARs at the Tritium Extraction Facility (TEF) at SRS. The tritium inventory supports limited-life component exchanges of tritium reservoirs deployed in the stockpile along with other Defense Programs needs. The program establishes tritium production schedules based on detailed computational models and annual tritium projections to maintain required tritium inventories, including reserve quantities. Production planning takes into consideration the material constantly being recovered and recycled from deployed reservoirs, including those from weapon dismantlement. The program also supports tritium science and technology initiatives to maintain a reliable tritium supply chain.

The Tritium Finishing Facility (TFF) project at the SRS will recapitalize tritium infrastructure that supports scheduled shipments of gas transfer systems to the Department of War (DoW).

**The Defense Fuels (DF) Program** is responsible for ensuring a reliable supply of unobligated enriched uranium for two defense mission requirements, low-enriched uranium (LEU) for tritium production and highly enriched uranium (HEU) for naval nuclear propulsion. Since 2013, the United States has lacked the capability to produce enriched uranium free of peaceful use obligations (i.e., unobligated). NNSA currently possesses sufficient unobligated LEU for tritium production until the early 2040s and sufficient unobligated HEU for naval nuclear propulsion into the 2050s. The DF Program must establish a new domestic uranium enrichment capability to provide new material beyond these need dates. The DF Program intends to meet these defense mission requirements by incrementally deploying enrichment capacity using two gas centrifuge technologies, including the industry-standard Domestic Uranium Enrichment Centrifuge Experiment (DUECE) being developed at Oak Ridge National Laboratory (ORNL), and the AC100 centrifuge.

### **Highlights of the FY 2027 Budget Request**

- Maintain a purified tritium supply for national security needs.
- Maintain tritium supply chain capability and capacity including technology development and insertion.
- Continue irradiation of 1,824 TPBARs in Watts Bar Nuclear Reactor Unit 1 (WBN1) Cycle 21.
- Commence irradiation of up to 1,920 TPBARs in Watts Bar Nuclear Reactor Unit 2 Cycle 8.
- Execute additional component procurements and TPBAR assemblies to satisfy assured production requirements.
- Conduct at least six extractions at the TEF.
- Disposition helium-3 byproduct for U.S. Government needs.
- Refurbish or replace tritium processing equipment consistent with the preventative maintenance plan, i.e. process system sustainment plan.
- Execute research and development activities supporting TPBAR material science; tritium extraction, recycle and recovery; risk mitigation activities; and technology maturation and insertion efforts.
- Sustain tritium recovery and recycle capabilities in legacy facilities, replacing Thermal Cycling Absorption Process Product Bed C and restoring the Tritium Recycle and Recovery diffuser system.

- Continue mini-thermal cycling absorption process prototype development to demonstrate technology readiness through small-scale hot-testing in TEF in preparation for using the technology to improve product and waste gas processing at SRS.
- Continue progress to advance TFF facility design (executed by an architectural and engineering firm) while also beginning long lead procurements for the project, based on design maturity.
- Complete conceptual design, submit NRC license application, and advance manufacturing readiness to MRL 5 for the DUECE pilot plant.
- Complete design and licensing for the AC100 deployment and begin manufacturing activities to support a partial 24-machine cascade.
- Complete HEU to LEU material downblending campaign.

## Explanation of Changes

### Tritium and Defense Fuels Program (+\$360.747 million)

- **Tritium and Defense Fuels Program (+\$360.747 million):** Increase in tritium funding supports SRS Tritium Extraction Facility and recycle and recovery projects. Increase in DF funding expands the pursuit of enrichment technologies and demonstration efforts to help ensure future defense fuels inventories for tritium and naval reactor production. It supports activities associated with manufacturing and operations for the AC100 deployment and advancing manufacturing readiness for the DUECE pilot plant. The delta does not account for the \$120 million in mandatory funding for centrifuge deployment that will be obligated in FY 2026.
- **18-D-650 Tritium Finishing Facility, SRS (+0):** No change in discretionary resources reflects the obligation of \$437 million in mandatory funding in FY 2026 that will progress design, establish performance baselines, prepare safety documentation, and plan for long-lead procurements and early site work. The project has completed the Site Preparation and Warehouse subproject and is progressing TFF finishing equipment and facility designs to 60 percent. NNSA continues to advance equipment and balance-of-plant designs, while monitoring existing infrastructure and investing as needed to mitigate risks and avoid disrupting DoW schedules.

## **Production Modernization Non-Nuclear Capability Modernization**

### **Overview**

The Non-Nuclear Capability Modernization (NNCM) program executes modernization projects to ensure the enduring availability of non-nuclear capabilities for multiple weapon systems. Non-nuclear components provide critical warhead functions using a wide range of components, including radiation-hardened microelectronics, neutron generators, gas transfer systems, power sources, electrical assemblies, cables, connectors, structural elements, pads/cushions, and a multitude of other parts. The NNCM program modernizes the extensive suite of infrastructure and equipment required to support the non-nuclear component lifecycle inclusive of design, development, qualification, production, and surveillance. These capabilities ensure that components can survive environments encountered throughout the stockpile to the target sequence and over the life of the weapon.

The NNCM program also executes long-term planning and other project cost (OPC) activities to modernize production capabilities for non-nuclear components through line-item projects, including the Power Sources Capability (PSC), Product Realization Infrastructure for Stockpile Modernization (PRISM), MESA Photolithography Capability (MPC), and Microelectronic Components Capability (MC2) projects.

### **Highlights of the FY 2027 Budget Request**

- Complete one project of the Kansas City Short Term Expansion Plan (KCSTEP).
- Procure equipment for the Kansas City Non-Nuclear Expansion Transformation (KCNEXT).
- Procure fabrication tools and equipment to enable continued manufacturing of warhead strategic radiation- hardened microelectronics at the MESA complex for the nuclear weapon stockpile.
- Develop techniques for recladding Annular Core Research Reactor fuel rods to preserve surveillance and qualification testing capabilities and protect nuclear fuel for potential use in the Combined Radiation Environments for Survivability Testing Complex (CREST).
- Continue with Phase 2 refurbishment of SNL's SATURN capability which tests component survivability against X-Ray effects.
- Support the Electronic Parts Program to reduce risk of using commercial off-the-shelf parts in weapons modernization programs.
- Procure production tools and equipment to enable the manufacturing of Neutron Generators for the nuclear weapons stockpile.
- Complete fielding of dual-path thermal spray production capability needed to meet the requirements of weapon modernization systems.
- Continue programmatic equipment acquisition and maintenance for Accelerators (including SATURN and HERMES), Major Environmental Test Facilities, Material Sciences, and Electrical Sciences at SNL.
- Support the technology maturation of On Machine Inspection with Direct Ink Write to increase inspection throughput.
- Continue construction on the SNL PSC Project.
- Begin design and procurement of long lead equipment for the SNL MPC line-item project.
- Complete the Analysis of Alternatives and initiate conceptual design for the MC2 project.

## **Explanation of Changes**

### **Non-Nuclear Capability Modernization (+\$253.420 million)**

- **Non-Nuclear Capability Modernization (+\$67.420 million):** Increase reflects investments in MESA production and NNC programmatic equipment and test/qualification capabilities and SATURN phase 2 refurbishment.
- **26-D-511 MESA Photolithography Capability (MPC), SNL (+\$51.000 million):** Increase reflects preliminary and final design and long lead procurement actions.
- **22-D-513 Power Sources Capability, SNL (+\$135.000 million):** Increase supports the continued construction of the facility to 85% completion by the end of FY27. The delta does not reflect \$100 million in mandatory funding that will be obligated in FY 2026.

## **Production Modernization Capability Based Investments**

### **Overview**

The Capability Based Investments (CBI) program funds projects that support the program of record and future capability requirements, primarily through capital equipment procurements, to reduce risks to core enterprise capabilities extending beyond any single weapon system need. These projects address capability gaps across all NNSA sites in weapon production, development, surveillance, and certifications. CBI prioritizes the highest risk to mission needs with emphasis on addressing single point failures, choke points, discontinued or failed equipment, and pivotal enabling capabilities. CBI projects are discrete, short-duration, and non-complex to allow for rapid response to emerging risks. Project scope includes multi-program test, measurement, and production equipment used for stockpile stewardship, sustainment, and modernization. CBI projects address needs beyond any single facility, campaign, or weapon system and are essential to reduce programmatic risk to mission across the nuclear security enterprise, ensuring needed capabilities are available to support mission deliverables.

### **Highlights of the FY 2027 Budget Request**

Table I shows the over 50 planned CBI projects to be executed with FY 2027 funding based on the status of enterprise infrastructure as of March 2026. This plan may need to be updated before and during the FY 2027 execution year to respond to changing infrastructure conditions and emerging priority requirements.

- Deliver programmatic equipment for the W80-4, W87-1, and W93 to enable modernization programs to deliver on schedule.
- Complete equipment replacement and refurbishment projects at LANL that support the roadmap to achieve a 30 pits per year plutonium pit production capacity.
- Modernize NNS sub-critical testing capabilities used for stockpile assessment, nuclear explosives package design, and weapon certification activities to support planned sub-critical testing schedules.
- Continue implementation of an enterprise-wide effort for early identification of at-risk materials and development of solutions to mitigate supply chain interruptions and onboard new qualified U.S. based suppliers for critical equipment, materials, and components required to produce nuclear weapon systems.
- Recapitalize weapon program manufacturing and qualification capabilities to meet rising throughput requirements. Support equipment replacement needs for both tritium sustainment and gas transfer system production.

### **Explanation of Change for Capability Based Investments (+\$40.167 million)**

Increase reflects additional projects to support equipment capabilities past useful life, addressing single point failures, mitigate at risk materials, and enable supply chain assurance needed to increase enterprise throughput and meet NSE mission needs.



**Table I**  
**Capability Based Investments**  
**Planned FY 2027 Recapitalization Projects - As of December 2025**  
**(\$K)**

| <b>Site</b> | <b>Project Name</b>                                              | <b>FY 2027 Allocation</b> |
|-------------|------------------------------------------------------------------|---------------------------|
| KCNSC       | Plant Capital Replacements Portfolio                             | 6,684                     |
| KCNSC       | 60 kV Electron Beam Welder                                       | 3,528                     |
| KCNSC       | GTS Production Modernization                                     | 3,680                     |
| KCNSC       | At Risk Materials and Specification Management                   | 1,313                     |
|             | <b>Subtotal, Kansas City National Security Campus</b>            | <b>15,205</b>             |
| LLNL        | Detonation and Dynamic Diagnostic Deployment Portfolio           | 2,000                     |
| LLNL        | PA/DA Stockpile Manufacturing Equipment                          | 5,994                     |
| LLNL        | Stockpile & AAR Equipment Recapitalization                       | 7,000                     |
| LLNL        | NEP Material Science and Engineering Characterization Portfolio  | 6,000                     |
| LLNL        | Manufacturing, Assembly, and Tooling Recapitalization            | 3,000                     |
| LLNL        | Programmatic Equipment Consolidation                             | 3,000                     |
| LLNL        | Pulsed Power & Energy Conversion Equipment for Stockpile Testing | 4,000                     |
| LLNL        | At Risk Materials and Specification Management                   | 756                       |
|             | <b>Subtotal, Lawrence Livermore National Laboratory</b>          | <b>31,750</b>             |
| LANL        | Standards and Cal: Demo and Installation of a Mod Lab for CMM    | 14,200                    |
| LANL        | NCERC PLANET Upgrade including Hydraulic System                  | 2,581                     |
| LANL        | LANSCe Klystron Test Bed                                         | 1,800                     |
| LANL        | PF-4 Trolley Buss Bar Phase III Installation and D&D             | 415                       |
| LANL        | At Risk Materials and Specification Management                   | 1,004                     |
| LANL        | MPDV Recapitalization supporting Weapons Engineering             | 1,000                     |
| LANL        | 12S Actuator Inventory                                           | 4,108                     |
|             | <b>Subtotal, Los Alamos National Laboratory</b>                  | <b>25,108</b>             |
| NNSS        | Area 6 Improvements - Chilled Water System                       | 10,000                    |
| NNSS        | PULSE A-Shaft Modernization                                      | 4,500                     |
| NNSS        | DAF Capability Modernization                                     | 3,000                     |
| NNSS        | PULSE Programmatic Equipment Modernization                       | 3,000                     |
| NNSS        | PULSE Accountability Modernization Upgrades                      | 4,000                     |
| NNSS        | At Risk Materials                                                | 75                        |
|             | <b>Subtotal, Nevada National Security Site</b>                   | <b>24,575</b>             |
| PNNL        | PuMPS Collaboration Laboratory Equipment                         | 1,100                     |
| PNNL        | Radiochemical Processing Lab Equipment Recapitalization          | 1,800                     |
| PNNL        | At Risk Materials                                                | 120                       |
|             | <b>Subtotal, Pacific Northwest National Laboratory</b>           | <b>3,020</b>              |
| PX          | Particle Injection Molding (PIM) installation                    | 4,100                     |
| PX          | LINAC Replacement-12-116                                         | 4,900                     |
| PX          | At Risk Materials, Specification Management, and Mitigations     | 350                       |
| PX          | CoLOSSIS Camera Upgrade - Bay 19                                 | 2,000                     |
|             | <b>Subtotal, Pantex Plant</b>                                    | <b>11,350</b>             |

| Site | Project Name                                                 | FY 2027 Allocation |
|------|--------------------------------------------------------------|--------------------|
| SNL  | Reactors/Accelerators Equipment Recapitalization             | 1,668              |
| SNL  | SNL WETL Centrifuge Recapitalization                         | 8,654              |
| SNL  | Electrical Sciences Equipment Portfolio                      | 5,020              |
| SNL  | At Risk Materials, Specification Management, and Mitigations | 4,103              |
| SNL  | Major Environmental Test Facilities Portfolio                | 864                |
|      | <b>Subtotal, Sandia National Laboratories</b>                | <b>20,309</b>      |
| SRS  | Mass Spec #2                                                 | 720                |
| SRS  | Mass Spec #1                                                 | 2,000              |
| SRS  | Replace Environmental Chambers 2 & 3                         | 6,744              |
| SRS  | Added Manufacturing for Weapons Support Building (WSB)       | 2,000              |
| SRS  | Radiological Counting and Analysis Systems                   | 1,373              |
| SRS  | Quick Change Vacuum Chucks                                   | 500                |
| SRS  | Automatic Leak Detector (ALD) Upgrades                       | 536                |
| SRS  | At-Risk Materials                                            | 60                 |
|      | <b>Subtotal, Savannah River Site</b>                         | <b>13,933</b>      |
| SRNL | At Risk Materials and Project Planning                       | 360                |
|      | <b>Subtotal, Savannah River National Lab</b>                 | <b>360</b>         |
| Y-12 | CNC Jig Grinder                                              | 5,775              |
| Y-12 | Ultrasonic Mill                                              | 4,725              |
| Y-12 | CMM w/Environmental Enclosure                                | 8,400              |
| Y-12 | Linatron Upgrade                                             | 2,663              |
| Y-12 | Life Cert Oven Manifolds Portfolio                           | 7,575              |
| Y-12 | At Risk Materials                                            | 337                |
|      | <b>Subtotal, Y-12 National Security Complex</b>              | <b>29,475</b>      |
| HQ   | Planning, Program Management, and Strategic Reserves         | 22,208             |
| HQ   | Corporate Reserves                                           | 5,870              |
|      | <b>Grand Total, Capability Based Investments</b>             | <b>203,163</b>     |

## **Production Modernization Warhead Assembly Modernization**

### **Overview**

The Warhead Assembly Modernization (WAM) program modernizes and optimizes the capabilities needed to execute warhead assembly/disassembly operations for weapons modernization, surveillance, and dismantlement programs. The WAM program is responsible for modernization activities supporting multiple weapon programs with a focus on increasing efficiency, capability, and capacity of weapon assembly and disassembly. WAM identifies and implements cross cutting enhancements that benefit all weapon operations executed at Pantex to ensure future mission demand can be achieved.

### **Warhead Assembly Modernization activities include the following:**

- Implement production modernization strategies to increase capacity and resiliency for weapon assembly and disassembly.
- Modernize storage infrastructure for non-nuclear components to accelerate delivery of weapons systems.
- Modernize processes and technologies that increase efficiency in weapon assembly and disassembly operations.
- Provide equipment and infrastructure to enable new technology insertion.
- Modernize critical equipment and capabilities that enable weapon assembly operations.
- Execute planning and activities for future major infrastructure projects supporting weapons staging and assembly operations.

### **Highlights of the FY 2027 Budget Request**

- Implement equipment solutions to support increased build-ahead lead times for weapon modernization components.
- Continue to modernize assembly component storage infrastructure, reducing delivery time to weapons assembly operations.
- Procure metrology and calibration equipment to expand capability and capacity for warhead assembly operations, mitigating bottlenecks and single points of failure.
- Procure physical storage enhancement solutions for special tooling and production supplies, improving traceability and quick delivery for assembly operations.
- Execute preliminary design and reviews for a modular approach to address the Material Staging Capability (MSC) mission need.
- Execute planning and OPC activities for the Future Weapons Assembly and Disassembly and Main Charge Assembly Capability Facilities.

### **Explanation of Changes**

#### **Warhead Assembly Modernization (+36.129 million)**

- **Warhead Assembly Modernization (+\$13.629 million):** Increase reflects execution of matured project plans to modernize warhead assembly operations.
- **18-D-680 Material Staging Capability, PX (+\$22.500 million):** Increase reflects resumption of design efforts for MSC.

**Capital Equipment Summary**  
**(\$K)**

|                                                                                                | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                                         |              |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC <\$10M)                                                   | N/A          | N/A                    | 273,245                    | 278,710                    | 284,284                    |
| AQ Nitrate Upgrades (Oxide Roast), LANL                                                        | 12,343       | 4,964                  | -                          | 7,379                      | -                          |
| Agilent 7700 ICP, LANL                                                                         | 10,000       | -                      | -                          | -                          | -                          |
| Basement Radiography Upgrades, LANL                                                            | 26,596       | 20,376                 | 5,274                      | 946                        | -                          |
| CNC Lathe (90%), LANL                                                                          | 24,259       | 13,361                 | 10,898                     | -                          | -                          |
| Drill and Press Operations and Glovebox (Previously Drill and Press D&D and Replacement), LANL | 61,727       | 744                    | -                          | -                          | -                          |
| Electrorefining Line MC&A GB, LANL                                                             | 29,500       | 4,355                  | 21,274                     | 3,871                      | -                          |
| Final Machining #2 (Previously T-Base #1 Replacement), LANL                                    | 53,796       | 37,938                 | 15,858                     | -                          | -                          |
| Foundry Immersion Density, LANL                                                                | 25,591       | 8,907                  | 14,195                     | 2,489                      | -                          |
| Foundry Upgrades Parts Staging (Previously Foundry Upgrades Phase 3), LANL                     | 43,610       | 24,142                 | 15,306                     | 4,162                      | -                          |
| Heat Treat (90%), LANL                                                                         | 34,303       | 2,807                  | 27,782                     | 3,714                      | -                          |
| High Energy Radiography, LANL                                                                  | 25,043       | -                      | -                          | -                          | -                          |
| Hot Inspection (Dimensional Inspection Box) (Previously Hot Inspection Phase 2), LANL          | 18,083       | 10,969                 | 6,653                      | 461                        | -                          |
| Load Frame Installation, LANL                                                                  | 35,724       | 19,690                 | 3,823                      | 12,211                     | -                          |
| Machining Parts Staging #2, LANL                                                               | 31,362       | 16,192                 | 11,635                     | 3,535                      | -                          |
| Triton Mass Spectrometer, LANL                                                                 | 18,435       | -                      | -                          | -                          | -                          |
| Metal Recovery System, LANL                                                                    | 52,933       | -                      | -                          | -                          | -                          |
| MRR Open Front Hood Install, LANL                                                              | 29,403       | 350                    | -                          | -                          | -                          |
| Subassembly Installation, LANL                                                                 | 18,783       | 11,741                 | 5,772                      | 1,270                      | -                          |
| TRU Waste Glovebox Project, LANL                                                               | 25,450       | 15,101                 | 7,458                      | 2,891                      | -                          |
| Turnings Consolidation glovebox (Previously Install new turnings consolidation glovebox), LANL | 32,766       | 3,019                  | 24,360                     | 5,387                      | -                          |
| XRD - Panalytical, LANL                                                                        | 12,523       | -                      | -                          | -                          | -                          |
| B332 R1353 Machining Center, LLNL                                                              | 19,440       | -                      | -                          | -                          | 19,440                     |
| DAF End of Life equipment replacement, LLNL                                                    | 20,476       | -                      | -                          | -                          | -                          |
| DAF NDA Count Capabilities, LLNL                                                               | 10,000       | -                      | -                          | -                          | -                          |
| DAF Pit Certification support gloveboxes, LLNL                                                 | 37,055       | -                      | -                          | -                          | -                          |
| DAF SCE assembly equipment, LLNL                                                               | 20,544       | -                      | -                          | -                          | -                          |
| DAF SCE part fabrication equipment, LLNL                                                       | 25,052       | -                      | -                          | -                          | -                          |
| High Volume Production Special Equipment Installation, LLNL                                    | 10,000       | -                      | -                          | -                          | -                          |
| High Performance Computing (HPC), ORNL                                                         | 25,000       | -                      | -                          | -                          | 25,000                     |
| Procurement of Light Gas Gun, PX                                                               | 10,000       | -                      | -                          | -                          | -                          |

**Weapons Activities /  
Production Modernization**

**FY 2027 Congressional Justification**

|                                                                                                            | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------------------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| Flexible Production Stepper (previously I-line Multiple Wafer Size Stepper (ASML1 Replacement)), SNL       | 10,000       | -                      | -                          | -                          | -                          |
| FSI Track Replacement (3 of 4) (previously FSI-TEL Track (ASML5)), SNL                                     | 10,000       | -                      | -                          | 10,000                     | -                          |
| FSI Track Replacement (4 of 4), SNL                                                                        | 10,000       | -                      | -                          | -                          | -                          |
| I-Line Stepper Replacement (2 of 2), SNL                                                                   | 10,000       | -                      | -                          | -                          | -                          |
| QU3992 Centrifuge, SNL                                                                                     | 10,000       | -                      | -                          | -                          | 10,000                     |
| Tonopah Test Range Radar #1, SNL                                                                           | 10,250       | 10,250                 | -                          | -                          | -                          |
| Tonopah Test Range Radar #2, SNL                                                                           | 10,250       | 10,250                 | -                          | -                          | -                          |
| TEF Classified D/3 DCS to Delta V DCS PHASED Migration, SRS                                                | 32,000       | -                      | -                          | -                          | -                          |
| WPS PLC Delta V Conversion, SRS                                                                            | 20,000       | -                      | -                          | -                          | -                          |
| Calcliner, Y-12                                                                                            | 162,800      | 149,300                | 13,500                     | -                          | -                          |
| LiM 9204-02 Electrolytic Cell Scrubber, Y-12 (formerly Electrolytic Cell Scrubbers, Y-12)                  | 30,000       | -                      | -                          | -                          | 30,000                     |
| Direct Chip Melt Bottom Loading Furnace: Chip Compaction (formerly Bottom Loading Furnace), Y-12           | 109,400      | 14,000                 | 10,800                     | 36,100                     | 34,600                     |
| Direct Chip Melt Bottom Loading Furnace: Compacted Chip Processing (formerly Bottom Loading Furnace), Y-12 | 326,000      | 91,300                 | 15,300                     | -                          | -                          |
| DUM Foundry 2nd Vacuum Arc Remelt (VAR) Furnace, Y-12                                                      | 23,000       | -                      | 23,000                     | -                          | -                          |
| Production Hot Isostatic Press                                                                             | 10,000       | -                      | -                          | -                          | 10,000                     |
| Direct Cast Vacuum Induction Melter                                                                        | 13,000       | -                      | -                          | -                          | 13,000                     |
| GMM 9201-01 Hydroform, Y-12                                                                                | 15,000       | -                      | -                          | -                          | 1,000                      |
| Machine Capability Lathe #2, Y-12                                                                          | 10,000       | 10,000                 | -                          | -                          | -                          |
| Machine Capability Lathe #3, Y-12                                                                          | 12,000       | 1,500                  | 10,500                     | -                          | -                          |
| Machine Capability Lathe #4, Y-12                                                                          | 14,000       | -                      | 1,500                      | 12,500                     | -                          |
| QOM B2E 9 MeV Linatron Replacement, Y-12                                                                   | 18,500       | -                      | -                          | -                          | -                          |
| QOM 5N 2 MeV Linatron #2 Replace, Y-12                                                                     | 10,000       | -                      | -                          | -                          | 1,000                      |
| QOM 5N Dye Pen Station modernization, Y-12                                                                 | 11,500       | -                      | -                          | -                          | -                          |
| QOM Beta 2E Radiography 2 MEV Unit, Y-12                                                                   | 32,800       | -                      | -                          | -                          | 1,300                      |
| QOM Beta 2E Radiography 9 MEV Unit, Y-12                                                                   | 40,000       | -                      | -                          | -                          | 1,000                      |
| Special Nuclear Material Vehicle, Y-12                                                                     | 19,200       | -                      | -                          | -                          | -                          |
| Cold Spray equipment, Y-12                                                                                 | 20,700       | -                      | -                          | -                          | -                          |
| <b>Total, Capital Equipment</b>                                                                            | <b>N/A</b>   | <b>481,256</b>         | <b>518,133</b>             | <b>385,626</b>             | <b>430,624</b>             |

**Capital Equipment Summary**  
**Outyears (\$K)**

|                                                                                                                  | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request | Outyears       |
|------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|----------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                                                           |                    |                    |                    |                    |                |
| Total Non-MIE Capital Equipment (TEC <\$10M)                                                                     | 289,970            | 295,769            | 301,685            | 307,718            | N/A            |
| Agilent 7700 ICP, LANL                                                                                           | -                  | 10,000             | -                  | -                  | -              |
| Drill and Press Operations and Glovebox (Previously<br>Drill and Press D&D and Replacement), LANL                | -                  | -                  | -                  | 60,983             | -              |
| Heat Treat (90%), LANL                                                                                           |                    |                    |                    |                    |                |
| High Energy Radiography, LANL                                                                                    | -                  | 25,043             | -                  | -                  | -              |
| Triton Mass Spectrometer, LANL                                                                                   |                    |                    | -                  | 18,435             | -              |
| Metal Recovery System, LANL                                                                                      | -                  | -                  | 52,933             | -                  | -              |
| MRR Open Front Hood Install, LANL                                                                                | -                  | 29,053             | -                  | -                  | -              |
| XRD - Panalytical, LANL                                                                                          | -                  | -                  | -                  | 12,523             | -              |
| DAF End of Life equipment replacement, LLNL                                                                      | -                  | 20,476             | -                  | -                  | -              |
| DAF NDA Count Capabilities, LLNL                                                                                 | 1,000              | 9,000              | -                  | -                  | -              |
| DAF Pit Certification support gloveboxes, LLNL                                                                   | 37,055             |                    | -                  | -                  | -              |
| DAF SCE assembly equipment, LLNL                                                                                 | -                  | -                  | 20,544             | -                  | -              |
| DAF SCE part fabrication equipment, LLNL                                                                         | -                  | -                  | 25,052             | -                  | -              |
| High Volume Production Special Equipment<br>Installation, LLNL                                                   | -                  | 10,000             | -                  | -                  | -              |
| High Performance Computing (HPC), ORNL                                                                           | -                  | -                  | -                  | -                  | -              |
| Procurement of Light Gas Gun, PX                                                                                 | 10,000             | -                  | -                  | -                  | -              |
| Flexible Production Stepper (previously I-line Multiple<br>Wafer Size Stepper (ASML1 Replacement)), SNL          | 10,000             | -                  | -                  | -                  | -              |
| FSI Track Replacement (4 of 4), SNL                                                                              | -                  | 10,000             | -                  | -                  | -              |
| I-Line Stepper Replacement (2 of 2), SNL                                                                         | -                  | 10,000             | -                  | -                  | -              |
| TEF Classified D/3 DCS to Delta V DCS PHASED<br>Migration, SRS                                                   | -                  | -                  | 32,000             | -                  | -              |
| WPS PLC Delta V Conversion, SRS                                                                                  | -                  | -                  | 3,000              | 17,000             | -              |
| Calcliner, Y-12                                                                                                  |                    |                    |                    |                    |                |
| Room Temperature Lithium Eletrolytic Cells, Y-12                                                                 | 15,000             | -                  | -                  | -                  | -              |
| Direct Chip Melt Bottom Loading Furnace: Chip<br>Compaction (formerly Bottom Loading Furnace), Y-12              | 13,200             | 600                | 100                | -                  | -              |
| Direct Chip Melt Bottom Loading Furnace: Compacted<br>Chip Processing (formerly Bottom Loading Furnace),<br>Y-12 | -                  | -                  | -                  | -                  | 219,400        |
| GMM 9201-01 Hydroform, Y-12                                                                                      | 14,000             | -                  | -                  | -                  | -              |
| QOM B2E 9 MeV Linatron Replacement, Y-12                                                                         | -                  | -                  | 1,500              | 17,000             | -              |
| QOM 5N 2 MeV Linatron #2 Replace, Y-12                                                                           | 9,000              | -                  | -                  | -                  | -              |
| QOM 5N Dye Pen Station modernization, Y-12                                                                       | -                  | 1,500              | 10,000             | -                  | -              |
| QOM Beta 2E Radiography 2 MEV Unit, Y-12                                                                         | -                  | 31,500             | -                  | -                  | -              |
| QOM Beta 2E Radiography 9 MEV Unit, Y-12                                                                         | 39,000             | -                  | -                  | -                  | -              |
| Special Nuclear Material Vehicle, Y-12                                                                           | -                  | 19,200             | -                  | -                  | -              |
| Cold Spray equipment, Y-12                                                                                       | 20,700             | -                  | -                  | -                  | -              |
| <b>Total, Capital Equipment</b>                                                                                  | <b>458,925</b>     | <b>472,141</b>     | <b>446,814</b>     | <b>433,659</b>     | <b>219,400</b> |

**Weapons Activities /  
Production Modernization**

**FY 2027 Congressional Justification**

**21-D-512 Los Alamos Plutonium Pit Production Project (LAP4)**  
**Los Alamos National Laboratory (LANL)**  
**Los Alamos, New Mexico**  
**Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 Request for the Los Alamos Plutonium Pit Production Project (LAP4) is \$812,100,000 of Total Project Cost (TPC), which includes \$762,029,000 of Total Estimated Cost (TEC) and \$50,071,000 of Other Project Cost (OPC). The FY 2027 request includes funds to finish design activities on the 30 Reliable Equipment Installation (30R) and Training and Development Center (TDC) subprojects; and to continue construction activities in the Decontamination and Demolition (D&D), 30 Base Equipment Installation (30B), and the West Entry Control Facility (WECF) subprojects; and to start construction activities on the 30R and TDC subprojects.

LAP4 includes the procurement of equipment and systems and is a contributor to support a baseline production increase from ten plutonium pits per year (ppy) at Los Alamos National Laboratory (LANL) to not less than 30 ppy, and to provide equipment and infrastructure necessary to support the reliable and timely provision of strategic weapons systems' primary components to strategic defense missions.

Critical Decision (CD)-1, *Approve Alternative Selection and Cost Range*, was approved April 27, 2021, with a TPC cost range of \$2,700,000,000 - \$3,900,000,000. The full project TPC will not be determined until all the subprojects are baselined at CD-2/3 approval. The current planning basis of \$5,865,353,000 and a CD-4 date of 4Q FY 2032 is based on the baseline estimates for 3 of the 5 subprojects and identified cost and schedule trends for the remaining scope. The overall LAP4 project estimate has not been updated since CD-1 approval. The current planning basis anticipates the baselining of the two remaining subprojects in FY 2026. The cost and schedule planning basis will be updated at that time. Both TEC and OPC activities will be funded through this line-item.

Per DOE O 413.3B, any cost savings realized from a LAP4 subproject will be returned to the LAP4 Total Project contingency pool for use, as needed after approval of a baseline change, in other LAP4 subprojects.

**Significant Changes:**

This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year. The Critical Milestone History and cost tables represent the current approved planning basis of LAP4. Project documentation has been developed to reflect the 30 Diamond (30D) Strategy, an execution strategy that optimally sequences both programmatic and project activities to achieve the 30 ppy capacity at LANL as soon as possible. The Baseline Change Proposals (BCPs) in line with 30D have been approved by the Deputy Secretary and cost and schedule information has been reflected in this document. The BCPs reflect changes to the original performance baselines due to the shifting and resequencing of program priorities. Outyear funding amounts may be revised in future budget requests as NNSA baselines the subprojects in accordance with DOE O 413.3B and as final designs are completed and associated reviews conducted.

Specific details on the LAP4 subprojects are listed below.

**D&D Subproject (21-D-512-01):** The D&D subproject has continued construction (removal of gloveboxes and equipment) and the associated support activities like development of Integrated Work Documents and work

control documents for future D&D efforts. The TPC and CD-4 have been adjusted to reflect the approved BCP with a revised performance measurement baseline TPC of \$538,600,000 and a schedule completion date of 1Q FY 2029. The subproject schedule has been updated to align with the implementation of the 30D execution strategy consistent with the BCP and reflects an 18 month delay in the completion of the subproject.

**30B Subproject (21-D-512-02):** Achieved CD-3A, *Approve Long-Lead Procurements* on January 3, 2022, with a TPC of \$72,000,000 and a completion date of 3Q FY 2024. Achieved CD-3B, *Approve Long-Lead Procurements* on August 5, 2022, with a TPC of \$43,000,000 and a completion date of 3Q FY 2024. The 30B subproject reached 90 percent design completion, established a performance baseline (CD-2), and approved start of construction (CD-3) on January 19, 2023. The TPC and CD-4 have been adjusted to reflect the approved BCP with a revised performance measurement baseline TPC of \$2,235,935,000 and a schedule completion date of 1Q FY 2032.

**30R Subproject (21-D-512-03):** Achieved CD-3A, *Approve Long-Lead Procurements* package on March 29, 2023, with a TPC of \$99,000,000 and a completion date of 1Q FY 2026. The final design – except for the Product Development Line scope – was completed December 2024, and establishing a performance baseline (CD-2) and approving start of construction (CD-3) has intentionally been shifted to no sooner than September 2026 as the focus will be on 30B and in alignment with the 30D strategy. The TPC value of 30R was adjusted to align the overall TPC of LAP4 within the currently planned funding and will be adjusted as the subproject achieves CD-2/3 in 4Q FY 2026. The long-lead procurement activities will continue as the NNSA is currently evaluating an additional CD-3X activity and will ultimately mitigate the delays associated with fabrications prior to achieving CD-2/3.

**TDC Subproject (21-D-512-04):** Currently at CD-1 with a TPC of \$450,000,000, the TDC subproject anticipates establishing a performance baseline (CD-2), and approving start of construction (CD-3) in September 2026 and is based on a design-build-to-budget acquisition approach.

**WECF Subproject (21-D-512-05):** The WECF subproject achieved CD-3A, *Approve Long-Lead Procurements* package on December 15, 2023, with a cost of \$27,800,000 and a completion of 1Q FY 2025. Final design is complete and the NNSA approved the performance baseline (CD-2) and start of construction (CD-3) on January 3, 2025 for a TPC of \$209,000,000 and CD-4 by the 4Q FY 2029. The subproject is on schedule and continues to make good field construction progress.

A Federal Project Director (FPD) has been assigned to the project.



**Critical Milestone History:**  
**LAP4 (21-D-512)**

| Fiscal Quarter or Date |            |                            |            |            |                       |            |              |                         |
|------------------------|------------|----------------------------|------------|------------|-----------------------|------------|--------------|-------------------------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4                    |
| FY 2021                | 11/25/2015 | 4Q FY 2020                 | 1Q FY 2021 | 4Q FY 2022 | 4Q FY 2022            | 4Q FY 2022 | 2Q FY 2024   | 4Q FY 2028              |
| FY 2022                | 11/25/2015 | 4Q FY 2020                 | 4/27/2021  | 2Q FY 2023 | 1Q FY 2023            | 2Q FY 2023 | N/A          | 4Q FY 2028              |
| FY 2023                | 11/25/2015 | 3/8/2021                   | 4/27/2021  | 4Q FY 2024 | 3Q FY 2024            | 4Q FY 2024 | N/A          | 4Q FY 2028              |
| FY 2024                | 11/25/2015 | 3/8/2021                   | 4/27/2021  | 3Q FY 2025 | 3Q FY 2025            | 3Q FY 2025 | N/A          | 4Q FY 2031              |
| FY 2025                | 11/25/2015 | 3/8/2021                   | 4/27/2021  | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | N/A          | 4Q FY 2032              |
| FY 2026                | 11/25/2015 | 3/8/2021                   | 4/27/2021  | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | N/A          | 4Q FY 2032              |
| FY 2027                | 11/25/2015 | 3/8/2021                   | 4/27/2021  | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | N/A          | 4Q FY 2034 <sup>1</sup> |

**D&D Subproject (21-D-512-01)**

| Fiscal Quarter or Date |            |                            |           |            |                       |            |            |
|------------------------|------------|----------------------------|-----------|------------|-----------------------|------------|------------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | CD-4       |
| FY 2023                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 11/18/2021 | 2Q FY 2022            | 11/18/2021 | 2Q FY 2027 |
| FY 2024                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 11/18/2021 | 7/20/2022             | 11/18/2021 | 2Q FY 2027 |
| FY 2025                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 11/18/2021 | 7/20/2022             | 11/18/2021 | 2Q FY 2027 |
| FY 2026                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 11/18/2021 | 7/20/2022             | 11/18/2021 | 2Q FY 2027 |
| FY 2027                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 11/18/2021 | 7/20/2022             | 11/18/2021 | 1Q FY 2029 |

**30B Subproject (21-D-512-02)**

| Fiscal Quarter or Date |            |                            |           |            |                       |            |            |
|------------------------|------------|----------------------------|-----------|------------|-----------------------|------------|------------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | CD-4       |
| FY 2023                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1Q FY 2023 | 4Q FY 2022            | 1Q FY 2023 | 4Q FY 2026 |
| FY 2024                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/19/2023  | 4Q FY 2023            | 1/19/2023  | 4Q FY 2030 |
| FY 2025                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/19/2023  | 3Q FY 2024            | 1/19/2023  | 4Q FY 2030 |
| FY 2026                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/19/2023  | 3Q FY 2024            | 1/19/2023  | 4Q FY 2030 |
| FY 2027                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/19/2023  | 4/25/2024             | 1/19/2023  | 1Q FY 2032 |

<sup>1</sup> Currently reflects draft schedule information without contingency that has not been through an EIR or ICE but is being shared ahead of time. This date will be adjusted to as the 30R subproject achieves CD-2/3.

| Fiscal Year | CD-3A      | CD-3B    |
|-------------|------------|----------|
| FY 2022     | 2Q FY 2022 | N/A      |
| FY 2023     | 1/3/2022   | N/A      |
| FY 2024     | 1/3/2022   | 8/5/2022 |
| FY 2025     | 1/3/2022   | 8/5/2022 |
| FY 2026     | 1/3/2022   | 8/5/2022 |
| FY 2027     | 1/3/2022   | 8/5/2022 |

**CD-3A – Approve Long-Lead Procurements** – Gloveboxes, enclosures, and equipment

**CD-3B – Approve Long-Lead Procurements** – Gloveboxes, enclosures, and equipment

### 30R Subproject (21-D-512-03)

| Fiscal Quarter or Date |            |                            |           |            |                       |            |                         |
|------------------------|------------|----------------------------|-----------|------------|-----------------------|------------|-------------------------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | CD-4                    |
| FY 2023                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1Q FY 2024 | 4Q FY 2023            | 1Q FY 2024 | 4Q FY 2028              |
| FY 2024                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2024 | 1Q FY 2025            | 4Q FY 2024 | 4Q FY 2031              |
| FY 2025                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1Q FY 2025 | 1Q FY 2025            | 1Q FY 2025 | 4Q FY 2032              |
| FY 2026                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1Q FY 2026 | 4Q FY 2025            | 1Q FY 2026 | 4Q FY 2032              |
| FY 2027                | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2026 | 3Q FY 2026            | 4Q FY 2026 | 4Q FY 2034 <sup>1</sup> |

| Fiscal Year | CD-3A      |
|-------------|------------|
| FY 2023     | 1Q FY 2023 |
| FY 2024     | 3Q FY 2023 |
| FY 2025     | 3/29/2023  |
| FY 2026     | 3/29/2023  |
| FY 2027     | 3/29/2023  |

**CD-3A – Approve Long-Lead Procurements** – Gloveboxes, enclosures, and equipment

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<sup>1</sup> Currently reflects draft schedule information without contingency that has not been through an EIR or ICE but is being shared ahead of time. This date will be adjusted to as the 30R subproject achieves CD-2/3.

**TDC (21-D-512-04)**

Fiscal Quarter or Date

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | CD-4       |
|-------------|------------|----------------------------|-----------|------------|-----------------------|------------|------------|
| FY 2023     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2024 | 3Q FY 2024            | 4Q FY 2024 | 4Q FY 2028 |
| FY 2024     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 3Q FY 2025 | 3Q FY 2025            | 3Q FY 2025 | 4Q FY 2030 |
| FY 2025     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | 4Q FY 2030 |
| FY 2026     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | 4Q FY 2030 |
| FY 2027     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2026 | 4Q FY 2026            | 4Q FY 2026 | 4Q FY 2031 |

**WECF Subproject (21-D-512-05)**

Fiscal Quarter or Date

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | CD-4       |
|-------------|------------|----------------------------|-----------|------------|-----------------------|------------|------------|
| FY 2023     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 2Q FY 2023 | 4Q FY 2022            | 2Q FY 2023 | 2Q FY 2026 |
| FY 2024     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 3Q FY 2024 | 3Q FY 2024            | 3Q FY 2024 | 4Q FY 2028 |
| FY 2025     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 4Q FY 2024 | 3Q FY 2024            | 4Q FY 2024 | 4Q FY 2028 |
| FY 2026     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/3/2025   | 10/17/2024            | 1/3/2025   | 4Q FY 2029 |
| FY 2027     | 11/25/2015 | 3/8/2021                   | 4/27/2021 | 1/3/2025   | 10/17/2024            | 1/3/2025   | 4Q FY 2029 |

| Fiscal Year | CD-3A      |
|-------------|------------|
| FY 2025     | 12/15/2023 |
| FY 2026     | 12/15/2023 |
| FY 2027     | 12/15/2023 |

**CD-3A – Approve Long-Lead Procurements** – Early minor site work and equipment**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range**Conceptual Design Complete** – Actual date the conceptual design was completed**CD-1** – Approve Alternative Selection and Cost Range**CD-2** – Approve Performance Baseline**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)**CD-3** – Approve Start of Construction**CD-4** – Approve Start of Operations or Project Closeout

**Project Cost History (\$K)****Total Project (21-D-512)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b>             |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------------------|
| FY 2021            | 116,900            | 79,100                   | 196,000           | 30,000     | 30,000            | 226,000 <sup>1</sup>   |
| FY 2022            | 456,000            | 3,035,000                | 3,491,000         | 404,000    | 404,000           | 3,895,000 <sup>2</sup> |
| FY 2023            | 489,897            | 3,005,340                | 3,495,237         | 399,763    | 399,763           | 3,895,000 <sup>2</sup> |
| FY 2024            | 555,285            | 3,525,496                | 4,080,781         | 649,094    | 649,094           | 4,729,875 <sup>3</sup> |
| FY 2025            | 483,407            | 4,350,888                | 4,834,295         | 615,394    | 615,394           | 5,449,689 <sup>3</sup> |
| FY 2026            | 485,859            | 4,363,933                | 4,849,792         | 1,015,561  | 1,015,561         | 5,865,353 <sup>3</sup> |
| FY 2027            | 488,798            | 4,854,704                | 5,343,502         | 535,929    | 535,929           | 5,879,431              |

**D&D Subproject (21-D-512-01)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------|
| FY 2023            | 22,689             | 459,695                  | 482,384           | 46,616     | 46,616            | 529,000    |
| FY 2024            | 22,689             | 459,695                  | 482,384           | 46,616     | 46,616            | 529,000    |
| FY 2025            | 22,684             | 459,700                  | 482,384           | 46,616     | 46,616            | 529,000    |
| FY 2026            | 22,684             | 459,700                  | 482,384           | 46,616     | 46,616            | 529,000    |
| FY 2027            | 27,183             | 503,677                  | 530,860           | 7,740      | 7,740             | 538,600    |

**30B Subproject (21-D-512-02)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------|
| FY 2023            | 212,626            | 1,599,990                | 1,812,616         | 213,384    | 213,384           | 2,026,000  |
| FY 2024            | 204,894            | 1,268,160                | 1,473,054         | 391,072    | 391,072           | 1,864,126  |
| FY 2025            | 120,449            | 1,397,697                | 1,518,146         | 345,980    | 345,980           | 1,864,126  |
| FY 2026            | 120,449            | 1,397,697                | 1,518,146         | 345,980    | 345,980           | 1,864,126  |
| FY 2027            | 110,992            | 1,959,719                | 2,070,711         | 165,224    | N/A               | 2,235,935  |

<sup>1</sup> The project cost history amounts for FY 2021 reflected only funding requested in that budget year; TPC is not indicative of the total project cost.

<sup>2</sup> The TPC reflects the top of the CD-1 cost range.

<sup>3</sup> NNSA continues to assess the impacts on the TPC and the CD-4 date. Over time the schedule and cost estimates have increased due to refinement of scope during design and partially accounting for parametric estimates on 30R in advance of having a fully developed baseline estimates. NNSA/LANL is currently refining scope in light of the project reaching the threshold of requiring a CD-1R. Additionally, other contributing factors include escalation, longer glovebox fabrication durations, and ongoing challenges with executing work within an operating nuclear facility.

**30R Subproject (21-D-512-03)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b>             |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------------------|
| FY 2023            | 163,074            | 517,871                  | 680,945           | 79,055     | 79,055            | 760,000                |
| FY 2024            | 236,194            | 1,369,857                | 1,606,051         | 150,698    | 150,698           | 1,756,749              |
| FY 2025            | 236,194            | 2,089,671                | 2,325,865         | 150,698    | 150,698           | 2,476,563              |
| FY 2026            | 236,194            | 2,026,335                | 2,262,529         | 550,698    | 550,698           | 2,813,227              |
| FY 2027            | 244,091            | 1,911,107                | 2,155,198         | 290,698    | 290,698           | 2,445,896 <sup>1</sup> |

**TDC Subproject (21-D-512-04)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------|
| FY 2023            | 71,185             | 331,947                  | 403,132           | 46,868     | 46,868            | 450,000    |
| FY 2024            | 71,185             | 331,947                  | 403,132           | 46,868     | 46,868            | 450,000    |
| FY 2025            | 83,757             | 307,983                  | 391,740           | 58,260     | 58,260            | 450,000    |
| FY 2026            | 83,757             | 307,983                  | 391,740           | 58,260     | 58,260            | 450,000    |
| FY 2027            | 83,757             | 307,983                  | 391,740           | 58,260     | 58,260            | 450,000    |

**WECF Subproject (21-D-512-05)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|------------|-------------------|------------|
| FY 2023            | 20,323             | 95,837                   | 116,160           | 13,840     | 13,840            | 130,000    |
| FY 2024            | 20,323             | 95,837                   | 116,160           | 13,840     | 13,840            | 130,000    |
| FY 2025            | 20,323             | 95,837                   | 116,160           | 13,840     | 13,840            | 130,000    |
| FY 2026            | 22,775             | 172,218                  | 194,993           | 14,007     | 14,007            | 209,000    |
| FY 2027            | 22,775             | 172,218                  | 194,993           | 14,007     | 14,007            | 209,000    |

**2. Project Scope and Justification****Scope**

The project scope includes the further repurposing of spaces within the existing LANL Plutonium Facility 4 (PF-4) and Sigma facility, beyond the scope of repurposing in the Chemistry and Metallurgy Research Replacement (CMRR) project, including removal of previously installed equipment and support systems as necessary to accommodate new pit production equipment. Scope includes design, construction, and installation of processing equipment, support systems, utilities infrastructure, physical infrastructure, and security features to reach the capability to produce 30 ppy. PF-4 is an operating Hazard Category (HC)- 2, Security Category 1

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<sup>1</sup> The current funding profile for 30R with a total project cost of \$2,445,896,000 is less than the previous total project cost estimate of \$2,813,227,000 but will be updated as the subproject achieves CD-2/3.

Nuclear Facility. Sigma is a radiological support facility. PF-4 and supporting capabilities need to be modified to achieve the required pit production capability/capacity.

The LAP4 project is composed of the five subprojects identified below.

**D&D Subproject (21-D-512-01)**

Decontamination and demolition of gloveboxes and programmatic equipment in PF-4 in preparation for installation of pit production equipment. The re-baselined scope continues to encompass waste characterization, D&D, size reduction, removal, waste handling, and disposition.

**30B Subproject (21-D-512-02)**

A major contributor of pit production enclosures and programmatic equipment procurement and installation to support pit production capacity of a base of 30 ppy at 50 percent confidence. The re-baselined scope continues to encompass designing, procuring, installing, testing, transitioning to operations (TTO), and hot startup of new gloveboxes and associated equipment in PF-4. To support reduced project and program risk, long-lead procurement and fabrication of enclosures and process equipment was approved on January 3, 2022, with a cost of \$72M. Additional long lead procurement and site preparation was approved on August 5, 2022, with a cost of \$43M. Advanced procurement of the long-lead equipment integrates with the approval of CD-2/3 on January 19, 2023, enabling installation to proceed immediately after the approval of the performance baseline. Installation of the long-lead procurement will proceed as the remainder of the 30B enclosures and equipment are fabricated. This tailored approach minimizes impacts to program operations and increases construction efficiencies. Additionally, temporary 80,000 sq ft of warehouse space has been provided for the pre-staging of equipment for setup, testing, and assembly, prior to final installation.

**30R Subproject (21-D-512-03)**

Pit production enclosures and programmatic equipment procurement and installation to support pit production capacity of 30 ppy reliably. The scope encompasses designing, procuring, installing, testing, transitioning to operations (TTO), and hot startup of new gloveboxes and associated equipment in PF-4 and the Sigma facility. The 30R subproject expands the capability and capacity to provide 30 war reserve ppy to the stockpile at a 90 percent confidence using a single shift. To support reduced project and program risk, long-lead procurement and fabrication of enclosures and process equipment was approved on March 29, 2023, with a cost of \$99M, and is expected to be complete in 1Q FY 2026. Advanced procurement of the long-lead equipment integrates with the anticipated approval of CD-2/3 to no sooner than September 2026, enabling installation to proceed immediately after the approval of the performance baseline. Installation of the long-lead procurement will proceed as the remainder of the 30R enclosures and equipment are fabricated. This tailored approach minimizes impacts to program operations and increases construction efficiency.

**TDC Subproject (21-D-512-04)**

The Training capability will ensure that production personnel can effectively receive approximately 700,000 required annual staff training hours for initial and annual training, including certification to fully satisfy skill and qualification requirements. The Development capability will support the enduring pit production mission by providing facilities and space for process improvement and development in a non-nuclear environment. The two nonnuclear capabilities are briefly summarized below. Design activities are underway and CD-2/3 approval followed by final design completion is anticipated in 4Q FY 2026.

- Nuclear worker training laboratories for glovebox operator and fissile material handler fundamentals training and process worker requalification training. The requalification training laboratories will have a dual purpose to also support production process and technology development activities.
- Unclassified Training areas including classrooms, computer-based training rooms, a training records management center and training staff office space.

- Classified Training areas including classrooms, conference rooms, auditorium/lecture hall, classified records management and storage, facility control system simulation area, cold machine shop, a glovebox equipment pre-installation testing area, and a classified parts vault-type room.

### **WECF Subproject (21-D-512-05)**

The Technical Area (TA)-55 WECF is required to accommodate the additional 800 workers per day entering the property protection area at TA-55 projected to implement the 30 ppy mission. This projected increase effectively doubles the workforce entrance control processing demand. The new WECF, like the existing East ECF, must be a DOE-compliant personnel screening facility which maintains integrity of the protected area at TA-55 to enable safe and secure environment for manufacturing operations and support the required 24/7 schedule. To support reduced project and program risk, long-lead procurement was approved on December 15, 2023, with a cost of \$28M. Final design is complete and CD-2/3 was approved on January 3, 2025.

### **Justification**

The NNSA's ability to produce pits in the required quantities established by the Nuclear Weapons Council (NWC) is an essential component of the nuclear deterrent. An Analysis of Alternatives (AoA) was conducted after CD-0, in accordance with the requirements of Office of Management and Budget (OMB) Circular A-11. The NNSA Administrator selected a preferred alternative on May 10, 2018, to continue pit production investments to reach the 30 ppy capability at LANL, and to repurpose facilities at the Savannah River Site (SRS) to produce 50 pits per year.

Sustained and reliable pit production at LANL additionally requires a commensurate increase in infrastructure and support facilities to accommodate the increased activity in a nuclear facility with a diversified mission portfolio. Resources necessary to operate and maintain a sustained and substantial production capacity drives a critical need for training infrastructure, which is included in this project. Increased ingress and egress of production personnel is also essential, and this project includes a new personnel access point/facility into Technical Area-55, which encloses the plutonium facilities.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. Funds appropriated under the Plutonium Modernization Program and described in this data sheet may be used for contracted support services to the FPD and to conduct independent reviews of design and construction for LAP4.

### **Key Performance Parameters (KPPs)**

The KPPs represent the minimum acceptable performance that the project must achieve. KPP were developed as part of the CD-1 approval and will be finalized for CD-2 approval. The KPPs for the subprojects with CD-2 are as follows:

### **D&D Subproject (21-D-512-01)**

| Item No. | KPP Threshold                                                                                                   | KPP Objective | Project Completion Criteria                                                                     |
|----------|-----------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------|
| KPP-1    | Complete LAP4 D&D subproject activities identified in the LAP4 D&D baseline to prepare space for follow-on LAP4 | None          | KPP completion criteria for LAP4 D&D KPP-1 will be verification of the design package closeout. |

| Item No.     | KPP Threshold                                        | KPP Objective                                                      | Project Completion Criteria                                                                                                                                                                                                                                       |
|--------------|------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | equipment installation subprojects or alternate use. |                                                                    |                                                                                                                                                                                                                                                                   |
| <b>KPP-2</b> | Complete removal of LAP4 D&D gloveboxes from PF-4.   | Complete disposition and removal of LAP4 D&D gloveboxes from LANL. | <p><u>Threshold:</u> The KPP completion criteria will be the verification that LAP4 D&amp;D gloveboxes are removed from PF-4.</p> <p><u>Objective:</u> The KPP completion criteria will be the verification of LAP4 D&amp;D gloveboxes are removed from LANL.</p> |



### 30B Subproject (21-D-512-02)

| Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | KPP Threshold                                                                                                                                                                       | KPP Objective                                                                        | Project Completion Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KPP-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Complete turnover to operations and equipment hot testing <i>(as applicable)</i> for equipment capabilities required to support the fastest path to rate production. <sup>(a)</sup> | None                                                                                 | <p>Equipment capabilities required to support the fastest path to rate production are defined in the Transition to Operation Section (Section 9) of this PEP.</p> <p>KPP completion objective evidence includes</p> <ul style="list-style-type: none"> <li>• Design package closeout</li> <li>• Operational startup preparation and assessment report <i>(as applicable<sup>(b)</sup>)</i></li> <li>• Facility Operations Director's authorization to start up hot operations</li> <li>• Equipment hot testing completion document <i>(as applicable<sup>(c)</sup>)</i>.</li> <li>• Declaration of equipment hot testing completion by responsible line manager.</li> <li>• Photo of equipment/process</li> <li>• KPP package transmittal to FPD.</li> <li>• FPD KPP verification and notice of acceptance.</li> </ul> |
| KPP-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Complete LAP4 30B equipment D&D activities identified in the LAP4 30B baseline for future equipment installation and lab integration.                                               | None                                                                                 | <p>D&amp;D of equipment to meet the fastest path to rate production is defined in the Transition to Operation Section (Section 9) of this PEP.</p> <p>KPP completion criteria for LAP4 30B KPP-2 will be verification of the closure of D&amp;D design change packages.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| KPP-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Complete disposition of removal of gloveboxes D&D by LAP4 30B subproject from PF-4.                                                                                                 | Complete disposition and removal of gloveboxes D&D by LAP4 30B subproject from LANL. | <p><b>Threshold:</b> KPP completion criteria will be the verification that gloveboxes D&amp;D by LAP4 30B subproject are removed from PF-4.</p> <p><b>Objective:</b> KPP completion criteria will be the verification of D&amp;D gloveboxes by LAP4 30B subproject are removed from LANL.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><sup>(a)</sup> Per NNSA-2024-002809, 30-Diamond (30D) Scope and Los Alamos Plutonium Pit Production Project (LAP4) Decontamination &amp; Decommissioning (D&amp;D) and 30 Base (30B) Subprojects Realignment; and subsequent update approved by NNSA</p> <p><sup>(b)</sup> Based on the LAP4 Operational Readiness Strategy for PF-4 Equipment Installation (PA-PLAN-01872) some equipment sets will only require design package closeout with no startup assessment</p> <p><sup>(c)</sup> Not all the equipment will require equipment hot testing</p> |                                                                                                                                                                                     |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## WECF Subproject (21-D-512-05)

| Item No.     | KPP Threshold                                                                                                      | KPP Objective | Project Completion Criteria                                                                                                                                                                                                                                                                                                                 |
|--------------|--------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>KPP-1</b> | Construct facility and provide infrastructure to increase pedestrian throughput capacity at TA-55 for 800 workers. | None          | KPP completion objective evidence includes: <ul style="list-style-type: none"><li>• Design package closeout</li><li>• Commissioning closure report</li><li>• Final Certificate of Occupancy</li><li>• Successful completion of evaluation of Security Systems performance and Protective Force operations by ALDDP and the ODFSA.</li></ul> |
| <b>KPP-2</b> | Provide sufficient entry control equipment for 12 access points.                                                   | None          |                                                                                                                                                                                                                                                                                                                                             |
| <b>KPP-3</b> | Provide a facility that meets DOE O 473.1A, Physical Protection Program.                                           | None          |                                                                                                                                                                                                                                                                                                                                             |

The preliminary KPPs for the subprojects that do not have CD-2 are as follows:

| Preliminary Key Performance Measures                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 30R: Complete equipment hot testing and turnover of all 30 ppy reliable equipment and structures, systems, and components in PF-4 and Sigma identified in the LAP4 PRD, Appendix B, to Weapons Production for initiation of Process Prove-in activities. |
| LAP4 Infrastructure: Training and Development Center will receive beneficial occupancy to allow operations.                                                                                                                                              |

### 3. Financial Schedule (\$K)

**Total Project (21-D-512)**

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |                  |
| <b>Design</b>                     |                                              |                    |                  |
| Prior Years                       | 422,410                                      | 422,410            | 382,179          |
| FY 2025                           | 55,794                                       | 55,794             | 36,037           |
| FY 2026                           | 10,594                                       | 10,594             | 70,538           |
| <b>Total Design</b>               | <b>488,798</b>                               | <b>488,798</b>     | <b>488,798</b>   |
| <b>Construction</b>               |                                              |                    |                  |
| Prior Years                       | 1,256,461                                    | 1,256,461          | 612,362          |
| FY 2025                           | 408,155                                      | 408,155            | 413,002          |
| FY 2026                           | 444,390                                      | 444,390            | 532,884          |
| FY 2027                           | 762,029                                      | 762,029            | 739,082          |
| FY 2028                           | 588,670                                      | 588,670            | 727,780          |
| FY 2029                           | 423,189                                      | 423,189            | 544,293          |
| FY 2030                           | 440,732                                      | 440,732            | 451,930          |
| FY 2031                           | 531,078                                      | 531,078            | 459,983          |
| Outyears                          | -                                            | -                  | 373,388          |
| <b>Total Construction</b>         | <b>4,854,704</b>                             | <b>4,854,704</b>   | <b>4,854,704</b> |
| <b>TEC</b>                        |                                              |                    |                  |
| Prior Years                       | 1,678,871                                    | 1,678,871          | 994,541          |
| FY 2025                           | 463,949                                      | 463,949            | 449,083          |
| FY 2026                           | 454,984                                      | 454,984            | 603,422          |
| FY 2027                           | 762,029                                      | 762,029            | 739,082          |
| FY 2028                           | 588,670                                      | 588,670            | 727,780          |
| FY 2029                           | 423,189                                      | 423,189            | 544,293          |
| FY 2030                           | 440,732                                      | 440,732            | 451,930          |
| FY 2031                           | 531,078                                      | 531,078            | 459,983          |
| Outyears                          | -                                            | -                  | 373,388          |
| <b>Total TEC</b>                  | <b>5,343,502</b>                             | <b>5,343,502</b>   | <b>5,343,502</b> |

|                                      | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|--------------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Other Project Costs<br/>(OPC)</b> |                                              |                    |                  |
| Prior Years                          | 210,319                                      | 210,319            | 72,859           |
| FY 2025                              | 6,095                                        | 6,095              | 7,131            |
| FY 2026                              | 2,916                                        | 2,916              | 35,059           |
| FY 2027                              | 50,071                                       | 50,071             | 53,900           |
| FY 2028                              | 99,830                                       | 99,830             | 64,500           |
| FY 2029                              | 86,766                                       | 86,766             | 68,656           |
| FY 2030                              | 79,932                                       | 79,932             | 91,868           |
| FY 2031                              | -                                            | -                  | 88,663           |
| Outyears                             | -                                            | -                  | 53,293           |
| <b>Total, OPC</b>                    | <b>535,929</b>                               | <b>535,929</b>     | <b>535,929</b>   |
| <b>Total Project Costs<br/>(TPC)</b> |                                              |                    |                  |
| Prior Years <sup>1</sup>             | 1,889,190                                    | 1,889,190          | 1,067,400        |
| FY 2025                              | 470,044                                      | 470,044            | 456,214          |
| FY 2026                              | 457,900                                      | 457,900            | 638,481          |
| FY 2027                              | 812,100                                      | 812,100            | 792,982          |
| FY 2028                              | 688,500                                      | 688,500            | 792,280          |
| FY 2029                              | 509,955                                      | 509,955            | 612,949          |
| FY 2030                              | 520,664                                      | 520,664            | 543,798          |
| FY 2031                              | 531,078                                      | 531,078            | 548,646          |
| Outyears                             | -                                            | -                  | 426,681          |
| <b>Total TPC</b>                     | <b>5,879,431</b>                             | <b>5,879,431</b>   | <b>5,879,431</b> |

<sup>1</sup> In FY 2024, \$5 million of AY 2024 funding was reprogrammed from 21-D-512 Los Alamos Pit Production Project, LANL to the Los Alamos Plutonium Operations program at LANL. The financial table reflects this reprogramming and is \$5M less than the FY2024 enacted of \$670M.

**D&D Subproject (21-D-512-01)**

|                                      | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|--------------------------------------|----------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>    |                                              |                    |                |
| <b>Design</b>                        |                                              |                    |                |
| Prior Years                          | 27,183                                       | 27,183             | 27,183         |
| <b>Total Design</b>                  | <b>27,183</b>                                | <b>27,183</b>      | <b>27,183</b>  |
| <b>Construction</b>                  |                                              |                    |                |
| Prior Years                          | 364,057                                      | 364,057            | 237,333        |
| FY 2025                              | 73,840                                       | 73,840             | 79,328         |
| FY 2026                              | 61,000                                       | 61,000             | 82,000         |
| FY 2027                              | 4,780                                        | 4,780              | 79,764         |
| FY 2028                              | -                                            | -                  | 25,252         |
| <b>Total Construction</b>            | <b>503,677</b>                               | <b>503,677</b>     | <b>503,677</b> |
| <b>TEC</b>                           |                                              |                    |                |
| Prior Years                          | 391,240                                      | 391,240            | 264,516        |
| FY 2025                              | 73,840                                       | 73,840             | 79,328         |
| FY 2026                              | 61,000                                       | 61,000             | 82,000         |
| FY 2027                              | 4,780                                        | 4,780              | 79,764         |
| FY 2028                              | -                                            | -                  | 25,252         |
| <b>Total TEC</b>                     | <b>530,860</b>                               | <b>530,860</b>     | <b>530,860</b> |
| <b>Other Project Costs<br/>(OPC)</b> |                                              |                    |                |
| Prior Years                          | 7,740                                        | 7,740              | 7,740          |
| <b>Total, OPC</b>                    | <b>7,740</b>                                 | <b>7,740</b>       | <b>7,740</b>   |
| <b>Total Project Costs<br/>(TPC)</b> |                                              |                    |                |
| Prior Years                          | 398,980                                      | 398,980            | 272,256        |
| FY 2025                              | 73,840                                       | 73,840             | 79,328         |
| FY 2026                              | 61,000                                       | 61,000             | 82,000         |
| FY 2027                              | 4,780                                        | 4,780              | 79,764         |
| FY 2028                              | -                                            | -                  | 25,252         |
| <b>Total TPC</b>                     | <b>538,600</b>                               | <b>538,600</b>     | <b>538,600</b> |

**30B Subproject (21-D-512-02)**

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |                  |
| <b>Design</b>                     |                                              |                    |                  |
| Prior Years                       | 110,992                                      | 110,992            | 110,992          |
| FY 2025                           | -                                            | -                  | -                |
| <b>Total Design</b>               | <b>110,992</b>                               | <b>110,992</b>     | <b>110,992</b>   |
| <b>Construction</b>               |                                              |                    |                  |
| Prior Years                       | 763,336                                      | 763,336            | 339,388          |
| FY 2025                           | 225,731                                      | 225,731            | 234,001          |
| FY 2026                           | 204,600                                      | 204,600            | 331,000          |
| FY 2027                           | 300,000                                      | 300,000            | 405,000          |
| FY 2028                           | 213,000                                      | 213,000            | 299,400          |
| FY 2029                           | 119,952                                      | 119,952            | 111,000          |
| FY 2030                           | -                                            | -                  | 105,930          |
| FY 2031                           | 133,100                                      | 133,100            | 134,000          |
| <b>Total Construction</b>         | <b>1,959,719</b>                             | <b>1,959,719</b>   | <b>1,959,719</b> |
| <b>TEC</b>                        |                                              |                    |                  |
| Prior Years                       | 874,328                                      | 874,328            | 450,380          |
| FY 2025                           | 225,731                                      | 225,731            | 234,045          |
| FY 2026                           | 204,600                                      | 204,600            | 330,956          |
| FY 2027                           | 300,000                                      | 300,000            | 405,000          |
| FY 2028                           | 213,000                                      | 213,000            | 299,400          |
| FY 2029                           | 119,952                                      | 119,952            | 111,000          |
| FY 2030                           | -                                            | -                  | 105,930          |
| FY 2031                           | 133,100                                      | 133,100            | 134,000          |
| <b>Total TEC</b>                  | <b>2,070,711</b>                             | <b>2,070,711</b>   | <b>2,070,711</b> |
| <b>Other Project Costs (OPC)</b>  |                                              |                    |                  |
| Prior Years                       | 165,224                                      | 165,224            | 27,764           |
| FY 2025                           | -                                            | -                  | 6,925            |
| FY 2026                           | -                                            | -                  | 33,400           |
| FY 2027                           | -                                            | -                  | 30,400           |
| FY 2028                           | -                                            | -                  | 21,900           |
| FY 2029                           | -                                            | -                  | 21,900           |
| FY 2030                           | -                                            | -                  | 21,868           |
| FY 2031                           | -                                            | -                  | 1,067            |
| <b>Total, OPC</b>                 | <b>165,224</b>                               | <b>165,224</b>     | <b>165,224</b>   |
| <b>Total Project Costs (TPC)</b>  |                                              |                    |                  |
| Prior Years                       | 1,039,552                                    | 1,039,552          | 478,144          |
| FY 2025                           | 225,731                                      | 225,731            | 240,970          |
| FY 2026                           | 204,600                                      | 204,600            | 364,356          |
| FY 2027                           | 300,000                                      | 300,000            | 435,400          |
| FY 2028                           | 213,000                                      | 213,000            | 321,300          |
| FY 2029                           | 119,952                                      | 119,952            | 132,900          |
| FY 2030                           | -                                            | -                  | 127,798          |

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| FY 2031          | 133,100          | 133,100          | 135,067          |
| <b>Total TPC</b> | <b>2,235,935</b> | <b>2,235,935</b> | <b>2,235,935</b> |

### 30R Subproject (21-D-512-03)

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |                  |
| <b>Design</b>                     |                                              |                    |                  |
| Prior Years                       | 213,400                                      | 213,400            | 206,806          |
| FY 2025                           | 22,794                                       | 22,794             | 29,388           |
| FY2026                            | 7,897                                        | 7,897              | 7,897            |
| <b>Total Design</b>               | <b>244,091</b>                               | <b>244,091</b>     | <b>244,091</b>   |
| <b>Construction</b>               |                                              |                    |                  |
| Prior Years                       | 78,520                                       | 78,520             | 28,760           |
| FY 2025                           | 48,184                                       | 48,184             | 62,178           |
| FY 2026                           | 29,990                                       | 29,990             | 65,103           |
| FY 2027                           | 285,640                                      | 285,640            | 124,977          |
| FY 2028                           | 326,826                                      | 326,826            | 307,728          |
| FY 2029                           | 303,237                                      | 303,237            | 348,973          |
| FY 2030                           | 440,732                                      | 440,732            | 300,000          |
| FY 2031                           | 397,978                                      | 397,978            | 300,000          |
| Outyears                          | -                                            | -                  | 373,388          |
| <b>Total Construction</b>         | <b>1,911,107</b>                             | <b>1,911,107</b>   | <b>1,911,107</b> |
| <b>TEC</b>                        |                                              |                    |                  |
| Prior Years                       | 291,920                                      | 291,920            | 235,566          |
| FY 2025                           | 70,978                                       | 70,978             | 91,566           |
| FY 2026                           | 37,887                                       | 37,887             | 73,000           |
| FY 2027                           | 285,640                                      | 285,640            | 124,977          |
| FY 2028                           | 326,826                                      | 326,826            | 307,728          |
| FY 2029                           | 303,237                                      | 303,237            | 348,973          |
| FY 2030                           | 440,732                                      | 440,732            | 300,000          |
| FY 2031                           | 397,978                                      | 397,978            | 300,000          |
| Outyears                          | -                                            | -                  | 373,388          |
| <b>Total TEC</b>                  | <b>2,155,198</b>                             | <b>2,155,198</b>   | <b>2,155,198</b> |
| <b>Other Project Costs (OPC)</b>  |                                              |                    |                  |
| Prior Years                       | 12,405                                       | 12,405             | 12,405           |
| FY 2025                           | 5,895                                        | 5,895              | -                |
| FY 2026                           | 257                                          | 257                | -                |
| FY 2027                           | 32,209                                       | 32,209             | 20,000           |
| FY 2028                           | 80,000                                       | 80,000             | 35,000           |
| FY 2029                           | 80,000                                       | 80,000             | 40,000           |
| FY 2030                           | 79,932                                       | 79,932             | 60,000           |
| FY 2031                           | -                                            | -                  | 70,000           |
| Outyears                          | -                                            | -                  | 53,293           |
| <b>Total, OPC</b>                 | <b>290,698</b>                               | <b>290,698</b>     | <b>290,698</b>   |
| <b>Total Project Costs (TPC)</b>  |                                              |                    |                  |
| Prior Years                       | 304,325                                      | 304,325            | 247,971          |

|                  | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|------------------|--------------------------------------|------------------|------------------|
| FY 2025          | 76,873                               | 76,873           | 91,566           |
| FY 2026          | 38,144                               | 38,144           | 73,000           |
| FY 2027          | 317,849                              | 317,849          | 144,977          |
| FY 2028          | 406,826                              | 406,826          | 342,728          |
| FY 2029          | 383,237                              | 383,237          | 388,973          |
| FY 2030          | 520,664                              | 520,664          | 360,000          |
| FY 2031          | 397,978                              | 397,978          | 370,000          |
| Outyears         | -                                    | -                | 426,681          |
| <b>Total TPC</b> | <b>2,445,896</b>                     | <b>2,445,896</b> | <b>2,445,896</b> |

**TDC Subproject (21-D-512-04)**

|                                   | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|-----------------------------------|--------------------------------------|----------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                      |                |                |
| <b>Design</b>                     |                                      |                |                |
| Prior Years                       | 48,060                               | 48,060         | 14,423         |
| FY 2025                           | 33,000                               | 33,000         | 6,649          |
| FY 2026                           | 2,697                                | 2,697          | 62,685         |
| <b>Total Design</b>               | <b>83,757</b>                        | <b>83,757</b>  | <b>83,757</b>  |
| <b>Construction</b>               |                                      |                |                |
| FY 2026                           | 104,000                              | 104,000        | -              |
| FY 2027                           | 155,139                              | 155,139        | 80,500         |
| FY 2028                           | 48,844                               | 48,844         | 80,500         |
| FY 2029                           | -                                    | -              | 75,000         |
| FY 2030                           | -                                    | -              | 46,000         |
| FY 2031                           | -                                    | -              | 25,983         |
| <b>Total Construction</b>         | <b>307,983</b>                       | <b>307,983</b> | <b>307,983</b> |
| <b>TEC</b>                        |                                      |                |                |
| Prior Years                       | 48,060                               | 48,060         | 14,423         |
| FY 2025                           | 33,000                               | 33,000         | 6,649          |
| FY 2026                           | 106,697                              | 106,697        | 62,685         |
| FY 2027                           | 155,139                              | 155,139        | 80,500         |
| FY 2028                           | 48,844                               | 48,844         | 80,500         |
| FY 2029                           | -                                    | -              | 75,000         |
| FY 2030                           | -                                    | -              | 46,000         |
| FY 2031                           | -                                    | -              | 25,983         |
| <b>Total TEC</b>                  | <b>391,740</b>                       | <b>391,740</b> | <b>391,740</b> |
| <b>Other Project Costs (OPC)</b>  |                                      |                |                |
| Prior Years                       | 17,205                               | 17,205         | 17,205         |
| FY 2025                           | -                                    | -              | -              |
| FY 2026                           | 2,459                                | 2,459          | 1,459          |
| FY 2027                           | 12,000                               | 12,000         | 2,500          |
| FY 2028                           | 19,830                               | 19,830         | 4,500          |
| FY 2029                           | 6,766                                | 6,766          | 5,000          |



|                                  |                |                |                |
|----------------------------------|----------------|----------------|----------------|
| FY 2030                          | -              | -              | 10,000         |
| FY 2031                          | -              | -              | 17,596         |
| <b>Total, OPC</b>                | <b>58,260</b>  | <b>58,260</b>  | <b>58,260</b>  |
| <b>Total Project Costs (TPC)</b> |                |                |                |
| Prior Years                      | 65,265         | 65,265         | 31,628         |
| FY 2025                          | 33,000         | 33,000         | 6,649          |
| FY 2026                          | 109,156        | 109,156        | 64,144         |
| FY 2027                          | 167,139        | 167,139        | 83,000         |
| FY 2028                          | 68,674         | 68,674         | 85,000         |
| FY 2029                          | 6,766          | 6,766          | 80,000         |
| FY 2030                          | -              | -              | 56,000         |
| FY 2031                          | -              | -              | 43,579         |
| <b>Total TPC</b>                 | <b>450,000</b> | <b>450,000</b> | <b>450,000</b> |

**WECF Subproject (21-D-512-05)**

|                                      | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|--------------------------------------|----------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>    |                                              |                    |                |
| <b>Design</b>                        |                                              |                    |                |
| Prior Years                          | 22,775                                       | 22,775             | 22,775         |
| <b>Total Design</b>                  | <b>22,775</b>                                | <b>22,775</b>      | <b>22,775</b>  |
| <b>Construction</b>                  |                                              |                    |                |
| Prior Years                          | 50,548                                       | 50,548             | 6,881          |
| FY 2025                              | 60,400                                       | 60,400             | 37,495         |
| FY 2026                              | 44,800                                       | 44,800             | 54,781         |
| FY 2027                              | 16,470                                       | 16,470             | 48,841         |
| FY 2028                              | -                                            | -                  | 14,900         |
| FY 2029                              | -                                            | -                  | 9,320          |
| <b>Total Construction</b>            | <b>172,218</b>                               | <b>172,218</b>     | <b>172,218</b> |
| <b>TEC</b>                           |                                              |                    |                |
| Prior Years                          | 73,323                                       | 73,323             | 29,656         |
| FY 2025                              | 60,400                                       | 60,400             | 36,754         |
| FY 2026                              | 44,800                                       | 44,800             | 54,781         |
| FY 2027                              | 16,470                                       | 16,470             | 48,841         |
| FY 2028                              | -                                            | -                  | 14,900         |
| FY 2029                              | -                                            | -                  | 10,061         |
| <b>Total TEC</b>                     | <b>194,993</b>                               | <b>194,993</b>     | <b>194,993</b> |
| <b>Other Project Costs<br/>(OPC)</b> |                                              |                    |                |
| Prior Years                          | 7,745                                        | 7,745              | 7,745          |
| FY 2025                              | 200                                          | 200                | 206            |
| FY 2026                              | 200                                          | 200                | 200            |
| FY 2027                              | 5,862                                        | 5,862              | 1,000          |

|                                      | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|--------------------------------------|--------------------------------------|----------------|----------------|
| FY 2028                              | -                                    | -              | 3,100          |
| FY 2029                              | -                                    | -              | 1,756          |
| <b>Total, OPC</b>                    | <b>14,007</b>                        | <b>14,007</b>  | <b>14,007</b>  |
| <b>Total Project Costs<br/>(TPC)</b> |                                      |                |                |
| Prior Years                          | 81,068                               | 81,068         | 37,401         |
| FY 2025                              | 60,600                               | 60,600         | 36,960         |
| FY 2026                              | 45,000                               | 45,000         | 54,981         |
| FY 2027                              | 22,332                               | 22,332         | 49,841         |
| FY 2028                              | -                                    | -              | 18,000         |
| FY 2029                              | -                                    | -              | 11,817         |
| <b>Total TPC</b>                     | <b>209,000</b>                       | <b>209,000</b> | <b>209,000</b> |

#### 4. Details of Project Cost Estimate (\$K)

##### Overall Project (21-D-512)

|                                               |                | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Original<br>Validated<br>Baseline |
|-----------------------------------------------|----------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>             |                |                              |                               |                                   |
| <b>Design</b>                                 |                |                              |                               |                                   |
|                                               | Design         | 416,727                      | 413,788                       | N/A                               |
|                                               | Federal Design | 13,675                       | 13,675                        | N/A                               |
|                                               | Support        | 58,396                       | 58,396                        | N/A                               |
|                                               | Contingency    | 58,396                       | 58,396                        | N/A                               |
| <b>Total Design</b>                           |                | <b>488,798</b>               | <b>485,859</b>                | <b>N/A</b>                        |
| <b>Construction</b>                           |                |                              |                               |                                   |
|                                               | Site Work      | 133,840                      | 106,632                       | N/A                               |
|                                               | Equipment      | 257,969                      | 242,491                       | N/A                               |
|                                               | Construction   | 2,967,713                    | 2,686,080                     | N/A                               |
|                                               | Federal Design | 103,358                      | 89,234                        | N/A                               |
|                                               | Support        | 1,391,824                    | 1,239,496                     | N/A                               |
|                                               | Contingency    | 1,391,824                    | 1,239,496                     | N/A                               |
| <b>Total Construction</b>                     |                | <b>4,854,704</b>             | <b>4,363,933</b>              | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)<sup>1</sup></b> |                | <b>5,343,502</b>             | <b>4,849,792</b>              | <b>N/A</b>                        |
| <b>Contingency, TEC</b>                       |                | <b>1,450,220</b>             | <b>1,297,892</b>              | <b>N/A</b>                        |
| <b>Other Project Costs (OPC)</b>              |                |                              |                               |                                   |
| OPC except D&D                                |                |                              |                               |                                   |

<sup>1</sup> The reclassification of cost from OPCs to TEC reflects the implementation of the 30D strategy BCPs for 30D strategy. These shifts can be seen in the D&D, 30B, and 30R subproject Details of Project Cost Estimates.

|                                       |                  |                  |            |
|---------------------------------------|------------------|------------------|------------|
| Conceptual Activities                 | 65,809           | 66,567           | N/A        |
| Startup                               | 331,809          | 727,726          | N/A        |
| Contingency                           | 138,311          | 221,268          | N/A        |
| <b>Total OPC</b>                      | <b>535,929</b>   | <b>1,015,561</b> | <b>N/A</b> |
| <i>Contingency, OPC</i>               | <i>138,311</i>   | <i>221,268</i>   | <i>N/A</i> |
| <b>Total Project Cost<sup>1</sup></b> | <b>5,879,431</b> | <b>5,865,353</b> | <b>N/A</b> |
| <b>Total Contingency (TEC+OPC)</b>    | <b>1,558,531</b> | <b>1,519,160</b> | <b>N/A</b> |

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<sup>1</sup> The current funding profile for LAP4 with a total project cost of \$5,879,431,000 is more than the previous overall total project cost estimate of \$5,865,353,000 but will be updated as the subprojects achieve CD-2/3.

# D&D Subproject (21-D-512-01)

|                                    |                | <b>Current<sup>1</sup><br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Original<br/>Validated<br/>Baseline</b> |
|------------------------------------|----------------|---------------------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                |                                                   |                                        |                                            |
| <b>Design</b>                      |                |                                                   |                                        |                                            |
|                                    | Design         | 27,183                                            | 22,684                                 | 22,689                                     |
|                                    | Federal Design | -                                                 | -                                      | -                                          |
|                                    | Support        | -                                                 | -                                      | -                                          |
|                                    | Contingency    | -                                                 | -                                      | -                                          |
| <b>Total Design</b>                |                | <b>27,183</b>                                     | <b>22,684</b>                          | <b>22,689</b>                              |
| <b>Construction</b>                |                |                                                   |                                        |                                            |
|                                    | Site Work      | -                                                 | -                                      | -                                          |
|                                    | Equipment      | 46,238                                            | 46,238                                 | 46,238                                     |
|                                    | Construction   | 298,159                                           | 296,164                                | 258,244                                    |
|                                    | Federal Design | 13,570                                            | 11,946                                 | 11,946                                     |
|                                    | Support        | 145,710                                           | 105,352                                | 143,267                                    |
|                                    | Contingency    | -                                                 | -                                      | -                                          |
| <b>Total Construction</b>          |                | <b>503,677</b>                                    | <b>459,700</b>                         | <b>459,695</b>                             |
| <b>Total Estimated Cost (TEC)</b>  |                | <b>530,860</b>                                    | <b>482,384</b>                         | <b>482,384</b>                             |
| <b>Contingency, TEC</b>            |                | <b>145,710</b>                                    | <b>105,352</b>                         | <b>143,267</b>                             |
| <b>Other Project Costs (OPC)</b>   |                |                                                   |                                        |                                            |
| OPC except D&D                     |                |                                                   |                                        |                                            |
|                                    | Conceptual     | 7,740                                             | 8,616                                  | 8,616                                      |
|                                    | Activities     | -                                                 | 36,000                                 | 36,000                                     |
|                                    | Startup        | -                                                 | 2,000                                  | 2,000                                      |
|                                    | Contingency    | -                                                 | -                                      | -                                          |
| <b>Total OPC</b>                   |                | <b>7,740</b>                                      | <b>46,616</b>                          | <b>46,616</b>                              |
| <b>Contingency, OPC</b>            |                | <b>-</b>                                          | <b>2,000</b>                           | <b>2,000</b>                               |
| <b>Total Project Cost</b>          |                | <b>538,600</b>                                    | <b>529,000</b>                         | <b>529,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> |                | <b>145,710</b>                                    | <b>107,352</b>                         | <b>145,267</b>                             |

<sup>1</sup> The Current Estimate reflects the implementation of 30D Strategy through the D&D BCP.

### 30B Subproject (21-D-512-02)

|                                    |                | <b>Current<sup>1</sup><br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Original<br/>Validated<br/>Baseline</b> |
|------------------------------------|----------------|---------------------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                |                                                   |                                        |                                            |
| <b>Design</b>                      |                |                                                   |                                        |                                            |
|                                    | Design         | 110,992                                           | 120,449                                | 204,894                                    |
|                                    | Federal Design | -                                                 | -                                      | -                                          |
|                                    | Support        | -                                                 | -                                      | -                                          |
|                                    | Contingency    | -                                                 | -                                      | -                                          |
| <b>Total Design</b>                |                | <b>110,992</b>                                    | <b>120,449</b>                         | <b>204,894</b>                             |
| <b>Construction</b>                |                |                                                   |                                        |                                            |
|                                    | Site Work      | 86,075                                            | 58,867                                 | 41,552                                     |
|                                    | Equipment      | 66,961                                            | 51,483                                 | 38,166                                     |
|                                    | Construction   | 1,090,346                                         | 746,114                                | 729,249                                    |
|                                    | Federal Design | 52,500                                            | 40,000                                 | 40,000                                     |
|                                    | Support        | -                                                 | -                                      | -                                          |
|                                    | Contingency    | 663,837                                           | 501,233                                | 419,193                                    |
| <b>Total Construction</b>          |                | <b>1,959,719</b>                                  | <b>1,397,697</b>                       | <b>1,268,160</b>                           |
| <b>Total Estimated Cost (TEC)</b>  |                | <b>2,070,711</b>                                  | <b>1,518,146</b>                       | <b>1,473,054</b>                           |
| <b>Contingency, TEC</b>            |                | <b>663,837</b>                                    | <b>501,233</b>                         | <b>419,193</b>                             |
| <b>Other Project Costs (OPC)</b>   |                |                                                   |                                        |                                            |
| OPC except D&D                     |                |                                                   |                                        |                                            |
|                                    | Conceptual     | 27,714                                            | 27,596                                 | 27,596                                     |
|                                    | Activities     | -                                                 | -                                      | -                                          |
|                                    | Startup        | 137,510                                           | 297,427                                | 363,476                                    |
|                                    | Contingency    | -                                                 | 20,957                                 | -                                          |
| <b>Total OPC</b>                   |                | <b>165,224</b>                                    | <b>345,980</b>                         | <b>391,072</b>                             |
| <b>Contingency, OPC</b>            |                | <b>-</b>                                          | <b>20,957</b>                          | <b>-</b>                                   |
| <b>Total Project Cost</b>          |                | <b>2,235,935</b>                                  | <b>1,864,126</b>                       | <b>1,864,126</b>                           |
| <b>Total Contingency (TEC+OPC)</b> |                | <b>663,837</b>                                    | <b>522,190</b>                         | <b>419,193</b>                             |

<sup>1</sup> The Current Estimate reflects the implementation of 30D Strategy through the 30B BCP.

30R Subproject (21-D-512-03)

|                                    |                        | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Original<br>Validated<br>Baseline |
|------------------------------------|------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                        |                              |                               |                                   |
| <b>Design</b>                      |                        |                              |                               |                                   |
|                                    | Design                 | 191,745                      | 183,848                       | N/A                               |
|                                    | Federal Design Support | 9,490                        | 9,490                         | N/A                               |
|                                    | Contingency            | 42,856                       | 42,856                        | N/A                               |
| <b>Total Design</b>                |                        | <b>244,091</b>               | <b>236,194</b>                | <b>N/A</b>                        |
| <b>Construction</b>                |                        |                              |                               |                                   |
|                                    | Site Work              | -                            | -                             | N/A                               |
|                                    | Equipment              | 98,414                       | 98,414                        | N/A                               |
|                                    | Construction           | 1,329,370                    | 1,314,767                     | N/A                               |
|                                    | Federal Design Support | 22,458                       | 22,458                        | N/A                               |
|                                    | Contingency            | 460,865                      | 509,287                       | N/A                               |
| <b>Total Construction</b>          |                        | <b>1,911,107</b>             | <b>2,026,335</b>              | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                        | <b>2,155,198</b>             | <b>2,262,529</b>              | <b>N/A</b>                        |
| <b>Contingency, TEC</b>            |                        | <b>503,721</b>               | <b>552,143</b>                | <b>N/A</b>                        |
| <b>Other Project Costs (OPC)</b>   |                        |                              |                               |                                   |
| OPC except D&D                     |                        |                              |                               |                                   |
|                                    | Conceptual Activities  | 10,755                       | 10,755                        | N/A                               |
|                                    | Startup                | 152,972                      | 352,972                       | N/A                               |
|                                    | Contingency            | 126,971                      | 186,971                       | N/A                               |
| <b>Total OPC</b>                   |                        | <b>290,698</b>               | <b>550,698</b>                | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                        | <i>126,971</i>               | <i>186,971</i>                | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                        | <b>2,445,896</b>             | <b>2,813,227</b>              | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                        | <b>630,692</b>               | <b>739,114</b>                | <b>N/A</b>                        |

TDC Subproject (21-D-512-04)

|                                    |                        | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Original<br>Validated<br>Baseline |
|------------------------------------|------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                        |                              |                               |                                   |
| <b>Design</b>                      |                        |                              |                               |                                   |
|                                    | Design                 | 64,332                       | 64,332                        | N/A                               |
|                                    | Federal Design Support | 3,885                        | 3,885                         | N/A                               |
|                                    | Contingency            | 15,540                       | 15,540                        | N/A                               |
| <b>Total Design</b>                |                        | <b>83,757</b>                | <b>83,757</b>                 | <b>N/A</b>                        |
| <b>Construction</b>                |                        |                              |                               |                                   |
|                                    | Site Work              | 30,600                       | 30,600                        | N/A                               |
|                                    | Equipment              | 40,000                       | 40,000                        | N/A                               |
|                                    | Construction           | 143,642                      | 143,642                       | N/A                               |
|                                    | Federal Design Support | 6,475                        | 6,475                         | N/A                               |
|                                    | Contingency            | 87,266                       | 87,266                        | N/A                               |
| <b>Total Construction</b>          |                        | <b>307,983</b>               | <b>307,983</b>                | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                        | <b>391,740</b>               | <b>391,740</b>                | <b>N/A</b>                        |
| <b>Contingency, TEC</b>            |                        | <b>102,806</b>               | <b>102,806</b>                | <b>N/A</b>                        |
| <b>Other Project Costs (OPC)</b>   |                        |                              |                               |                                   |
| OPC except D&D                     |                        |                              |                               |                                   |
|                                    | Conceptual Activities  | 17,760                       | 17,760                        | N/A                               |
|                                    | Startup                | 30,500                       | 30,500                        | N/A                               |
|                                    | Contingency            | 10,000                       | 10,000                        | N/A                               |
| <b>Total OPC</b>                   |                        | <b>58,260</b>                | <b>58,260</b>                 | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                        | <i>10,000</i>                | <i>10,000</i>                 | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                        | <b>450,000</b>               | <b>450,000</b>                | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                        | <b>112,806</b>               | <b>112,806</b>                | <b>N/A</b>                        |

WECF Subproject (21-D-512-05)

|                                    |                | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Original<br/>Validated<br/>Baseline</b> |
|------------------------------------|----------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                |                                       |                                        |                                            |
| <b>Design</b>                      |                |                                       |                                        |                                            |
|                                    | Design         | 22,475                                | 22,475                                 | 22,475                                     |
|                                    | Federal Design |                                       |                                        |                                            |
|                                    | Support        | 300                                   | 300                                    | 300                                        |
|                                    | Contingency    | -                                     | -                                      | -                                          |
| <b>Total Design</b>                |                | <b>22,775</b>                         | <b>22,775</b>                          | <b>22,775</b>                              |
| <b>Construction</b>                |                |                                       |                                        |                                            |
|                                    | Site Work      | 17,165                                | 17,165                                 | 17,165                                     |
|                                    | Equipment      | 6,356                                 | 6,356                                  | 6,356                                      |
|                                    | Construction   | 106,196                               | 103,984                                | 103,984                                    |
|                                    | Federal Design |                                       |                                        |                                            |
|                                    | Support        | 8,355                                 | 8,355                                  | 8,355                                      |
|                                    | Contingency    | 34,146                                | 36,358                                 | 36,358                                     |
| <b>Total Construction</b>          |                | <b>172,218</b>                        | <b>172,218</b>                         | <b>172,218</b>                             |
| <b>Total Estimated Cost (TEC)</b>  |                | <b>194,993</b>                        | <b>194,993</b>                         | <b>194,993</b>                             |
| <b>Contingency, TEC</b>            |                | <b>34,146</b>                         | <b>346,358</b>                         | <b>36,358</b>                              |
| <b>Other Project Costs (OPC)</b>   |                |                                       |                                        |                                            |
| OPC except D&D                     |                |                                       |                                        |                                            |
|                                    | Conceptual     |                                       |                                        |                                            |
|                                    | Activities     | 1,840                                 | 1,840                                  | 1,840                                      |
|                                    | Startup        | 10,827                                | 10,827                                 | 10,827                                     |
|                                    | Contingency    | 1,340                                 | 1,340                                  | 1,340                                      |
| <b>Total OPC</b>                   |                | <b>14,007</b>                         | <b>14,007</b>                          | <b>14,007</b>                              |
| <b>Contingency, OPC</b>            |                | <b>1,340</b>                          | <b>1,340</b>                           | <b>1,340</b>                               |
| <b>Total Project Cost</b>          |                | <b>209,000</b>                        | <b>209,000</b>                         | <b>209,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> |                | <b>35,486</b>                         | <b>37,698</b>                          | <b>37,698</b>                              |



## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years            | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total     |
|--------------|------|------------------------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|
| FY 2020      | TEC  | N/A                    | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A       |
|              | OPC  | N/A                    | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A       |
|              | TPC  | 26,156                 | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 26,156    |
| FY 2021      | TEC  | N/A                    | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | -         |
|              | OPC  | N/A                    | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | -         |
|              | TPC  | 1,552,156              | 200,000 | 200,000 | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 1,952,156 |
| FY 2022      | TEC  | 506,000                | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | 2,985,000 | 3,491,000 |
|              | OPC  | 100,000                | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | 274,000   | 374,000   |
|              | TPC  | 606,000                | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | 3,259,000 | 3,865,000 |
| FY 2023      | TEC  | 1,735,234              | 593,160 | 563,515 | 305,000 | 12,300  | -       | -       | -       | -         | 3,209,209 |
|              | OPC  | 159,000                | 66,840  | 61,485  | 60,000  | 42,000  | -       | -       | -       | -         | 389,325   |
|              | TPC  | 1,894,234              | 660,000 | 625,000 | 365,000 | 54,300  | -       | -       | -       | -         | 3,598,534 |
| FY 2024      | TEC  | 1,628,318              | 591,271 | 521,120 | 665,139 | 674,933 | -       | -       | -       | -         | 4,080,781 |
|              | OPC  | 265,916                | 88,870  | 188,880 | 50,361  | 55,067  | -       | -       | -       | -         | 649,094   |
|              | TPC  | 1,894,234              | 680,141 | 710,000 | 715,500 | 730,000 | -       | -       | -       | -         | 4,729,875 |
| FY 2025      | TEC  | 1,628,318              | 381,130 | 626,212 | 850,139 | 853,307 | 503,189 | -       | -       | -         | 4,842,295 |
|              | OPC  | 265,916                | 88,870  | 143,788 | 50,361  | 51,693  | 6,766   | -       | -       | -         | 607,394   |
|              | TPC  | 1,894,234              | 470,000 | 770,000 | 900,500 | 905,000 | 509,955 | -       | -       | -         | 5,449,689 |
| FY 2026      | TEC  | 1,615,318              | 406,875 | 568,079 | N/A     | N/A     | N/A     | N/A     | N/A     | 2,259,520 | 4,849,792 |
|              | OPC  | 273,916                | 63,125  | 101,921 | N/A     | N/A     | N/A     | N/A     | N/A     | 576,599   | 438,962   |
|              | TPC  | 1,889,234              | 470,000 | 670,000 | N/A     | N/A     | N/A     | N/A     | N/A     | 2,836,119 | 5,865,353 |
| FY 2027      | TEC  | 1,678,871              | 463,949 | 454,984 | 762,029 | 588,670 | 423,189 | 440,732 | 531,078 | -         | 5,343,502 |
|              | OPC  | 210,319                | 6,095   | 2,916   | 50,071  | 99,830  | 86,766  | 79,932  | -       | -         | 535,929   |
|              | TPC  | 1,889,190 <sup>1</sup> | 470,044 | 457,900 | 812,100 | 688,500 | 509,955 | 520,664 | 531,078 | -         | 5,879,431 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 4Q FY 2032 |
| Expected Useful Life (number of years)                              | 50         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 4Q FY 2082 |

Related Funding Requirements  
2021 Base Year<sup>2</sup>  
(Budget Authority in millions)

<sup>1</sup> In FY 2024, \$5 million of AY 2024 funding was reprogrammed from 21-D-512 Los Alamos Pit Production Project, LANL to the Los Alamos Plutonium Operations program at LANL. The financial table reflects this reprogramming and is \$5M less than the FY 2024 enacted of \$670M.

<sup>2</sup> Life cycle costs associated with this project were developed as part of CD-1 and estimate updates to the operation and maintenance costs will be made as fabrication and installation progress occurs and market conditions adjust over time. Neither the Plutonium Pit Production Analysis of Alternatives (AoA) nor Plutonium Pit Production Engineering Assessment (EA) evaluated life cycle costs of reaching 30 ppy at LANL separately from reaching the full 80 ppy production rate for various LANL options.

|                            | Annual Costs            |                        | Life Cycle Costs        |                        |
|----------------------------|-------------------------|------------------------|-------------------------|------------------------|
|                            | Previous Total Estimate | Current Total Estimate | Previous Total Estimate | Current Total Estimate |
| Operations and Maintenance | 88                      | 88                     | 9,800                   | 9,800                  |

## 7. D&D Information

The scope parameters established at CD-1 established the necessary site infrastructure improvements (WECF, TDC, temporary warehouse, material staging and laydown area, etc.) to support establishing a 30 ppy mission and to enable increased construction capacity, risk mitigation, and project efficiency.

These activities will include an increase in site square footage and the D&D of equipment within existing facilities. The D&D of existing facilities are not funded on this project. Some removal of contaminated equipment in PF-4 for space reuse will occur using project funds.

| Gross Square Footage Created/Eliminated                                                                                           | WECF Square Feet | TDC Square Feet | Temporary Warehouse Square Feet |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------------------------|
| New area to be constructed by this project at Los Alamos National Laboratory                                                      | 23,802           | 130,000         | 80,000                          |
| Area of D&D in this project at Los Alamos National Laboratory                                                                     | -                | -               | -                               |
| Area at Los Alamos National Laboratory to be transferred, sold, and/or D&D outside the project including area previously “banked” | 23,802           | 130,000         | 80,000                          |
| Area of D&D in this project at other sites                                                                                        | -                | -               | -                               |
| Area at other sites to be transferred, sold, and/or D&D outside the project including area previously “banked”                    | -                | -               | -                               |
| Total area eliminated                                                                                                             | -                | -               | -                               |

## 8. Acquisition Approach

Expansion of pit production capacity at LANL will be accomplished with the installation of systems of gloveboxes and equipment. Equipment installation to provide the capability to produce ten ppy will be accomplished using program funding in the Plutonium Modernization Program. NNSA led glovebox efforts such as the Matrixed Execution Team (MET) and Interface meetings continue to drive the prioritization, integration, and coordination of critical glovebox fabrications across the complex and within the supply chain. The installation of equipment to produce more than ten ppy will be accomplished through this project. The LANL management and operating (M&O) contractor will execute design, and construction will be implemented with cleared and accomplished by the LANL craft resources. Subcontract installation of equipment is not feasible within PF-4, due to concurrent operational activities and the requisite security and safety restraints. The performance baselines for each subproject will be established upon completion of 90 percent design maturity, to allow development of credible cost estimates in accordance with DOE O 413.3B and NNSA policy. For infrastructure, non-nuclear design and construction will be executed via M&O-issued design-bid-build and design-build construction contracts. The performance baselines for each subproject will be established using a graded approach for design maturities appropriate for the various facility types, and to allow development of credible cost estimates in accordance with DOE O 413.3B and NNSA policy.

**04-D-125, Chemistry and Metallurgy Research Replacement (CMRR) Project,  
Los Alamos National Laboratory (LANL), Los Alamos, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 Request for the Chemistry and Metallurgy Research Replacement (CMRR) Project is \$110,000,000 supporting subprojects for equipment installation in the Plutonium Facility 4 (PF-4), and associated infrastructure for related operations at PF-4.

The CMRR Project provides continuity in analytical chemistry (AC) and materials characterization (MC) capabilities through the relocation of programmatic operations from the existing Chemistry and Metallurgy Research (CMR) facility and provides infrastructure and support facilities for consolidated operations at the Technical Area-55 (TA-55) site. With the baselining of the final subproject, PF-4 Equipment Installation Phase 2 (PEI2), the overall total project cost estimate (TEC) is \$2,886,230,000 at a 75 percent confidence level with a projected CD-4 date of 3Q FY 2034 at an 85 percent confidence level.

**Significant Changes:**

The FY 2027 Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year.

FY 2027 funding will be used to support continued construction to replace existing equipment, install gloveboxes and equipment, increase capacity for change rooms leading into PF-4, upgrades in capacity for vehicular entrances/exits to and from TA-55, and upgrades to existing PF-4 ingress/egress security posts for essential capacity increases related to CMRR missions.

The current CMRR subprojects are listed below, and further completion details are described in Section 2 of this document.

**RLUOB Subproject (04-D-125-01):** *COMPLETE* - CD-4 approved on June 24, 2010.

**RLUOB Equipment Installation Phase 1 (REI1) Subproject (04-D-125-02):** *COMPLETE* - CD-4 approved on June 20, 2013.

**Nuclear Facility (NF) Subproject (04-D-125-03):** *CANCELLED* - This subproject was cancelled.

**RLUOB Equipment Installation Phase 2 (REI2) Subproject (04-D-125-04):** *COMPLETE* – CD-4 approved on December 20, 2021.

**PEI1 Subproject (04-D-125-05):** *COMPLETE* – CD-4 approved on January 8, 2021.

**PEI2 Subproject (04-D-125-06):** Maximizes use of PF-4 by consolidating and relocating existing capabilities, replacing existing equipment, installing gloveboxes and equipment, and development of infrastructure supporting AC/MC mission relocation to TA-55. PEI2 will establish enduring AC and MC capabilities for supporting National Nuclear Security Administration (NNSA) actinide-based missions. PEI2 also improves TA-55 and PF-4 personnel and vehicular ingress/egress, levels of worker preparation/staging and warehousing for relocated AC/MC operations and personnel. See Section 2 of this datasheet for additional detail on *Project Scope and Justification*. Underruns from PEI1 and REI2 and funding from RC3 were utilized to fund remaining

performance baselines. PEI2 was paused in 2017 and restarted in March 2022. CD-3B, Change Room Expansion and Post 118 expansion, was approved in February 2021 at \$89,000,000. CD-3C, Long-Lead Equipment Procurement, was approved in December 2022 at \$53,900,000. CD-2/3 was approved for PEI2 at a Total Project Cost (TPC) of \$1,185,816,000 and CD-4 date of June 2034.

**RC3 Subproject (04-D-125-07): COMPLETE** – The scope maximized the use of RLUOB by converting the facility to a Hazard Category 3 Nuclear Facility from the original radiological categorization. The facility was originally limited to 8.9 grams and now limited to 400 grams of Plutonium. RC3 remaining scope was removed based on the November 2024 CD-IRR and this subproject is now considered complete.

A Level 4 Federal Project Director (FPD) has been appointed to this project and has approved this data sheet.

### Critical Milestone History<sup>1</sup>

| Fiscal Quarter or Date |           |                            |           |            |                       |            |                  |          |
|------------------------|-----------|----------------------------|-----------|------------|-----------------------|------------|------------------|----------|
| Fiscal Year            | CD-0      | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | D&D Complete     | CD-4     |
| FY 2004                | 7/16/2002 | N/A                        | 1QFY2004  |            | N/A                   | 2QFY2004   | N/A              | 1QFY2011 |
| FY 2005                | 7/16/2002 | N/A                        | 3QFY2004  |            | N/A                   | 3QFY2005   | N/A              | 3QFY2012 |
| FY 2006                | 7/16/2002 | N/A                        | 2QFY2005  | 4QFY2005   | N/A                   | 1QFY2006   | N/A              | 4QFY2010 |
| FY 2007                | 7/16/2002 | N/A                        | 9/30/2005 | 1QFY2006   | N/A                   | 1QFY2006   | N/A              | 1QFY2013 |
| FY 2008                | 7/16/2002 | N/A                        | 9/30/2005 | 10/21/2005 | N/A                   | 1QFY2006   | N/A              | 1QFY2013 |
| FY 2009                | 7/16/2002 | N/A                        | 9/30/2005 | TBD        | N/A                   | TBD        | N/A              | TBD      |
| FY 2010                | 7/16/2002 | N/A                        | 9/30/2005 | TBD        | N/A                   | TBD        | N/A              | TBD      |
| FY 2011                | 7/16/2002 | N/A                        | 5/18/2005 | TBD        | N/A                   | TBD        | N/A              | TBD      |
| FY 2012                | 7/16/2002 | N/A                        | 5/18/2005 | 4QFY2012   | N/A                   | 4QFY2012   | N/A              | TBD      |
| FY 2012 Rep            | 7/16/2002 | N/A                        | 5/18/2005 | TBD        | TBD                   | TBD        | N/A              | TBD      |
| FY 2016                | 7/16/2002 | N/A                        | 4QFY2014  | 3QFY2016   | 2QFY2016              | 3QFY2016   | 4QFY2019         | 4QFY2024 |
| FY 2017                | 7/16/2002 | N/A                        | 8/21/2014 | 3QFY2016   | 2QFY2016              | 3QFY2016   | 4QFY2019         | 4QFY2024 |
| FY 2018                | 7/16/2002 | N/A                        | 8/21/2014 | 2QFY2022   | 3QFY2021              | 2QFY2022   | 4QFY2026         | 4QFY2026 |
| FY 2019                | 7/16/2002 | N/A                        | 8/21/2014 | 4QFY2022   | 4QFY2022              | 4QFY2022   | 4Q FY 2026       | 4QFY2026 |
| FY 2020                | 7/16/2002 | N/A                        | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | N/A              | 3QFY2022 |
| FY 2021                | 7/16/2002 | N/A                        | 8/21/2014 | 1QFY2023   | 2QFY2023              | 2QFY2023   | 4QFY2025         | 4QFY2029 |
| FY 2022                | 7/16/2002 | N/A                        | 8/21/2014 | 4QFY2023   | 4QFY2023              | 4QFY2023   | 3QFY2028         | 4QFY2029 |
| FY 2023                | 7/16/2002 | N/A                        | 8/21/2014 | 3QFY2024   | 2QFY2024              | 3QFY2024   | 4QFY2029         | 4QFY2029 |
| FY 2024                | 7/16/2002 | N/A                        | 8/21/2014 | 3QFY2024   | 2QFY2024              | 3QFY2024   | 4QFY2029         | 4QFY2029 |
| FY 2026                | 7/16/2002 | N/A                        | 11/6/2024 | 11/6/2024  | 11/6/2024             | 11/6/2024  | N/A              | 3QFY2034 |
| FY 2027                | 7/16/2002 | N/A                        | 11/6/2024 | 11/6/2024  | 11/6/2024             | 11/6/2024  | N/A <sup>2</sup> | 3QFY2034 |

<sup>1</sup> Critical milestone history reflects no milestones in FY2013, FY2014, FY2015, and FY2025 since no budget requests were submitted in these years.

<sup>2</sup> The D&D scope associated with the PEI2 subproject was de-scoped as part of the CD-IRR and CD-2/3 approval process.

**RLUOB Subproject (04-D-125-01)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4                   |
|-------------|-----------|----------------------------|-----------|------------|-----------------------|------------|--------------|------------------------|
| FY 2011     | 7/16/2002 | N/A                        | 5/18/2005 | 10/21/2005 | N/A                   | 10/21/2005 | N/A          | 2/28/2010              |
| FY 2012     | 7/16/2002 | N/A                        | 5/18/2005 | 10/21/2005 | N/A                   | 10/21/2005 | N/A          | 6/24/2010              |
| FY 2012 Rep | 7/16/2002 | N/A                        | 5/18/2005 | 10/21/2005 | N/A                   | 10/21/2005 | N/A          | 6/24/2010 <sup>1</sup> |

**REI1 Subproject (04-D-125-02)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2      | Final Design Complete | CD-3      | D&D Complete | CD-4                   |
|-------------|-----------|----------------------------|-----------|-----------|-----------------------|-----------|--------------|------------------------|
| FY 2011     | 7/16/2002 | N/A                        | 5/18/2005 | 7/17/2009 | N/A                   | 7/17/2009 | N/A          | 4/30/2013              |
| FY 2012     | 7/16/2002 | N/A                        | 5/18/2005 | 7/17/2009 | N/A                   | 7/17/2009 | N/A          | 4/30/2013              |
| FY 2012 Rep | 7/16/2002 | N/A                        | 5/18/2005 | 7/17/2009 | N/A                   | 7/17/2009 | N/A          | 6/20/2013 <sup>2</sup> |

**Nuclear Facility (NF) Subproject (04-D-125-03)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2      | Final Design Complete | CD-3      | D&D Complete | CD-4                   |
|-------------|-----------|----------------------------|-----------|-----------|-----------------------|-----------|--------------|------------------------|
| FY 2011     | 7/16/2002 | N/A                        | 5/18/2005 | TBD       | N/A                   | TBD       | N/A          | TBD                    |
| FY 2012     | 7/16/2002 | N/A                        | 5/18/2005 | 4QFY2012  | N/A                   | 4QFY2012  | N/A          | TBD                    |
| FY 2012 Rep | 7/16/2002 | N/A                        | 5/18/2005 | TBD       | TBD                   | TBD       | N/A          | TBD                    |
| FY 2016     | 7/16/2002 | N/A                        | 5/18/2005 | Cancelled | Cancelled             | Cancelled | N/A          | Cancelled <sup>2</sup> |

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<sup>1</sup> This subproject is complete, and the project history has not changed.

<sup>2</sup> This subproject remains canceled, and the project history has not changed.

**REI2 Subproject (04-D-125-04)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4                    |
|-------------|-----------|----------------------------|-----------|------------|-----------------------|------------|--------------|-------------------------|
| FY 2016     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2016   | 2QFY2016              | 3QFY2016   | N/A          | 1QFY2020                |
| FY 2017     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2016   | 2QFY2016              | 3QFY2016   | N/A          | 1Q FY2020               |
| FY 2018 PB  | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 2QFY2022                |
| FY 2019     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 2QFY2022                |
| FY 2020     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 2QFY2022                |
| FY 2021     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 2QFY2022                |
| FY 2022     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 2QFY2022                |
| FY 2023     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 4/6/2016              | 10/31/2016 | N/A          | 12/20/2021 <sup>1</sup> |

Fiscal Quarter or Date

| Fiscal Year | CD-3A      | CD-3B      |
|-------------|------------|------------|
| FY 2016     | 12/18/2014 | 2QFY2015   |
| FY 2017     | 12/18/2014 | 12/22/2015 |
| FY 2018     | 12/18/2014 | 12/22/2015 |
| FY 2019     | 12/18/2014 | 12/22/2015 |
| FY 2020     | 12/18/2014 | 12/22/2015 |
| FY 2021     | 12/18/2014 | 12/22/2015 |
| FY 2022     | 12/18/2014 | 12/22/2015 |
| FY 2023     | 12/18/2014 | 12/22/2015 |

**CD-3A** – Approve Long-Lead Procurements**CD-3B** – Approve Long-Lead Procurements**PEI1 Subproject (04-D-125-05)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4                  |
|-------------|-----------|----------------------------|-----------|------------|-----------------------|------------|--------------|-----------------------|
| FY 2016     | 7/16/2002 | 4QFY2015                   | 4QFY2014  | 3QFY2016   | 2QFY2016              | 3QFY2016   | 4QFY2019     | 1QFY2024              |
| FY 2017     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2016   | 2QFY2016              | 3QFY2016   | 4QFY2019     | 1QFY2020              |
| FY 2018 PB  | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | 4QFY2019     | 3QFY2022              |
| FY 2019     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | 4QFY2019     | 3QFY2022              |
| FY 2020     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | 4QFY2019     | 3QFY2022              |
| FY 2021     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | 4QFY2019     | 3QFY2022              |
| FY 2022     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 10/31/2016 | 12/1/2016             | 10/31/2016 | 11/12/2019   | 1/8/2021 <sup>2</sup> |

<sup>1</sup> This subproject is complete, and the project history has not changed.<sup>2</sup> This subproject is complete, and the project history has not changed.

Fiscal Quarter or Date

| Fiscal Year | CD-3A     | CD-3B      |
|-------------|-----------|------------|
| FY 2016     | 3/18/2015 | 12/22/2015 |
| FY 2017     | 3/18/2015 | 12/22/2015 |
| FY 2018     | 3/18/2015 | 12/22/2015 |
| FY 2019     | 3/18/2015 | 12/22/2015 |
| FY 2020     | 3/18/2015 | 12/22/2015 |
| FY 2021     | 3/18/2015 | 12/22/2015 |
| FY 2022     | 3/18/2015 | 12/22/2015 |

**CD-3A** – Approve Long-Lead Procurements

**CD-3B** – Approve Long-Lead Procurements

**PEI2 Subproject (04-D-125-06)**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2      | Final Design Complete | CD-3      | D&D Complete     | CD-4     |
|-------------|-----------|----------------------------|-----------|-----------|-----------------------|-----------|------------------|----------|
| FY 2016     | 7/16/2002 | 8/21/2014                  | 4QFY2014  | 3QFY2016  | 2QFY2016              | 3QFY2016  | 4QFY2019         | 1QFY2024 |
| FY 2021     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 2QFY2023  | 2QFY2023              | 2QFY2023  | 4QFY2025         | 4QFY2028 |
| FY 2022     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2023  | 3QFY2023              | 3QFY2023  | 3QFY2028         | 4QFY2029 |
| FY 2023     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2023  | 2QFY2023              | 3QFY2023  | 4QFY2029         | 4QFY2029 |
| FY 2024     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2023  | 2QFY2023              | 3QFY2023  | 4QFY2029         | 4QFY2029 |
| FY 2026     | 7/16/2002 | 8/21/2014                  | 11/6/2024 | 11/6/2024 | 11/6/2024             | 11/6/2024 | N/A              | 3QFY2034 |
| FY 2027     | 7/16/2002 | 8/21/2014                  | 11/6/2024 | 11/6/2024 | 11/6/2024             | 11/6/2024 | N/A <sup>1</sup> | 3QFY2034 |

Fiscal Quarter or Date

| Fiscal Year | CD-3A     | CD-3B    | CD-3C      |
|-------------|-----------|----------|------------|
| FY 2016     | 3/18/2015 | N/A      | N/A        |
| FY 2017     | 3/18/2015 | N/A      | N/A        |
| FY 2018     | 3/18/2015 | N/A      | N/A        |
| FY 2019     | 3/18/2015 | N/A      | N/A        |
| FY 2020     | 3/18/2015 | N/A      | N/A        |
| FY 2021     | 3/18/2015 | 2QFY2022 | N/A        |
| FY 2022     | 3/18/2015 | 2/3/2021 | N/A        |
| FY 2023     | 3/18/2015 | 2/9/2021 | N/A        |
| FY 2024     | 3/18/2015 | 2/9/2021 | 12/28/2022 |

**CD-3A** – D&D of Room 200 Area

**CD-3B** – Infrastructure scope/early site security/access

**CD-3C** – Approve Long-Lead Procurements

<sup>1</sup> The D&D scope associated with the PEI2 subproject was de-scoped as part of the CD-1RR and CD-2/3 approval process.

**RC3 (04-D-125-07)<sup>1</sup>**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2     | Final Design Complete | CD-3     | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|-----------|----------|-----------------------|----------|--------------|----------|
| FY 2016     | 7/16/2002 | 8/21/2014                  | 4QFY2014  | 3QFY2018 | 2QFY2017              | 4QFY2017 | N/A          | 1QFY2024 |
| FY 2021     | 7/16/2002 | 8/21/2014                  | 4QFY2014  | 2QFY2023 | 2QFY2023              | 2QFY2023 | N/A          | 4QFY2028 |
| FY 2022     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 4QFY2023 | 4QFY2023              | 1QFY2024 | N/A          | 4QFY2028 |
| FY 2023     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2024 | 2QFY2024              | 3QFY2024 | N/A          | 4QFY2028 |
| FY 2024     | 7/16/2002 | 8/21/2014                  | 8/21/2014 | 3QFY2024 | 2QFY2024              | 3QFY2024 | N/A          | 4QFY2028 |
| FY 2026     | 7/16/2002 | 8/21/2014                  | 11/6/2024 | N/A      | N/A                   | N/A      | N/A          | N/A      |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)**CD-1** – Approve Alternative Selection and Cost Range**CD-2** – Approve Performance Baseline**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)**CD-3** – Approve Start of Construction**D&D Complete** – Completion of D&D work**CD-4** – Approve Start of Operations or Project Closeout

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<sup>1</sup> RC3 has been deemed completed based on November 6, 2024 CD-1RR. The completed scope maximized the use of RLUOB by converting the facility to a Hazard Category 3 Nuclear Facility from the original radiological categorization. The facility was originally limited to 8.9 grams and is now limited to 400 grams of plutonium. RC3 originally included construction scope, which was removed with CD-1RR November 6, 2024; therefore, there are no CD-2/3/4 dates associated with this subproject.



## Project Cost History<sup>1</sup> (\$K)

| Fiscal Year          | TEC, Design<br>03-D-103 | TEC, Design/Construction<br>04-D-125 | TEC, Total | OPC, Except D&D      | OPC, D&D | OPC, Total | TPC                    |
|----------------------|-------------------------|--------------------------------------|------------|----------------------|----------|------------|------------------------|
| FY 2004              | N/A                     | N/A                                  | 500,000    | 100,000              | N/A      | N/A        | 600,000                |
| FY 2005              | N/A                     | N/A                                  | 500,000    | 100,000              | N/A      | N/A        | 600,000                |
| FY 2006              | N/A                     | N/A                                  | 750,000    | 100,000              | N/A      | N/A        | 850,000                |
| FY 2007              | N/A                     | N/A                                  | 738,097    | 100,000              | N/A      | N/A        | 838,097                |
| FY 2008              | 65,939                  | 672,158                              | 738,097    | 100,000              | N/A      | N/A        | 838,098                |
| FY 2009              | TBD                     | TBD                                  | TBD        | TBD                  | N/A      | TBD        | TBD                    |
| FY 2010              | 65,138                  | TBD                                  | TBD        | TBD                  | N/A      | TBD        | TBD                    |
| FY 2016              | 63,646                  | 2,295,936                            | 2,359,582  | 463,721              | 54,000   | 517,721    | 2,877,303              |
| FY 2017              | 63,646                  | 2,243,436                            | 2,307,082  | 516,221              | 54,000   | 570,221    | 2,877,303              |
| FY 2018              | 63,573                  | 2,209,842                            | 2,273,415  | 549,815              | 54,000   | 603,815    | 2,877,230              |
| FY 2019              | 63,573                  | 2,209,069                            | 2,272,642  | 550,588              | 54,000   | 604,588    | 2,877,230              |
| FY 2020              | 63,573                  | 1,492,091                            | 1,555,664  | 336,089              | N/A      | 336,089    | 1,891,753 <sub>2</sub> |
| FY 2021              | 63,573                  | 2,209,069                            | 2,272,642  | 550,588              | 54,000   | 604,588    | 2,877,230              |
| FY 2022              | 63,573                  | 2,241,987                            | 2,305,560  | 526,670 <sup>3</sup> | 54,000   | 580,670    | 2,886,230              |
| FY 2023              | 63,573                  | 2,293,647                            | 2,357,220  | 493,730              | 35,280   | 529,010    | 2,886,230              |
| FY 2024              | 63,573                  | 2,293,647                            | 2,357,220  | 493,730              | 35,280   | 529,010    | 2,886,230              |
| FY 2026              | 63,573                  | 2,451,983                            | 2,515,556  | 370,674              | -        | 370,674    | 2,886,230              |
| FY 2027 <sup>4</sup> | 63,573                  | 2,349,422                            | 2,412,995  | 370,574              | -        | 370,574    | 2,783,569              |

## RLUOB Subproject (04-D-125-01) (\$K)

| Fiscal Year          | TEC, Design<br>03-D-103 | TEC, Design/Construction<br>04-D-125 | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|----------------------|-------------------------|--------------------------------------|------------|-----------------|----------|------------|---------|
| FY 2011              | N/A                     | 159,130                              | 159,130    | 4,870           | N/A      | 4,870      | 164,000 |
| FY 2012              | N/A                     | 159,130                              | 159,130    | 4,870           | N/A      | 4,870      | 164,000 |
| FY 2012 Rep          | N/A                     | 159,130                              | 159,130    | 4,870           | N/A      | 4,870      | 164,000 |
| FY 2016 <sup>5</sup> | N/A                     | 194,130                              | 194,130    | 4,870           | N/A      | 4,870      | 199,000 |

<sup>1</sup> Project cost history reflects no budgets in FY 2013, FY 2014, FY 2015, and FY 2025 since no CPDS or budget requests were submitted in these years.

<sup>2</sup> In the FY 2020 CMRR Data Project Data Sheet the PEI2 and RC3 subprojects were removed from the CMRR project and funded under the Plutonium Pit Production Project in accordance with the Conference Report.

<sup>3</sup> The published FY 2022 CPDS OPC was incorrectly stated as \$520,035,000. The rest of the FY 2022 numbers were correct. The FY 2022 number has been updated to correct this previous typographical error in the FY 2022 submittal.

<sup>4</sup> The FY2027 figure represents the current funding profile for CMRR with a total project cost of \$2,783,569,000 and it is less than the performance baseline's overall total project cost estimate is \$2,886,230,000. The FY2028 and outyear funding is currently being worked with the program to restore funding levels.

<sup>5</sup> This subproject is complete, and the project history has not changed.

**REI1 Subproject (04-D-125-02) (\$K)**

| Fiscal Year          | TEC,<br>Design<br>03-D-103 | TEC,<br>Design/Construction<br>04-D-125 | TEC,<br>Total | OPC,<br>Except<br>D&D | OPC,<br>D&D | OPC,<br>Total | TPC     |
|----------------------|----------------------------|-----------------------------------------|---------------|-----------------------|-------------|---------------|---------|
| FY 2011              | N/A                        | 152,900                                 | 152,900       | 46,500                | N/A         | 46,500        | 199,400 |
| FY 2012              | N/A                        | 152,900                                 | 152,900       | 46,500                | N/A         | 46,500        | 199,400 |
| FY 2012 Rep          | N/A                        | 152,900                                 | 152,900       | 46,500                | N/A         | 46,500        | 199,400 |
| FY 2016 <sup>1</sup> | N/A                        | 151,963                                 | 151,963       | 44,797                | N/A         | 44,797        | 196,760 |

**NF Subproject (03-D-103 and 04-D-125-03) (\$K)**

| Fiscal Year          | TEC,<br>Design<br>03-D-103 | TEC,<br>Design/Construction<br>04-D-125 | TEC, Total               | OPC,<br>Except<br>D&D | OPC,<br>D&D | OPC,<br>Total       | TPC                      |
|----------------------|----------------------------|-----------------------------------------|--------------------------|-----------------------|-------------|---------------------|--------------------------|
| FY 2011              | 65,138                     | TBD                                     | TBD                      | TBD                   | N/A         | TBD                 | TBD                      |
| FY 2012              | 65,138                     | 3,239,862 – 5,169,862                   | 3,305,000 –<br>5,235,000 | 405,000 -<br>625,000  | N/A         | 405,000-<br>625,000 | 3,710,000 -<br>5,860,000 |
| FY 2012 Rep          | 65,138                     | TBD                                     | TBD                      | 4,870                 | N/A         | TBD                 | TBD                      |
| FY 2016              | 63,646                     | 391,324                                 | 454,970                  | 40,274                | N/A         | 40,274              | 495,244                  |
| FY 2017              | 63,646                     | 391,324                                 | 454,970                  | 40,274                | N/A         | 40,274              | 495,244                  |
| FY 2018 <sup>2</sup> | 63,573                     | 336,919                                 | 400,492                  | 39,054                | N/A         | 39,054              | 439,546                  |

**REI2 Subproject (04-D-125-04) (\$K)**

| Fiscal Year | TEC,<br>Design<br>03-D-103 | TEC,<br>Design/Construction<br>04-D-125 | TEC,<br>Total | OPC,<br>Except<br>D&D | OPC,<br>D&D | OPC,<br>Total | TPC                  |
|-------------|----------------------------|-----------------------------------------|---------------|-----------------------|-------------|---------------|----------------------|
| FY 2016     | -                          | 540,000                                 | 540,000       | 135,000               | N/A         | 135,000       | 675,000              |
| FY 2017     | -                          | 540,000                                 | 540,000       | 135,000               | N/A         | 135,000       | 675,000              |
| FY 2018 PB  | -                          | 488,040                                 | 488,040       | 145,210               | N/A         | 145,210       | 633,250              |
| FY 2019     | -                          | 488,040                                 | 488,040       | 145,210               | N/A         | 145,210       | 633,250              |
| FY 2020     | -                          | 488,040                                 | 488,040       | 145,210               | N/A         | 145,210       | 633,250              |
| FY 2021     | -                          | 488,040                                 | 488,040       | 145,210               | N/A         | 145,210       | 633,250              |
| FY 2022     | -                          | 451,517                                 | 451,517       | 111,090               | N/A         | 111,090       | 562,607              |
| FY 2023     | -                          | 410,659                                 | 410,659       | 106,191               | N/A         | 106,191       | 516,850              |
| FY 2024     | -                          | 410,201                                 | 410,201       | 103,343               | N/A         | 103,343       | 513,544              |
| FY 2026     | -                          | 412,488                                 | 412,488       | 103,193               | N/A         | 103,193       | 515,681 <sup>3</sup> |

<sup>1</sup> This subproject is complete, and the project history has not changed.

<sup>2</sup> This subproject remains canceled, and the project history has not changed.

<sup>3</sup> REI2 achieved CD-4 in December 2021, with an approved TPC of \$509,300,000 the subproject is currently completing financial closeout and the actual will be updated to reflect the final costs in the next project data sheet. The tables reflect the final costs of \$515,681,000.

**PEI1 Subproject (04-D-125-05) (\$K)**

| <b>Fiscal Year</b>   | <b>TEC,<br/>Design<br/>03-D-103</b> | <b>TEC,<br/>Design/Construction<br/>04-D-125</b> | <b>TEC,<br/>Total</b> | <b>OPC,<br/>Except<br/>D&amp;D</b> | <b>OPC,<br/>D&amp;D</b> | <b>OPC,<br/>Total</b> | <b>TPC</b> |
|----------------------|-------------------------------------|--------------------------------------------------|-----------------------|------------------------------------|-------------------------|-----------------------|------------|
| FY 2016              | -                                   | 1,071,000                                        | 1,071,000             | 240,000                            | 54,000                  | 294,000               | 1,365,000  |
| FY 2017              | -                                   | 257,595                                          | 257,595               | 57,405                             | N/A                     | 57,405                | 315,000    |
| FY 2018 PB           | -                                   | 292,300                                          | 292,300               | 101,700                            | N/A                     | 101,700               | 394,000    |
| FY 2019              | -                                   | 292,300                                          | 292,300               | 101,700                            | N/A                     | 101,700               | 394,000    |
| FY 2020              | -                                   | 292,300                                          | 292,300               | 101,700                            | N/A                     | 101,700               | 394,000    |
| FY 2021              | -                                   | 292,300                                          | 292,300               | 101,700                            | N/A                     | 101,700               | 394,000    |
| FY 2022              | -                                   | 231,400                                          | 231,400               | 52,600                             | N/A                     | 52,600                | 284,000    |
| FY 2023              | -                                   | 220,701                                          | 220,701               | 56,905                             | N/A                     | 56,905                | 277,606    |
| FY 2024 <sup>1</sup> | -                                   | 220,719                                          | 220,719               | 56,454                             | N/A                     | 56,454                | 277,173    |

**PEI2 Subproject (04-D-125-06) (\$K)**

| <b>Fiscal Year</b>   | <b>TEC,<br/>Design<br/>03-D-103</b> | <b>TEC, Design/<br/>Construction<br/>04-D-125</b> | <b>TEC, Total</b> | <b>OPC,<br/>Except<br/>D&amp;D</b> | <b>OPC,<br/>D&amp;D</b> | <b>OPC,<br/>Total</b> | <b>TPC</b> |
|----------------------|-------------------------------------|---------------------------------------------------|-------------------|------------------------------------|-------------------------|-----------------------|------------|
| FY 2016              | -                                   | 471,500                                           | 471,500           | 159,500                            | 54,000                  | 213,500               | 685,000    |
| FY 2020              | -                                   | 28,739                                            | 28,739            | 296                                | N/A                     | 296                   | 29,035     |
| FY 2021              | -                                   | 475,242                                           | 475,242           | 146,098                            | 54,000                  | 200,098               | 675,340    |
| FY 2022              | -                                   | 538,662                                           | 538,662           | 156,533                            | 54,000                  | 210,533               | 749,195    |
| FY 2023              | -                                   | 590,413                                           | 590,413           | 118,356                            | 35,280                  | 153,636               | 744,049    |
| FY 2024              | -                                   | 625,693                                           | 625,693           | 118,356                            | -                       | 118,356               | 744,049    |
| FY 2026 <sup>2</sup> | -                                   | 1,103,356                                         | 1,103,356         | 82,460                             | -                       | 82,460                | 1,185,816  |
| FY 2027              | -                                   | 1,000,795                                         | 1,000,795         | 82,360                             | -                       | 82,360                | 1,083,155  |

<sup>1</sup> This subproject is complete, and the project history has not changed.

<sup>2</sup> FY 2026 had an offsetting discrepancy between TEC and OPC costs. The TEC total should have been \$1,103,456 and the OPC total was \$82,360, consistent with detailed cost estimate baseline values. This has been corrected in FY 2027.

**RC3 (04-D-125-07) (\$K)**

| <b>Fiscal Year</b> | <b>TEC,<br/>Design<br/>03-D-103</b> | <b>TEC,<br/>Design/Construction<br/>04-D-125</b> | <b>TEC,<br/>Total</b> | <b>OPC,<br/>Except<br/>D&amp;D</b> | <b>OPC,<br/>D&amp;D</b> | <b>OPC,<br/>Total</b> | <b>TPC</b>           |
|--------------------|-------------------------------------|--------------------------------------------------|-----------------------|------------------------------------|-------------------------|-----------------------|----------------------|
| FY 2016            | -                                   | 289,405                                          | 289,405               | 75,595                             | N/A                     | 75,595                | 365,000              |
| FY 2020            | -                                   | -                                                | -                     | 162                                | N/A                     | 162                   | 162                  |
| FY 2021            | -                                   | 270,475                                          | 270,475               | 68,859                             | N/A                     | 68,859                | 339,334              |
| FY 2022            | -                                   | 337,396                                          | 337,396               | 117,726                            | N/A                     | 117,726               | 455,122 <sup>1</sup> |
| FY 2023            | -                                   | 388,862                                          | 388,862               | 123,557                            | N/A                     | 123,557               | 512,419              |
| FY 2024            | -                                   | 390,801                                          | 390,801               | 125,357                            | N/A                     | 125,357               | 516,158              |
| FY 2026            | -                                   | 32,408                                           | 32,408                | 39,848                             | N/A                     | 39,848                | 72,254 <sup>2</sup>  |

**2. Project Scope and Justification****Scope**

The CMRR Project, as originally proposed, relocated, and consolidated mission critical AC, material MC, and actinide research and development (R&D) capabilities; and provided special nuclear material (SNM) storage and large vessel handling capabilities. The SNM storage and large vessel handling capabilities originally planned for CMRR-NF are not included in the current set of CMRR subprojects and have been addressed by programmatic operations. This data sheet provides information related to the one ongoing subproject to transition AC and MC capabilities into PF-4, to ensure continuity in plutonium support capabilities and enable the cessation of program operations in CMR.

The list of CMRR line-item subprojects since inception are:

- **RLUOB Subproject (04-D-125-01):** Construction of a 203,686 gross square foot (gsf) facility to house laboratory space capable of handling radiological quantities of SNM; a 22,071 gsf utility building sized to provide utility services (including chilled and hot water, potable hot/cold water, compressed air, and process gases) for all CMRR facility elements; office space for CMRR workers located outside of perimeter security protection systems; and space for centralized TA-55 training activities. The RLUOB became fully functional and operational after the completion of the equipment installation effort for this facility in the REI phase.
- **RLUOB Equipment Installation (REI) Subproject (04-D-125-02):** Equipment installation included gloveboxes, hoods, AC/MC instrumentation, security and communication hardware, and final facility tie-ins and operational readiness/turnover activities. RLUOB equipment fabrication, installation, testing, and acceptance physically completed in FY 2012. Staff occupation of the office spaces in FY 2012 occurred and CD-4 was approved. The facility exceeded its sustainability goal of LEED Silver by achieving LEED Gold in June 2012.
- **Nuclear Facility (NF) Subproject (04-D-125-03):** This subproject is cancelled with the remaining mission need (excluding SNM storage and large vessel handling) for CMRR to be met by other subprojects.

<sup>1</sup> The high end of the cost range of the subproject was increased to reflect the completion of PEI1 and REI2 subprojects and application of the underruns to the existing scope. The underruns were used/made available to address existing scope as performance baselines were established.

<sup>2</sup> RC3 has been deemed complete based on CD-1RR, and the project history has not changed.

- **REI Phase 2 (REI2) Subproject (04-D-125-04):** Maximizes the use of RLUOB laboratories by both reconfiguring some existing laboratory space and equipping empty laboratories with AC and MC capabilities. Until the RC3 subproject was completed, the RLUOB was operated at a radiological limit, 38.6 g of Pu-239 equivalent, consistent with the NNSA Supplemental Guidance NA-1 SD G 1027. New gloveboxes/hoods and equipment were installed in RLUOB through this subproject. This project makes progress toward ceasing program operations in CMR. Specific capabilities in REI2 scope include the following:
  - Trace Elements Sample Preparation
  - Mass Spectrometry Sample Preparation
  - X-Ray Fluorescence Sample Preparation and Instruments
  - Radiochemistry Counting Laboratory and Sample Preparation
  - Oxide and Metal Sample Distribution
  - Coulometry
  - AC and MC Capabilities for R&D and Troubleshooting
- **PF-4 Equipment Installation Phase 1 (PEI1) Subproject (04-D-125-05):** The PEI1 subproject involved the following: relocation of existing PF-4 processes within PF-4 to create open consolidated space, reusing existing gloveboxes for new processes, decontamination and decommissioning (D&D) of old gloveboxes/equipment in PF-4 to create open laboratory space; and installation of new gloveboxes/equipment in the created open space. PEI1 supports the AC and MC capabilities that require the processing of larger amounts of nuclear material. This project made progress toward ceasing program operations in CMR. These capabilities support pit production, pit surveillance, plutonium science and other national security programs. The removal work was executed as site-prep work within this subproject. Specific capabilities in PEI1 scope included:
  - Sample Preparation Surface Science
  - Mechanical Testing
  - Physical Properties
  - Small Sample Fabrication and Preparation
- **PF-4 Equipment Installation Phase 2 (PEI2) Subproject (04-D-125-06):** This scope will maximize use of PF-4 by consolidating and relocating existing capabilities within PF-4, replacing existing equipment, and installing gloveboxes and equipment. PEI2 will establish enduring AC and MC capabilities for supporting NNSA actinide-based missions, including pit production. PEI scope also includes the following construction and facilities upgrades:
  - New Construction to increase capacity for change rooms leading into PF-4.
  - Upgrade in capacity for vehicular entrances/exits to and from TA-55.
  - Upgrades to existing PF-4 ingress/egress security posts for essential capacity increases related to CMRR missions.
- **RLUOB Hazard Category 3 (RC3) (04-D-125-07):** The subproject is deemed completed now that NNSA has converted the Radiological Laboratory to a Hazard Category 3 Nuclear Facility; remaining scope has been removed. The scope maximizes the use of RLUOB by converting the facility to a Hazard Category 3 Nuclear Facility from the original radiological categorization. The facility was originally limited to 8.9 grams and is now limited to 400 grams of Plutonium.

### **Justification**

As defined in the most recent revision of the Mission Need Statement (MNS), the mission of the CMRR Project is to ensure continuity in AC and MC capabilities for NNSA actinide-based missions in support of stockpile stewardship. The AC and MC capabilities provided by this project support pit production, pit surveillance, plutonium science and other national security programs. During development of the plutonium strategy, the joint Department of Defense-Cost Analysis and Program Evaluation business case analysis indicated that optimizing RLUOB and repurposing space in PF-4 should be started as soon as possible to maintain continuity in AC and MC capabilities.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B. Funds appropriated under this data sheet may be used for contracted support services to the FPD to conduct independent assessments of the planning and execution of this project required by DOE O 413.3B and to conduct technical reviews of design and construction documents.

### **Key Performance Parameters (KPPs)**

#### **PF-4 Equipment Installation Phase 2 (PEI2) Subproject (04-D-125-06)**

| <b>Item No.</b> | <b>Performance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KPP-<br>PEI2-1  | Complete personnel access infrastructure upgrades to enable reliable 24/7 operations for PF-4 in support of the 30 PPY mission. Specifically, Reconfigure and expand the two PF-4 security posts to accommodate 1,200 personnel/day with average wait times under 15 minutes as shown in ALDWP Engineering Process Modeling evaluation of the entry control facilities; and Expand men and women change rooms, and laundry facilities to support 24/7 operations. |
| KPP-<br>PEI2-2  | Increase vehicle access capacity of the TA-55 Protected Area (PA) to enable the required capability to support the required 24/7 schedule. Reconfigure East Vehicle Access and West Vehicle Access for the TA-55 PA with the required security features and be fully functional and turned over for operational activities to support expansion of vehicle access.                                                                                                |
| KPP-<br>PEI2-3  | Install enduring Material Characterization capabilities in PF-4 as described in TTO-PEI2-105118-00001, <i>PEI2 Transition to Operations Plan for Equipment Installation</i> .                                                                                                                                                                                                                                                                                     |

### 3. Financial Schedule (\$K)

#### Total Project<sup>1</sup>

|                                    | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|------------------------------------|--------------------------------------|------------------|------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                      |                  |                  |
| <b>Design (03-D-103-010)</b>       |                                      |                  |                  |
| Prior Years - FY 2024              | 63,573                               | 63,573           | 63,573           |
| <b>Total Design (03-D-103-010)</b> | <b>63,573</b>                        | <b>63,573</b>    | <b>63,573</b>    |
| <b>Design (04-D-125)</b>           |                                      |                  |                  |
| Prior Years - FY 2024              | 670,290                              | 670,290          | 667,781          |
| FY 2025                            | -                                    | -                | 2,509            |
| <b>Total Design (04-D-125)</b>     | <b>670,290</b>                       | <b>670,290</b>   | <b>670,290</b>   |
| <b>Construction</b>                |                                      |                  |                  |
| Prior Years - FY 2024              | 1,422,812                            | 1,411,367        | 1,019,253        |
| FY 2025                            | -                                    | -3,560           | 103,624          |
| FY 2026                            | -                                    | 15,005           | 176,340          |
| FY 2027                            | 110,000                              | 110,000          | 126,921          |
| FY 2028                            | 77,200                               | 77,200           | 126,737          |
| FY 2029                            | 69,120                               | 69,120           | 75,000           |
| FY 2030                            | -                                    | -                | 46,914           |
| FY 2031                            | -                                    | -                | 2,800            |
| Outyears                           | -                                    | -                | 1,543            |
| <b>Total Construction</b>          | <b>1,679,132</b>                     | <b>1,679,132</b> | <b>1,679,132</b> |
| <b>TEC</b>                         |                                      |                  |                  |
| Prior Years - FY 2024              | 2,156,675                            | 2,145,230        | 1,750,607        |
| FY 2025                            | -                                    | -3,560           | 106,133          |
| FY 2026                            | -                                    | 15,005           | 176,340          |
| FY 2027                            | 110,000                              | 110,000          | 126,921          |
| FY 2028                            | 77,200                               | 77,200           | 126,737          |
| FY 2029                            | 69,120                               | 69,120           | 75,000           |
| FY 2030                            | -                                    | -                | 46,914           |
| FY 2031                            | -                                    | -                | 2,800            |
| Outyears                           | -                                    | -                | 1,543            |
| <b>Total TEC</b>                   | <b>2,412,995</b>                     | <b>2,412,995</b> | <b>2,412,995</b> |
| <b>Other Project Costs (OPC)</b>   |                                      |                  |                  |
| <b>(OPC)</b>                       |                                      |                  |                  |
| Prior Years - FY 2024              | 108,408                              | 108,408          | 104,983          |
| FY 2025                            | -                                    | -                | -                |

<sup>1</sup> Reflects reprogramming of \$3M of FY 2021 BA and \$2M of FY 2022 BA to the TA-55 Reinvestment Project, Phase III. Reflects reprogramming of \$2M of FY 2021 BA and \$3M of FY 2022 BA to the Transuranic Liquid Waste project. Reflects reprogramming of \$20M of FY 2023 BA to the Uranium Processing Facility project and \$232.96M used as offset in FY 2023.

|                                    | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|------------------------------------|--------------------------------------|------------------|------------------|
| FY 2026                            | -                                    | -                | 3,425            |
| <b>Total OPC</b>                   | <b>108,408</b>                       | <b>108,408</b>   | <b>108,408</b>   |
| <b>(OPC except D&amp;D)</b>        |                                      |                  |                  |
| Prior Years - FY 2024              | 220,186                              | 220,186          | 186,336          |
| FY 2025                            | -                                    | -                | 2,338            |
| FY 2026                            | -                                    | -                | 1,788            |
| FY 2027                            | -                                    | -                | 10,000           |
| FY 2028                            | 35,000                               | 35,000           | 25,000           |
| FY 2029                            | 6,980                                | 6,980            | 20,000           |
| FY 2030                            | -                                    | -                | 10,000           |
| FY 2031                            | -                                    | -                | 5,000            |
| Outyears                           | -                                    | -                | 1,704            |
| <b>Total OPC except D&amp;D</b>    | <b>262,166</b>                       | <b>262,166</b>   | <b>262,166</b>   |
| <b>OPC Total</b>                   |                                      |                  |                  |
| Prior Years - FY 2024              | 328,594                              | 328,594          | 291,319          |
| FY 2025                            | -                                    | -                | 2,338            |
| FY 2026                            | -                                    | -                | 5,213            |
| FY 2027                            | -                                    | -                | 10,000           |
| FY 2028                            | 35,000                               | 35,000           | 25,000           |
| FY 2029                            | 6,980                                | 6,980            | 20,000           |
| FY 2030                            | -                                    | -                | 10,000           |
| FY 2031                            | -                                    | -                | 5,000            |
| Outyears                           | -                                    | -                | 1,704            |
| <b>Total, OPC</b>                  | <b>370,574</b>                       | <b>370,574</b>   | <b>370,574</b>   |
| <b>Total Project Costs (TPC)</b>   |                                      |                  |                  |
| Prior Years - FY 2024 <sup>a</sup> | 2,485,269                            | 2,473,824        | 2,041,926        |
| FY 2025                            | -                                    | -3,560           | 108,471          |
| FY 2026                            | -                                    | 15,005           | 181,553          |
| FY 2027                            | 110,000                              | 110,000          | 136,921          |
| FY 2028                            | 112,200                              | 112,200          | 151,737          |
| FY 2029                            | 76,100                               | 76,100           | 95,000           |
| FY 2030                            | -                                    | -                | 56,914           |
| FY 2031                            | -                                    | -                | 7,800            |
| Outyears                           | -                                    | -                | 3,247            |
| <b>Total TPC <sup>1</sup></b>      | <b>2,783,569</b>                     | <b>2,783,569</b> | <b>2,783,569</b> |

<sup>1</sup> The current funding profile for CMRR is less than the performance baseline's overall total project cost estimate of \$2,886,230,000.



**Prior Subprojects (RLUOB/REI/Nuclear Facility) 03-D-103-010<sup>1</sup> & 04-D-125-01, -02, -03)**

|                                    | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|------------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>  |                                                  |                    |                |
| <b>Design (03-D-103-010)</b>       |                                                  |                    |                |
| Prior Years - FY<br>2018           | 63,573                                           | 63,573             | 63,573         |
| <b>Total Design (03-D-103-010)</b> | <b>63,573</b>                                    | <b>63,573</b>      | <b>63,573</b>  |
| <b>Design (04-D-125)</b>           |                                                  |                    |                |
| Prior Years - FY<br>2018           | 386,929                                          | 386,929            | 386,929        |
| <b>Total Design (04-D-125)</b>     | <b>386,929</b>                                   | <b>386,929</b>     | <b>386,929</b> |
| <b>Total Design</b>                |                                                  |                    |                |
| Prior Years - FY<br>2018           | 450,502                                          | 450,502            | 450,502        |
| <b>Total Design</b>                | <b>450,502</b>                                   | <b>450,502</b>     | <b>450,502</b> |
| <b>Construction</b>                |                                                  |                    |                |
| Prior Years - FY<br>2018           | 296,083                                          | 296,083            | 296,083        |
| <b>Total Construction</b>          | <b>296,083</b>                                   | <b>296,083</b>     | <b>296,083</b> |
| <b>TEC</b>                         |                                                  |                    |                |
| Prior Years - FY<br>2018           | 746,585                                          | 746,585            | 746,585        |
| <b>Total TEC</b>                   | <b>746,585</b>                                   | <b>746,585</b>     | <b>746,585</b> |
| <b>Other Project Costs (OPC)</b>   |                                                  |                    |                |
| <b>(OPC non-capital)</b>           |                                                  |                    |                |
| Prior Years - FY<br>2018           | 88,721                                           | 88,721             | 88,721         |
| <b>Total Project Costs (TPC)</b>   | <b>88,721</b>                                    | <b>88,721</b>      | <b>88,721</b>  |
| Prior Years - FY<br>2018           |                                                  |                    |                |
| <b>Total TPC</b>                   | <b>835,306</b>                                   | <b>835,306</b>     | <b>835,306</b> |

<sup>1</sup> 03-D-103-010 CPDS funded design efforts on multiple line-item projects starting in 2003. Subsequently the funding of design and construction was shifted to 04-D-125.

**REI Phase 2 (REI2) Subproject (04-D-125-04)<sup>1</sup>**

|                                               | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>             |                                                  |                    |                |
| <b>Design (04-D-125-04)</b>                   |                                                  |                    |                |
| Prior Years - FY 2021                         | 42,512                                           | 42,512             | 42,512         |
| <b>Total Design (04-D-125-04)</b>             | <b>42,512</b>                                    | <b>42,512</b>      | <b>42,512</b>  |
| <b>Construction (04-D-125-04)</b>             |                                                  |                    |                |
| Prior Years - FY 2024                         | 369,976                                          | 369,976            | 369,976        |
| <b>Total Construction (04-D-125-04)</b>       | <b>369,976</b>                                   | <b>369,976</b>     | <b>369,976</b> |
| <b>TEC (04-D-125-04)</b>                      |                                                  |                    |                |
| Prior Years - FY 2024                         | 412,488                                          | 412,488            | 412,488        |
| <b>Total TEC (04-D-125-04)</b>                | <b>412,488</b>                                   | <b>412,488</b>     | <b>412,488</b> |
| <b>Other Project Costs (OPC)</b>              |                                                  |                    |                |
| <b>OPC except D&amp;D (04-D-125-04)</b>       |                                                  |                    |                |
| Prior Years - FY 2024                         | 103,193                                          | 103,193            | 103,193        |
| <b>Total OPC except D&amp;D (04-D-125-04)</b> | <b>103,193</b>                                   | <b>103,193</b>     | <b>103,193</b> |
| <b>Total Project Costs (TPC)</b>              |                                                  |                    |                |
| Prior Years - FY 2024                         | 515,681                                          | 515,681            | 515,681        |
| <b>Total TPC (04-D-125-04)<sup>2</sup></b>    | <b>515,681</b>                                   | <b>515,681</b>     | <b>515,681</b> |

<sup>1</sup> Unused funding was reallocated from REI2 to support execution of the PEI2 subprojects.

<sup>2</sup> TPC value reflects final costs for REI2.

**PF-4 Equipment Installation Phase 1 (PEI1) Subproject (04-D-125-05) <sup>1</sup>**

|                                                                       | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------------------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>                                     |                                                  |                    |                |
| <b>Design (04-D-125-05)</b>                                           |                                                  |                    |                |
| Prior Years - FY<br>2018                                              | 31,611                                           | 31,611             | 31,611         |
| <b>Total Design (04-D-125-05)</b>                                     | <b>31,611</b>                                    | <b>31,611</b>      | <b>31,611</b>  |
| <b>Construction (04-D-125-05)</b>                                     |                                                  |                    |                |
| Prior Years - FY<br>2024                                              | 189,108                                          | 189,108            | 189,108        |
| <b>Total Construction (04-D-125-05)</b>                               | <b>189,108</b>                                   | <b>189,108</b>     | <b>189,108</b> |
| <b>TEC (04-D-125-05)</b>                                              |                                                  |                    |                |
| Prior Years - FY<br>2024                                              | 220,719                                          | 220,719            | 220,719        |
| <b>Total TEC (04-D-125-05)</b>                                        | <b>220,719</b>                                   | <b>220,719</b>     | <b>220,719</b> |
| <b>Other Project Costs (OPC)<br/>OPC except D&amp;D (04-D-125-05)</b> |                                                  |                    |                |
| Prior Years - FY<br>2024                                              | 56,454                                           | 56,454             | 56,454         |
| <b>Total OPC except D&amp;D (04-D-125-05)</b>                         | <b>56,454</b>                                    | <b>56,454</b>      | <b>56,454</b>  |
| <b>Total Project Costs (TPC)</b>                                      |                                                  |                    |                |
| Prior Years - FY<br>2024                                              | 277,173                                          | 277,173            | 277,173        |
| <b>Total TPC (04-D-125-05)</b>                                        | <b>277,173</b>                                   | <b>277,173</b>     | <b>277,173</b> |

<sup>1</sup> Funding was reallocated from PEI1 to remaining subprojects.

**PF-4 Equipment Installation Phase 2 (PEI2) Subproject (04-D-125-06)<sup>1</sup>**

|                                         | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b>       |                                              |                    |                  |
| <b>Design (04-D-125-06)</b>             |                                              |                    |                  |
| Prior Years - FY 2024                   | 176,830                                      | 176,830            | 174,321          |
| FY 2025                                 | -                                            | -                  | 2,509            |
| <b>Total Design (04-D-125-06)</b>       | <b>176,830</b>                               | <b>176,830</b>     | <b>176,830</b>   |
| <b>Construction (04-D-125-06)</b>       |                                              |                    |                  |
| Prior Years - FY 2024                   | 567,645                                      | 556,200            | 164,086          |
| FY 2025                                 | -                                            | -3,560             | 103,624          |
| FY 2026                                 | -                                            | 15,005             | 176,340          |
| FY 2027                                 | 110,000                                      | 110,000            | 126,921          |
| FY 2028                                 | 77,200                                       | 77,200             | 126,737          |
| FY 2029                                 | 69,120                                       | 69,120             | 75,000           |
| FY 2030                                 | -                                            | -                  | 46,914           |
| FY 2031                                 | -                                            | -                  | 2,800            |
| Outyears                                | -                                            | -                  | 1,543            |
| <b>Total Construction (04-D-125-06)</b> | <b>823,965</b>                               | <b>823,965</b>     | <b>823,965</b>   |
| <b>TEC (04-D-125-06)</b>                |                                              |                    |                  |
| Prior Years - FY 2024                   | 744,475                                      | 733,030            | 338,407          |
| FY 2025                                 | -                                            | -3,560             | 106,133          |
| FY 2026                                 | -                                            | 15,005             | 176,340          |
| FY 2027                                 | 110,000                                      | 110,000            | 126,921          |
| FY 2028                                 | 77,200                                       | 77,200             | 126,737          |
| FY 2029                                 | 69,120                                       | 69,120             | 75,000           |
| FY 2030                                 | -                                            | -                  | 46,914           |
| FY 2031                                 | -                                            | -                  | 2,800            |
| Outyears                                | -                                            | -                  | 1,543            |
| <b>Total TEC (04-D-125-06)</b>          | <b>1,000,795</b>                             | <b>1,000,795</b>   | <b>1,000,795</b> |
| <b>Other Project Costs (OPC)</b>        |                                              |                    |                  |
| <b>OPC (04-D-125-06)</b>                |                                              |                    |                  |
| Prior Years - FY 2024                   | 6,438                                        | 6,438              | 3,013            |
| FY 2025                                 | -                                            | -                  | -                |
| FY 2026                                 | -                                            | -                  | 3,425            |
| <b>Total OPC (04-D-125-06)</b>          | <b>6,438</b>                                 | <b>6,438</b>       | <b>6,438</b>     |
| <b>OPC except D&amp;D (04-D-125-06)</b> |                                              |                    |                  |

<sup>1</sup> Reflects reprogramming of \$3M of FY 2021 BA and \$2M of FY 2022 BA to the TA-55 Reinvestment Project, Phase III. Reflects reprogramming of \$2M of FY 2021 BA and \$3M of FY 2022 BA to the Transuranic Liquid Waste project. Reflects reprogramming of \$20M of FY 2023 BA to the Uranium Processing Facility project and \$232.96M used as offset in FY 2023.

|                                               | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------------------|----------------------------------------------|--------------------|------------------|
| Prior Years - FY 2024                         | 33,942                                       | 33,942             | 92               |
| FY 2025                                       | -                                            | -                  | 2,338            |
| FY 2026                                       | -                                            | -                  | 1,788            |
| FY 2027                                       | -                                            | -                  | 10,000           |
| FY 2028                                       | 35,000                                       | 35,000             | 25,000           |
| FY 2029                                       | 6,980                                        | 6,980              | 20,000           |
| FY 2030                                       | -                                            | -                  | 10,000           |
| FY 2031                                       | -                                            | -                  | 5,000            |
| Outyears                                      | -                                            | -                  | 1,704            |
| <b>Total OPC except D&amp;D (04-D-125-06)</b> | <b>75,922</b>                                | <b>75,922</b>      | <b>75,922</b>    |
| <b>Total OPC (04-D-125-06)</b>                |                                              |                    |                  |
| Prior Years - FY 2024                         | 40,380                                       | 40,380             | 3,105            |
| FY 2025                                       | -                                            | -                  | 2,338            |
| FY 2026                                       | -                                            | -                  | 5,213            |
| FY 2027                                       | -                                            | -                  | 10,000           |
| FY 2028                                       | 35,000                                       | 35,000             | 25,000           |
| FY 2029                                       | 6,980                                        | 6,980              | 20,000           |
| FY 2030                                       | -                                            | -                  | 10,000           |
| FY 2031                                       | -                                            | -                  | 5,000            |
| Outyears                                      | -                                            | -                  | 1,704            |
| <b>Total OPC (04-D-125-06)</b>                | <b>82,360</b>                                | <b>82,360</b>      | <b>82,360</b>    |
| <b>Total Project Costs (TPC)</b>              |                                              |                    |                  |
| Prior Years - FY 2024                         | 784,855                                      | 773,410            | 341,512          |
| FY 2025                                       | -                                            | -3,560             | 108,471          |
| FY 2026                                       | -                                            | 15,005             | 181,553          |
| FY 2027                                       | 110,000                                      | 110,000            | 136,921          |
| FY 2028                                       | 112,200                                      | 112,200            | 151,737          |
| FY 2029                                       | 76,100                                       | 76,100             | 95,000           |
| FY 2030                                       | -                                            | -                  | 56,914           |
| FY 2031                                       | -                                            | -                  | 7,800            |
| Outyears                                      | -                                            | -                  | 3,247            |
| <b>Total TPC (04-D-125-06) <sup>1</sup></b>   | <b>1,083,155</b>                             | <b>1,083,155</b>   | <b>1,083,155</b> |

<sup>1</sup> The current funding profile for PEI2 of \$1,083,155 is less than the TPC of \$1,185,816,000 in CD-1RR.

**RLUOB Hazard Category 3 (RC3) (04-D-125-07)**

|                                               | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b>             |                                                  |                    |               |
| <b>Design (04-D-125-07)</b>                   |                                                  |                    |               |
| Prior Years - FY<br>2024                      | 32,408                                           | 32,408             | 32,408        |
| <b>Total Design (04-D-125-07)</b>             | <b>32,408</b>                                    | <b>32,408</b>      | <b>32,408</b> |
| <b>Construction (04-D-125-07)</b>             |                                                  |                    |               |
| Prior Years - FY<br>2024                      | -                                                | -                  | -             |
| <b>Total Construction (04-D-125-07)</b>       | <b>-</b>                                         | <b>-</b>           | <b>-</b>      |
| <b>TEC (04-D-125-07)</b>                      |                                                  |                    |               |
| Prior Years - FY<br>2024                      | 32,408                                           | 32,408             | 32,408        |
| <b>Total TEC (04-D-125-07)</b>                | <b>32,408</b>                                    | <b>32,408</b>      | <b>32,408</b> |
| <b>Other Project Costs (OPC)</b>              |                                                  |                    |               |
| <b>OPC non-capital (04-D-125-07)</b>          |                                                  |                    |               |
| Prior Years - FY<br>2024                      | 13,249                                           | 13,249             | 13,249        |
| <b>Total OPC non-capital (04-D-125-07)</b>    | <b>13,249</b>                                    | <b>13,249</b>      | <b>13,249</b> |
| <b>OPC except D&amp;D (04-D-125-07)</b>       |                                                  |                    |               |
| Prior Years - FY<br>2024                      | 26,597                                           | 26,597             | 26,597        |
| <b>Total OPC except D&amp;D (04-D-125-06)</b> | <b>26,597</b>                                    | <b>26,597</b>      | <b>26,597</b> |
| <b>Total OPC (04-D-125-06)</b>                |                                                  |                    |               |
| Prior Years - FY<br>2023                      | 39,846                                           | 39,846             | 39,846        |
| <b>Total OPC (04-D-125-06)</b>                | <b>39,846</b>                                    | <b>39,846</b>      | <b>39,846</b> |
| <b>Total Project Costs (TPC)</b>              |                                                  |                    |               |
| Prior Years - FY<br>2024                      | 72,254                                           | 72,254             | 72,254        |
| <b>Total TPC (04-D-125-06)</b>                | <b>72,254</b>                                    | <b>72,254</b>      | <b>72,254</b> |

#### 4. Details of Project Cost Estimate (\$K)

##### Total Project

|                                       | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|---------------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>     |                              |                               |                                   |
| <b>Design</b>                         |                              |                               |                                   |
| Design                                |                              |                               | N/A                               |
| Contingency                           |                              |                               | N/A                               |
| <b>Total Design</b>                   | <b>733,863</b>               | <b>728,097</b>                | <b>N/A</b>                        |
| <b>Construction</b>                   |                              |                               |                                   |
| Site                                  |                              |                               | N/A                               |
| Work                                  |                              |                               | N/A                               |
| Equipment                             |                              |                               | N/A                               |
| Construction                          |                              |                               | N/A                               |
| Contingency                           |                              |                               | N/A                               |
| <b>Total Construction</b>             | <b>1,679,132</b>             | <b>1,787,559</b>              | <b>N/A</b>                        |
| <b>Other TEC (if any)</b>             |                              |                               |                                   |
| Cold Startup                          | -                            | -                             | N/A                               |
| Contingency                           | -                            | -                             | N/A                               |
| <b>Total, Other TEC</b>               | <b>-</b>                     | <b>-</b>                      | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>     | <b>2,412,995</b>             | <b>2,515,656</b>              | <b>N/A</b>                        |
| <i>Contingency, TEC</i>               | <i>129,213</i>               | <i>143,979</i>                | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>      |                              |                               |                                   |
| OPC except D&D                        | 370,574                      | 370,574                       |                                   |
| <b>Total OPC</b>                      | <b>370,574</b>               | <b>370,574</b>                | <b>N/A</b>                        |
| <i>Contingency, OPC</i>               | <i>14,812</i>                | <i>14,812</i>                 | <i>N/A</i>                        |
| <b>Total Project Cost<sup>1</sup></b> | <b>2,783,569</b>             | <b>2,886,230</b>              | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b>    | <b>144,025</b>               | <b>158,791</b>                | <b>N/A</b>                        |

<sup>1</sup> The current funding profile for CMRR with a total project cost of \$2,783,569 is less than the performance baseline's overall total project cost estimate is \$2,886,230,000.

**Prior Subprojects (RLUOB/REI/Nuclear Facility) 03-D-103-010 & 04-D-125-01, -02, -03)**

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             |                                       |                                        |                                            |
| Contingency                        |                                       |                                        |                                            |
| <b>Total Design</b>                | <b>450,502</b>                        | <b>450,502</b>                         | <b>N/A</b>                                 |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Work                          |                                       |                                        |                                            |
| Equipment                          |                                       |                                        |                                            |
| Construction                       |                                       |                                        |                                            |
| Contingency                        |                                       |                                        |                                            |
| <b>Total Construction</b>          | <b>296,083</b>                        | <b>296,083</b>                         | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  | <b>746,585</b>                        | <b>746,585</b>                         | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                                       |                                        |                                            |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                |                                       |                                        | N/A                                        |
| Conceptual Design                  |                                       |                                        | N/A                                        |
| Other OPC Costs                    |                                       |                                        | N/A                                        |
| Contingency                        |                                       |                                        | N/A                                        |
| <b>Total OPC</b>                   | <b>88,721</b>                         | <b>88,721</b>                          | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                                       |                                        |                                            |
| <b>Total Project Cost</b>          | <b>835,306</b>                        | <b>835,306</b>                         | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> | <b>-</b>                              | <b>-</b>                               | <b>N/A</b>                                 |



**REI Phase 2 (REI2) Subproject (04-D-125-04)**

|                                       |                     | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|---------------------------------------|---------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>     |                     |                                       |                                        |                                            |
| <b>Design</b>                         |                     |                                       |                                        |                                            |
|                                       | Design              | 42,512                                | 42,512                                 | N/A                                        |
|                                       | Contingency         |                                       |                                        | N/A                                        |
| <b>Total Design</b>                   |                     | <b>42,512</b>                         | <b>42,512</b>                          | <b>44,816</b>                              |
| <b>Construction</b>                   |                     |                                       |                                        |                                            |
|                                       | Site Work           | 4,463                                 | 4,463                                  | 5,461                                      |
|                                       | Equipment           | 42,750                                | 42,750                                 | 52,089                                     |
|                                       | Construction        | 322,763                               | 320,476                                | 305,023                                    |
|                                       | Contingency         | -                                     | -                                      | 80,651                                     |
| <b>Total Construction</b>             |                     | <b>369,976</b>                        | <b>367,689</b>                         | <b>443,224</b>                             |
| <b>Total Estimated Cost (TEC)</b>     |                     | <b>412,488</b>                        | <b>410,201</b>                         | <b>488,040</b>                             |
| <i>Contingency, TEC</i>               |                     | -                                     | -                                      | 80,651                                     |
| <b>Other Project Costs (OPC)</b>      |                     |                                       |                                        |                                            |
| OPC except D&D                        |                     |                                       |                                        |                                            |
|                                       | Conceptual Planning | 2,595                                 | 2,595                                  | 1,883                                      |
|                                       | Conceptual Design   | 3,670                                 | 3,670                                  | 2,663                                      |
|                                       | Other OPC Costs     | 96,928                                | 97,078                                 | 81,707                                     |
|                                       | Contingency         | -                                     | -                                      | 59,594                                     |
| <b>Total OPC</b>                      |                     | <b>103,193</b>                        | <b>103,343</b>                         | <b>145,847</b>                             |
| <i>Contingency, OPC</i>               |                     | -                                     | -                                      | 59,594                                     |
| <b>Total Project Cost<sup>a</sup></b> |                     | <b>515,681</b>                        | <b>513,544</b>                         | <b>633,887</b>                             |
| <b>Total Contingency (TEC+OPC)</b>    |                     | <b>-</b>                              | <b>-</b>                               | <b>140,245</b>                             |

<sup>1</sup>REI2 achieved CD-4, with an approved TPC of \$509,300,000. Current TPC reflect final costs.

**PF-4 Equipment Installation Phase 1 (PEI1) Subproject (04-D-125-05)**

|                                    |                     | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                     |                                       |                                        |                                            |
| <b>Design</b>                      |                     |                                       |                                        |                                            |
|                                    | Design              | 31,611                                | 31,611                                 | N/A                                        |
|                                    | Contingency         |                                       |                                        | N/A                                        |
| <b>Total Design</b>                |                     | <b>31,611</b>                         | <b>31,611</b>                          | <b>34,308</b>                              |
| <b>Construction</b>                |                     |                                       |                                        |                                            |
|                                    | Site Work           | 30,054                                | 30,054                                 | 43,054                                     |
|                                    | Equipment           | 11,842                                | 11,842                                 | 11,842                                     |
|                                    | Construction        | 147,212                               | 147,212                                | 137,892                                    |
|                                    | Contingency         |                                       |                                        | 65,204                                     |
| <b>Total Construction</b>          |                     | <b>189,108</b>                        | <b>189,108</b>                         | <b>257,992</b>                             |
| <b>Total Estimated Cost (TEC)</b>  |                     | <b>220,719</b>                        | <b>220,719</b>                         | <b>292,300</b>                             |
| <i>Contingency, TEC</i>            |                     | -                                     | -                                      | 65,204                                     |
| <b>Other Project Costs (OPC)</b>   |                     |                                       |                                        |                                            |
| OPC except D&D                     |                     |                                       |                                        |                                            |
|                                    | Conceptual Planning | 2,189                                 | 2,189                                  | 2,189                                      |
|                                    | Conceptual Design   | -                                     | -                                      | -                                          |
|                                    | Other OPC Costs     | 54,265                                | 54,265                                 | 63,686                                     |
|                                    | Contingency         | -                                     | -                                      | 35,825                                     |
| <b>Total OPC</b>                   |                     | <b>56,454</b>                         | <b>56,454</b>                          | <b>101,700</b>                             |
| <i>Contingency, OPC</i>            |                     | -                                     | -                                      | 35,825                                     |
| <b>Total Project Cost</b>          |                     | <b>277,173</b>                        | <b>277,173</b>                         | <b>394,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> |                     | <b>-</b>                              | <b>-</b>                               | <b>101,029</b>                             |

**PF-4 Equipment Installation Phase 2 (PEI2) Subproject (04-D-125-06)**

|                                       |                      | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|---------------------------------------|----------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>     |                      |                                       |                                        |                                            |
| <b>Design</b>                         |                      |                                       |                                        |                                            |
|                                       | Design               | 173,464                               | 167,698                                | 167,698                                    |
|                                       | Federal Design       |                                       |                                        |                                            |
|                                       | Support              | 3,366                                 | 3,366                                  | 3,366                                      |
|                                       | Contingency          |                                       | -                                      |                                            |
| <b>Total Design</b>                   |                      | <b>176,830</b>                        | <b>171,064</b>                         | <b>171,064</b>                             |
| <b>Construction</b>                   |                      |                                       |                                        |                                            |
|                                       | Site Work            | -                                     | -                                      | -                                          |
|                                       | Equipment            | 32,658                                | 32,658                                 | 32,658                                     |
|                                       | Construction         | 612,794                               | 706,455                                | 706,455                                    |
|                                       | Federal Construction |                                       |                                        |                                            |
|                                       | Support              | 49,300                                | 49,300                                 | 49,300                                     |
|                                       | Contingency          | 129,213                               | 143,979                                | 143,979                                    |
| <b>Total Construction</b>             |                      | <b>823,965</b>                        | <b>932,392</b>                         | <b>932,392</b>                             |
| <b>Other TEC (if any)</b>             |                      |                                       |                                        |                                            |
|                                       | Cold Startup         | -                                     | -                                      | -                                          |
|                                       | Contingency          | -                                     | -                                      | -                                          |
| <b>Total, Other TEC</b>               |                      | <b>-</b>                              | <b>-</b>                               | <b>-</b>                                   |
| <b>Total Estimated Cost (TEC)</b>     |                      | <b>1,000,795</b>                      | <b>1,103,456</b>                       | <b>1,103,456</b>                           |
| <i>Contingency, TEC</i>               |                      | <i>129,213</i>                        | <i>143,979</i>                         | <i>143,979</i>                             |
| <b>Other Project Costs (OPC)</b>      |                      |                                       |                                        |                                            |
| OPC D&D                               |                      |                                       |                                        |                                            |
| OPC except D&D                        |                      |                                       |                                        |                                            |
|                                       | Conceptual Planning  | -                                     | -                                      | -                                          |
|                                       | Conceptual Design    | -                                     | -                                      | -                                          |
|                                       | Other OPC Costs      | 64,114                                | 64,114                                 | 64,114                                     |
|                                       | Federal OPC Support  | 3,434                                 | 3,434                                  | 3,434                                      |
|                                       | Contingency          | 14,812                                | 14,812                                 | 14,812                                     |
| <b>Total OPC</b>                      |                      | <b>82,360</b>                         | <b>82,360</b>                          | <b>82,360</b>                              |
| <i>Contingency, OPC</i>               |                      | <i>14,812</i>                         | <i>14,812</i>                          | <i>14,812</i>                              |
| <b>Total Project Cost<sup>1</sup></b> |                      | <b>1,083,155</b>                      | <b>1,185,816</b>                       | <b>1,185,816</b>                           |
| <b>Total Contingency (TEC+OPC)</b>    |                      | <b>144,025</b>                        | <b>158,791</b>                         | <b>158,791</b>                             |

<sup>1</sup> The current funding profile for PEI2 of \$1,083,155 is less than the TPC of \$1,185,816,000 in CD-1RR.

**RLUOB Hazard Category 3 (RC3) (04-D-125-07)**

|                                    |                        | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                        |                                       |                                        |                                            |
| <b>Design</b>                      |                        |                                       |                                        |                                            |
|                                    | Design                 | 32,408                                | 32,408                                 | N/A                                        |
|                                    | Contingency            | -                                     | -                                      | N/A                                        |
| <b>Total Design</b>                |                        | <b>32,408</b>                         | <b>32,408</b>                          | <b>N/A</b>                                 |
| <b>Construction</b>                |                        |                                       |                                        |                                            |
|                                    | Site Work              | -                                     | -                                      | N/A                                        |
|                                    | Equipment/Construction | -                                     | -                                      | N/A                                        |
|                                    | Other, as needed       | -                                     | -                                      | N/A                                        |
|                                    | Contingency            | -                                     | -                                      | N/A                                        |
| <b>Total Construction</b>          |                        | <b>-</b>                              | <b>-</b>                               | <b>N/A</b>                                 |
| <b>Other TEC (if any)</b>          |                        |                                       |                                        |                                            |
|                                    | Cold Startup           | -                                     | -                                      | N/A                                        |
|                                    | Contingency            | -                                     | -                                      | N/A                                        |
| <b>Total, Other TEC</b>            |                        | <b>-</b>                              | <b>-</b>                               | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                        | <b>32,408</b>                         | <b>32,408</b>                          | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                        | <i>-</i>                              | <i>-</i>                               | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                        |                                       |                                        |                                            |
| OPC except D&D                     |                        |                                       |                                        |                                            |
|                                    | Conceptual Planning    | -                                     | -                                      | N/A                                        |
|                                    | Conceptual Design      | -                                     | -                                      | N/A                                        |
|                                    | Other OPC Costs        | 39,846                                | 39,846                                 | N/A                                        |
|                                    | Contingency            | -                                     | -                                      | N/A                                        |
| <b>Total OPC</b>                   |                        | <b>39,846</b>                         | <b>39,846</b>                          | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                        | <i>-</i>                              | <i>-</i>                               | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                        | <b>72,254</b>                         | <b>72,254</b>                          | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                        | <b>-</b>                              | <b>-</b>                               | <b>N/A</b>                                 |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year         | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears | Total     |
|----------------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|
| FY 2019              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,513,236   | -       | -       | -       | -       | -       | -       | -       | 363,994  | 2,877,230 |
| FY 2020              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 1,891,753   | -       | -       | -       | -       | -       | -       | -       | -        | 1,891,753 |
| FY 2021              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,667,549   | 198,477 | 11,204  | -       | -       | -       | -       | -       | -        | 2,877,230 |
| FY 2022              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,197,487   | -       | -       | -       | -       | -       | -       | -       | 688,743  | 2,886,230 |
| FY 2023              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,610,693   | 167,867 | -       | -       | -       | -       | -       | -       | -        | 2,778,560 |
| FY 2024              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,554,109   | 77,000  | 21,204  | -       | -       | -       | -       | -       | -        | 2,652,313 |
| FY 2026              | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | N/A       |
|                      | TPC  | 2,485,269   | -       | 50,000  | N/A     | N/A     | N/A     | N/A     | N/A     | 350,961  | 2,886,230 |
| FY 2027 <sup>1</sup> | TEC  | 2,156,675   | -       | -       | 110,000 | 77,200  | 69,120  | -       | -       | -        | 2,412,995 |
|                      | OPC  | 328,594     | -       | -       | -       | 35,000  | 6,980   | -       | -       | -        | 370,574   |
|                      | TPC  | 2,485,269   | -       | -       | 110,000 | 112,200 | 76,100  | -       | -       | -        | 2,783,569 |

<sup>1</sup> The current funding profile for CMRR with a total project cost of \$2,783,569 is less than the performance baseline's overall total project cost estimate is \$2,886,230,000.

## 6. Related Operations and Maintenance Funding Requirements

|                                                         |            |
|---------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy <sup>1</sup> | 3Q FY 2034 |
| Expected Useful Life                                    | 50 years   |
| Expected Future Start of D&D of this capital asset      | 3Q FY 2084 |

### Related Funding Requirements (Budget Authority in Millions of Dollars) 2016 Base Dollars

| Funding Requirement        | Annual Costs      |                  | Life Cycle Costs  |                  |
|----------------------------|-------------------|------------------|-------------------|------------------|
|                            | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate |
| Operations and Maintenance | 25                | 25               | 1,250             | 1,250            |

## 7. D&D Information

The scope parameters established at CD-1 provided necessary Site Infrastructure Improvements (office facilities, physical security, warehouse, material staging and laydown area, access control and change rooms, etc.) to support AC/MC mission relocation, and to enable increased construction capacity, risk mitigation, and project efficiency. These activities will include an increase in site square footage and the D&D of equipment within existing facilities. The D&D of existing facilities is not funded on this project.

CMR D&D is not part of the CMRR project scope. Some removal of contaminated equipment in PF-4 for space reuse will occur using project funds.

| Gross Square Footage Created/Eliminated                                                                                           | RLUOB/<br>REI1<br>Square<br>Feet | REI2/<br>PEI1<br>Square<br>Feet | RC3/<br>PEI2<br>Square<br>Feet |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|--------------------------------|
| New area constructed previously by this project at Los Alamos National Laboratory                                                 | 225,757                          | 50,000                          | 127,500                        |
| Area of D&D in this project at Los Alamos National Laboratory                                                                     | -                                | -                               | -                              |
| Area at Los Alamos National Laboratory to be transferred, sold, and/or D&D outside the project including area previously “banked” | 225,757                          | 50,000                          | 127,500                        |
| Area of D&D in this project at other sites                                                                                        | -                                | -                               | -                              |
| Area at other sites to be transferred, sold, and/or D&D outside the project including area previously “banked”                    | -                                | -                               | -                              |
| Total area eliminated                                                                                                             | -                                | -                               | -                              |

<sup>1</sup> Start date tied to anticipated programmatic operation of RLUOB as a hazard category 3 facility. Individual portions of CMRR project will have different completion dates and life spans.

## **8. Acquisition Approach**

The CMRR Acquisition Strategy is based on procurement strategies specific for each subproject of the CMRR project in order to mitigate overall technical and schedule risk. The RLUOB subproject was executed via LANL-issued design-build subcontract based on performance specifications developed during CMRR Conceptual Design. The REI1 subproject was executed via LANL-issued final design-bid build construction contracts. The REI2 subproject is being executed via LANL-issued final design-bid-build construction contracts. The PEI1 subproject was executed via LANL-issued final design, and the construction was self-performed in the PF-4. The PEI2 subproject is being executed via LANL-issued design subcontracts, and construction is being self-performed in the PF-4. Construction work external to PF-4 is being executed through construction subcontracts. The performance baselines for each baselined subproject have been established upon completion of 90 percent design maturity to allow development of credible cost estimates in accordance with DOE O 413.3B and NNSA policy.

**21-D-511, Savannah River Plutonium Processing Facility (SRPPF)  
Savannah River Site (SRS), Aiken, South Carolina  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 Request for the Savannah River Plutonium Processing Facility (SRPPF) project is \$1,946,523,000. Appropriations may be used for design, construction, or other project costs (OPC). The most recent Department of Energy (DOE) approved Critical Decisions (CD) for the project are:

- Main Processing Building (MPB) Subproject (21-D-511-02) CD-3J, Approve Site Preparation, approved January 16, 2026, by the Deputy Administrator for Defense Programs.
- MPB Subproject (21-D-511-02) CD-3Q (previous scope under CD-3B for Sandfilter and Fanhouse (S&F) Subproject (21-D-511-06)), Approve Long Lead Procurement or Site Preparation, approved October 17, 2025, by the Acting Deputy Administrator for Defense Programs.
- High Fidelity Training and Operations Center (HFTOC) Subproject (21-D-511-05) CD-3A, Approve Early Site Preparation and Long Lead Procurement, approved September 26, 2025, by the Acting Deputy Administrator for Defense Programs.
- HFTOC Subproject (21-D-511-05) CD-3C, Approve Long Lead Specialty Equipment Procurements and Critical Bulk Materials, approved September 26, 2025, by the Acting Deputy Administrator for Defense Programs.
- HFTOC Subproject (21-D-511-05) CD-2/3, Approve Performance Baseline and Start of Construction/Execution, approved February 6, 2026, by the Under Secretary for Nuclear Security and NNSA Administrator.

CD-0, Approve Mission Need for the “Plutonium Modular Approach,” was approved on November 25, 2015. The approved mission need established the requirement for a responsive infrastructure to meet plutonium pit production requirements. This data sheet has been updated to reflect the outcome from approved programmatic changes in the project’s scope that have occurred since CD-1 approval, which is further described in the Significant Changes section below. A Tailoring Strategy (TS), endorsed by the Project Management Risk Committee (PMRC) and Energy Systems Acquisition Advisory Board (ESAAB), was approved October 29, 2024, by the Deputy Secretary as the Chief Executive for Project Management (CE) and Project Management Executive (PME) for SRPPF. The Tailoring Strategy included an exemption to requirements of DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, to allow establishing the DOE O 413.3 Performance Baseline for Hazard Category 1, 2 and 3 nuclear facilities at less than 90 percent design completion to support a CD-2/3 approval in FY 2026. A Federal Project Director (Level IV) is assigned to this project and has approved this Construction Project Data Sheet (CPDS).

NNSA completed the Plutonium Pit Production Analysis of Alternatives (AoA) in October 2017 and the follow-on Plutonium Pit Production Engineering Assessment (EA) in April 2018. Both efforts informed NNSA’s selection of a preferred alternative on May 10, 2018, to continue to invest in Los Alamos National Laboratory (LANL) for the capability to produce no fewer than 30 pits per year (ppy) in 2026, and to repurpose existing facilities at Savannah River Site (SRS) to produce a capability of no fewer than 50 ppy in 2030. Based on information developed to support the CD-1 approval, NNSA determined that achieving the required 50 war reserve (WR) ppy production capacity at the SRS in 2030 is not feasible. Establishing the required SRPPF pit production capacity to support Department of Defense (DoD) requirements remains a high-priority and is essential for sustaining the effectiveness of the Nation’s nuclear deterrent.



The scope, cost and schedule estimates approved at CD-1 include an estimated cost range of \$6,900,000,000 to \$11,100,000,000 and a CD-4 schedule range of 1<sup>st</sup> Quarter FY 2032 to 4<sup>th</sup> Quarter FY 2035. The full project TPC will not be determined until all the subprojects are baselined at CD-2/3 approval. The FY 2027 CPDS reflects a Total Project Cost (TPC) of \$25B as a budgetary placeholder, which aligns with the high end of the \$18B - \$25B estimate range briefed subsequent to the release of the FY 2025 CPDS and reflected as the basis of the Section 4 tables in the FY 2026 CPDS. However, the TPC estimate for the project may change once the MPB subproject achieves CD-2/3.

The M&O contractor submitted a cost and schedule estimate for all project scope through CD-4 in January 2024 based on 50 percent design complete. NNSA evaluated this estimate and determined that the top end of the original approved CD-1 cost range has grown by more than 50 percent. As such and in accordance with DOE O 413.3, NNSA acknowledged that it must reassess the alternative selection process to identify a new alternative or reaffirm the selected alternative. This analysis is commonly referred to as CD-1 Reaffirmation (CD-1R). NNSA began the CD-1R analysis in FY 2025, to confirm the preferred alternative and that it was essential to national security, and CD-1R was approved in August 2025 by the Deputy Secretary of the Department of Energy.

#### **Significant Changes:**

This CPDS is an update of the FY 2026 CPDS and is not a new start.

The FY 2026 appropriation and FY 2027 Request support final design and construction execution of authorized CD-3Xs (as shown in and described under the Critical Milestone History section below), for HFTOC having received CD-2/3 approval in 2Q FY 2026, and for MPB after CD-2/3 approval, which is expected 4Q FY 2026. Construction is expected to continue for the Administrative Building Subproject, providing a Construction Maintenance Building and Procurement Warehouse by the current PME approved CD-4 completion date of 1Q FY 2030.

Providing a status update for ADMIN, HFTOC and MPB since the FY 2026 CPDS:

In FY 2025, NNSA issued letters of concern to the M&O regarding Construction Management (CM) subcontractor performance issues with design progression and execution of authorized CD-3Xs. In February 2025, NNSA authorized the M&O contractor to de-scope the HFTOC design from the CM subcontractor due to CM staff limitations and performance issue with completing design for both HFTOC and MPB. In April 2025, based on opportunities identified during CD-1R, NNSA directed the M&O to relax HFTOC glovebox requirements to maximize the potential for delivery of the completed HFTOC in 4Q FY 2028.

The contractor optimized the HFTOC design, allowing most HFTOC gloveboxes to be fabricated as 'mock' versions. These 'mock' gloveboxes are simpler, less costly, and do not require the stringent specifications or inert atmospheric controls of standard production gloveboxes yet still meet project requirements. This change reduced costs and improves schedules for both the HFTOC subproject and the MPB, especially considering industry's limited glovebox manufacturing capacity. Cost and schedule reductions were detailed in the contractor's CD-2/3 packages.

In May 2025, the M&O contractor submitted a CD-2/3 package for the entire SRPPF Project. NNSA conducted a sufficiency review to determine readiness for an Independent Cost Estimate (ICE) and External Independent Review (EIR) to be conducted by the DOE Office of Project Management (DOE PM). After NNSA sufficiency review, NNSA notified the M&O in June 2025 that the HFTOC CD-2/3 package met sufficiency necessary to perform the ICE for CD-2/3, but that the MPB CD-2/3 package was not sufficient to move forward for ICE

purposes. NNSA identified issues requiring revision of the MPB CD-2/3 package and directed the M&O to revise and resubmit the package to enable NNSA determination of readiness to begin the EIR and ICE process. The HFTOC ICE and EIR were completed leading to HFTOC CD-2/3 approval on February 6, 2026. The revised MPB CD-2/3 package was received from the M&O contractor in January 2026 and NNSA has incentivized the M&O contractor to achieve CD-2/3 approval in 4Q FY 2026. NOTE: Multiple MPB CD-3Xs are planned to be approved through FY 2026. These additional CD-3Xs continue to provide the best value for the project critical path by generating work scopes having final design ready to execute at CD-3X approval versus attempting to re-integrate CD-3X work scopes into the MPB CD-2/3 package. Attempting to reintegrate the CD-3X work scopes into the MPB CD-2/3 package would create significant rework and delay finalization of the MPB CD-2/3 package, which would delay the package review and approval currently forecast for 4Q FY 2026.

In FY 2026 the project continues to focus on acceleration of mature design scopes of work that will be proposed as long lead procurement and site preparation packages as described in the Critical Milestone section with forecasted approval dates. In November 2025 NNSA directed the M&O contractor to further improve the Final Design Complete milestone date to September 2026 by using additional engineering resources external to the MPB. This direction, along with the additional resources the CM gained from the HFTOC descope in FY 2025, pulled the Final Design package delivery into 2Q FY 2026. NNSA has incentivized the M&O contractor to achieve Final Design Completion in conjunction with a CD-2/3 approval of 4Q FY 2026 to enable the project to start full MPB construction execution going into FY 2027.

As of August 2025, there are 81 gloveboxes in fabrication and almost all MPB gloveboxes have been released for limited notice to proceed for vendors to begin procuring materials and long lead specialty facility equipment items. The FY 2027 request will be managed to allow procurement of long lead equipment and materials, initiating fabrication for additional gloveboxes, increased execution of CD-3X work, and HFTOC construction, while balancing the start of full MPB construction in 1Q FY2027.

The MPB CD-2/3 submittal is anticipated to support achievement of CD-4 within the current 1Q FY 2032 – 4Q FY 2035 range and NNSA intends to continue forward with approval of the CD-2/3 package as submitted. The TPC in the Project Cost History tables, and the CD-4 date shown in the Critical Milestone History tables, for the Overall Project will continue to reflect estimates totaling to a \$25B TPC budgetary placeholder until the Performance Baseline TPC and CD-4 date for the MPB Subproject is established by approval of MPB CD-2/3.

In FY 2025, the Defense Nuclear Nonproliferation (DNN) Program partnered with the Offices of Defense Programs (DP) and Nuclear Energy (NE) to assess surplus plutonium inventories at SRS. This assessment was conducted to implement the President's Executive Order on Reinvigorating the Nuclear Industrial Base (EO), which halted the Dilute and Dispose Program except for DOE's legal obligations to the State of South Carolina. The goal of the assessment was to determine which materials are suitable for defense or industry purposes and which, if any, still require disposition. Prior to this assessment, and accounting for potential disposition needs, the Surplus Plutonium Disposition (SPD) Project, a post-CD-2/3 line-item construction project (18-D-150) being executed at SRS, was originally designed to supplement and increase process throughput with the existing SRS surplus plutonium disposition operations. An opportunity to support the SRPPF pit production mission was identified for DNN, working with DP, to repurpose the gloveboxes being procured by the SPD Project and provide them to the Office of Defense Programs to support the SRPPF Project.

NNSA DP evaluated the feasibility of repurposing the SPD gloveboxes, which are intended to be installed in K Area, to perform plutonium purification activities instead of plutonium disposition activities. This repurpose will allow for plutonium purification activities, including the preparation of plutonium metal for eventual transfer to the SRPPF, which is projected to accelerate the First Production Unit (FPU) schedule at SRS. In

early FY 2026, DNN determined that the existing glovebox at Savannah River being used to process surplus plutonium is sufficient to disposition the remaining material to meet the legal obligations to the State of South Carolina and therefore DP could repurpose all three of the SPD gloveboxes for pit production. As a risk mitigation measure, DNN requested that one of the three SPD gloveboxes maintain the capability to perform the dilute and dispose mission, specifically to ensure continued disposition flexibility should industry not accept certain materials for alternative uses.

NNSA DP is completing design and safety basis work and pursuing appropriate DOE O 413.3 approval authority to allow transfer of all equipment, gloveboxes, and support systems from the SPD Project to the SRPPF Project. As part of this effort, design flexibility is being incorporated into one glovebox to retain the capability for the dilute and dispose mission, providing future risk mitigation. Upon receipt of necessary approvals, the CPDS and DOE O 413.3 documentation will be updated, and the equipment, gloveboxes, and support systems will be transferred to the SRPPF project. This transfer will be integrated as a new sub-project, tentatively referred to as the K-Area Plutonium Metal Preparation (KPuMP) Subproject, within the SRPPF Project's scope, cost and schedule baseline. NNSA is considering potentially one or more CD-3Xs, utilizing SRPPF funding, to progress the KPuMP Subproject starting in FY 2026.

### **Critical Milestone History**

#### **Overall Project (21-D-511-02, 21-D-511-03 and 21-D-511-05)**

| Fiscal Quarter or Date |            |                            |            |                 |                       |                 |                                      |
|------------------------|------------|----------------------------|------------|-----------------|-----------------------|-----------------|--------------------------------------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1       | CD-2            | Final Design Complete | CD-3            | CD-4                                 |
| FY 2021                | 11/25/2015 | 4Q FY 2020                 | 2Q FY 2021 | TBD             | TBD                   | TBD             | 4Q FY 2026 - 4Q FY 2031 <sup>1</sup> |
| FY 2022                | 11/25/2015 | 3Q FY 2021                 | 3Q FY 2021 | TBD             | TBD                   | TBD             | 1Q FY 2032 - 4Q FY 2035              |
| FY 2023                | 11/25/2015 | 06/25/2021                 | 06/25/2021 | 1Q FY 2024      | 4Q FY 2023            | 1Q FY 2024      | 1Q FY 2032 - 4Q FY 2035              |
| FY 2024                | 11/25/2015 | 06/25/2021                 | 06/25/2021 | 3Q FY 2025      | 2Q FY 2025            | 3Q FY 2025      | 1Q FY 2032 - 4Q FY 2035 <sup>2</sup> |
| FY 2025                | 11/25/2015 | 06/25/2021                 | 06/25/2021 | 3Q FY 2026      | 2Q FY 2026            | 3Q FY 2026      | 1Q FY 2032 - 4Q FY 2035 <sup>2</sup> |
| FY 2026                | 11/25/2015 | 06/25/2021                 | 06/25/2021 | 1Q - 3Q FY 2026 | 4Q FY 2027            | 1Q - 3Q FY 2026 | 1Q FY 2032 - 4Q FY 2035 <sup>2</sup> |
| FY 2027                | 11/25/2015 | 06/25/2021                 | 06/25/2021 | 4Q FY 2026      | 4Q FY 2026            | 4Q FY 2026      | 1Q FY 2032 - 4Q FY 2035 <sup>2</sup> |

<sup>1</sup> CD-4 range was based on the *Plutonium Pit Production Engineering Assessment*

<sup>2</sup> CD-4 range reflects the range approved at CD-1.

## Main Process Buildings (MPB) Subproject (21-D-511-02)

Fiscal Quarter or Date

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1       | CD-2            | Final Design Complete | CD-3            | CD-4                                 |
|-------------|------------|----------------------------|------------|-----------------|-----------------------|-----------------|--------------------------------------|
| FY 2022     | 11/25/2015 | 3Q FY 2021                 | 3Q FY 2021 | TBD             | TBD                   | TBD             | TBD                                  |
| FY 2023     | 11/25/2015 | 06/25/2021                 | 6/25/2021  | 1Q FY 2024      | 4Q FY 2023            | 1Q FY 2024      | 1Q FY 2032 - 4Q FY 2035 <sup>1</sup> |
| FY 2024     | 11/25/2015 | 06/25/2021                 | 6/25/2021  | 3Q FY 2025      | 2Q FY 2025            | 3Q FY 2025      | 1Q FY 2032 - 4Q FY 2035 <sup>1</sup> |
| FY 2025     | 11/25/2015 | 06/25/2021                 | 6/25/2021  | 3Q FY 2026      | 2Q FY 2026            | 3Q FY 2026      | 1Q FY 2032 - 4Q FY 2035 <sup>1</sup> |
| FY 2026     | 11/25/2015 | 06/25/2021                 | 6/25/2021  | 1Q - 3Q FY 2026 | 4Q FY 2027            | 1Q - 3Q FY 2026 | 1Q FY 2032 - 4Q FY 2035 <sup>1</sup> |
| FY 2027     | 11/25/2015 | 06/25/2021                 | 6/25/2021  | 4Q FY 2026      | 4Q FY 2026            | 4Q FY 2026      | 1Q FY 2032 - 4Q FY 2035 <sup>1</sup> |

Fiscal Quarter or Date

| Fiscal Year | MPB CD-3A  | MPB CD-3C  | MPB CD-3D  | MPB CD-3E  | MPB CD-3F  | MPB CD-3G  | MPB CD-3H  |
|-------------|------------|------------|------------|------------|------------|------------|------------|
| FY 2022     | 3Q FY 2021 | N/A        | N/A        | N/A        | N/A        | N/A        | N/A        |
| FY 2023     | 4Q FY 2022 | N/A        | N/A        | N/A        | N/A        | N/A        | N/A        |
| FY 2024     | 08/30/2022 | 4Q FY 2023 | N/A        | 4Q FY 2023 | 1Q FY 2025 | 1Q FY 2025 | 1Q FY 2025 |
| FY 2025     | 08/30/2022 | 11/20/2023 | N/A        | 2Q FY 2024 | 1Q FY 2025 | 3Q FY 2025 | 1Q FY 2025 |
| FY 2026     | 08/30/2022 | 11/20/2023 | 12/30/2024 | 04/03/2024 | 1Q FY 2026 | 2Q FY 2026 | 10/15/2024 |
| FY 2027     | 08/30/2022 | 11/20/2023 | 12/30/2024 | 04/03/2024 | 4Q FY 2026 | 3Q FY 2026 | 10/15/2024 |

Fiscal Quarter or Date

| Fiscal Year | MPB CD-3I  | MPB CD-3J  | MPB CD-3K  | MPB CD-3L  | MPB CD-3M  |
|-------------|------------|------------|------------|------------|------------|
| FY 2022     | N/A        | N/A        | N/A        | N/A        | N/A        |
| FY 2023     | N/A        | N/A        | N/A        | N/A        | N/A        |
| FY 2024     | TBD        | N/A        | N/A        | N/A        | N/A        |
| FY 2025     | TBD        | N/A        | N/A        | N/A        | N/A        |
| FY 2026     | 12/16/2024 | 4Q FY 2025 | 1Q FY 2026 | 3Q FY 2026 | 3Q FY 2026 |
| FY 2027     | 12/16/2024 | 01/16/2026 | 4Q FY 2026 | 4Q FY 2026 | 4Q FY 2026 |

<sup>1</sup> CD-4 range reflects the range approved at CD-1.

Fiscal Quarter or Date

| Fiscal Year | MPB CD-3N<br>(Formerly<br>USPI CD-3A) | MPB CD-3O<br>(Formerly<br>S&F CD-3A) | MPB CD-3P<br>(Formerly<br>USPI CD-3B) | MPB CD-3Q<br>(Formerly<br>S&F CD-3B) | MPB CD-3R<br>(Formerly S&F<br>CD-3A Scope) |
|-------------|---------------------------------------|--------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------------|
| FY 2022     | 3Q FY 2021                            | N/A                                  | N/A                                   | N/A                                  | N/A                                        |
| FY 2023     | 4Q FY 2022                            | N/A                                  | N/A                                   | N/A                                  | N/A                                        |
| FY 2024     | 4Q FY 2023                            | 4Q FY 2023                           | TBD                                   | 1Q FY 2025                           | N/A                                        |
| FY 2025     | 12/21/2023                            | 2Q FY 2024                           | 2Q FY 2025                            | 1Q FY 2025                           | N/A                                        |
| FY 2026     | 12/21/2023                            | 02/27/2024                           | 2Q FY 2026                            | 2Q FY 2026                           | 02/10/2025                                 |
| FY 2027     | 12/21/2023                            | 02/27/2024                           | 3Q FY 2026                            | 10/17/2025                           | 02/10/2025                                 |

**Administrative Building (ADMIN) Subproject (21-D-511-03)**

Fiscal Quarter or Date

| Fiscal Year | CD-0       | Conceptual<br>Design<br>Complete | CD-1       | CD-2       | Final<br>Design<br>Complete | CD-3       | CD-4       |
|-------------|------------|----------------------------------|------------|------------|-----------------------------|------------|------------|
| FY 2022     | 11/25/2015 | 3Q FY 2021                       | 3Q FY 2021 | TBD        | TBD                         | TBD        | TBD        |
| FY 2023     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 2Q FY 2023 | 1Q FY 2023                  | 2Q FY 2023 | 4Q FY 2030 |
| FY 2024     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 1Q FY 2024 | 1Q FY 2024                  | 1Q FY 2024 | 2Q FY 2026 |
| FY 2025     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 12/12/2023 | 12/12/2023                  | 12/12/2023 | 3Q FY 2027 |
| FY 2026     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 12/12/2023 | 12/12/2023                  | 12/12/2023 | 1Q FY 2030 |
| FY 2027     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 12/12/2023 | 12/12/2023                  | 12/12/2023 | 1Q FY 2030 |

**High Fidelity Training and Operations Center (HFTOC) Subproject (21-D-511-05)**

Fiscal Quarter or Date

| Fiscal Year | CD-0       | Conceptual<br>Design<br>Complete | CD-1       | CD-2           | Final<br>Design<br>Complete | CD-3            | CD-4       |
|-------------|------------|----------------------------------|------------|----------------|-----------------------------|-----------------|------------|
| FY 2022     | 11/15/2015 | 3Q FY 2021                       | 3Q FY 2021 | TBD            | TBD                         | TBD             | TBD        |
| FY 2023     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 2Q FY 2023     | 1Q FY 2023                  | 2Q FY 2023      | 4Q FY 2028 |
| FY 2024     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 3Q FY 2025     | 3Q FY 2025                  | 3Q FY 2025      | 4Q FY 2028 |
| FY 2025     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 4Q FY 2025     | 3Q FY 2025                  | 4Q FY 2025      | 4Q FY 2028 |
| FY 2026     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 1Q – 3QFY 2026 | 4Q FY 2026                  | 1Q – 3Q FY 2026 | 4Q FY 2028 |
| FY 2027     | 11/25/2015 | 06/25/2021                       | 06/25/2021 | 2/6/2026       | 2/6/2026                    | 2/6/2026        | 4Q FY 2028 |

| Fiscal Quarter or Date |             |             |             |
|------------------------|-------------|-------------|-------------|
| Fiscal Year            | HFTOC CD-3A | HFTOC CD-3B | HFTOC CD-3C |
| FY 2024                | 1Q FY 2024  | 1Q FY 2025  | N/A         |
| FY 2025                | 1Q FY 2025  | 1Q FY 2025  | N/A         |
| FY 2026                | 4Q FY 2025  | 10/25/2024  | N/A         |
| FY 2027                | 09/26/2025  | 10/25/2024  | 09/26/2025  |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete (d)

**CD-3** – Approve Start of Construction

**D&D Complete** – Completion of Demolition and Disposal (D&D) work

**CD-4** – Approve Start of Operations or Project Closeout

**MPB Subproject (21-D-511-02) Long Lead Procurement and Site Preparation (Dismantle and Removal (D&R)) CD-3A** – Dismantle and removal of equipment, partially installed commodities, and coatings from Building 226-F. Site preparation activities including temporary ventilation, temporary electrical, temporary communications, and site services contract support activities.

**MPB Subproject (21-D-511-02) Site Preparation CD-3C** – Site preparation activities, including structural demolition and removal of wall sections to facilitate installation of gloveboxes and process equipment to support MPB.

**MPB Subproject (21-D-511-02) Site Preparation CD-3D** – site preparation activities, including construction area fencing, access control stations, parking lot expansion / improvements, and road improvements necessary for logistical coordination and execution.

**MPB Subproject (21-D-511-02) Long Lead Procurement CD-3E** – Initial long lead procurement of gloveboxes and process equipment to support MPB.

**MPB Subproject (21-D-511-02) Long Lead Procurement CD-3F** – Long lead procurement of bulk materials to support MPB.

**MPB Subproject (21-D-511-02) Long Lead Procurement CD-3G** – Long lead procurement of BOP equipment to support MPB.

**MPB Subproject (21-D-511-02) Long Lead Procurement CD-3H** – Second package of long lead procurement of gloveboxes and process equipment to support MPB.

**MPB Subproject (21-D-511-02) Long Lead Procurement CD-3I** –Third package of long lead procurement of gloveboxes and process equipment to support MPB and PRD, Revision 4.

**MPB Subproject (21-D-511-02) Site Preparation CD-3J** - Interior Building Preparation (early construction) to include wall repairs, embed cleanup, exposed rebar mitigations, pour backs and coating (re)application.

**MPB Subproject (21-D-511-02) Site Preparation CD-3K - Building Modifications (early construction)** including structural concrete and mezzanines interior to the MPB, construct North and South Annexes, transformer pads, stair towers, elevator shafts and additional concrete penetrations.

**MPB Subproject (21-D-511-02) Site Preparation CD-3L - Building Modifications (early construction)** including all building, equipment and commodities related to the Compressor Building, Diesel Generator and Fuel Oil Storage, Waste Buildings, Nitrogen Generation, Cooling Tower, Firewater Pumphouse & Tank, and Diesel Fuel Station.

**MPB Subproject (21-D-511-02) Site Preparation CD-3M –** If needed, Overhead Commodity Fabrication and Installation (early construction) to include structural steel, fire sprinkler and HVAC in room branch lines requiring installation prior to glovebox delivery and impacting critical path; balance of concrete modifications and penetrations.

**MPB Subproject (21-D-511-02) Long Lead Procurement and Site Preparation CD-3N (formerly USPI Subproject CD-3A) –** Site preparation and installation of all temporary facilities, utilities (above and below ground), other general temporary infrastructure necessary to support mobilization and onboarding of construction resources, i.e., storage / laydown of construction materials and equipment, shop / fabrication / work areas, etc., to support initiation of SRPPF construction activities. Final site work, including installation of buried process support utilities and a waste transfer line, demolition, and removal of any unneeded MFFF support buildings (temporary and some permanent), and final roadways/grading.

**MPB Subproject (21-D-511-02) Site Preparation CD-3O (formerly S&F Subproject CD-3A) –** Site preparation activities for the sandfilter and fanhouse facilities that includes stormwater drainage relocation and sand filter and fan house excavation.

**MPB Subproject (21-D-511-02) Site Preparation CD-3P (formerly the USPI Subproject CD-3B) –** If needed, additional site preparation activities including underground utilities to support the MPB (early construction).

**MPB Subproject (21-D-511-02) Site Preparation CD-3Q (formerly S&F Subproject CD-3B) –** If needed, additional site preparation activities, including the base mat installation for the sandfilter (early construction).

**MPB Subproject (21-D-511-02) Site Preparation CD-3R (formerly scope under the S&F Subproject CD-3A) –** Site preparation activities for the sandfilter and fanhouse facilities that includes sheet piling / shoring for sand filter excavation and installation of the sand filter mudmat.

**HFTOC Subproject (21-D-511-05) Early Site Preparation and Long Lead Procurement CD-3A –** Site preparation activities for the HFTOC including underground utilities work and building modifications to support receipt and installation of future equipment.

**HFTOC Subproject (21-D-511-05) Long Lead Procurement CD-3B –** Long lead procurement of gloveboxes and equipment to support the HFTOC.

**HFTOC Subproject (21-D-511-05) Long Lead Specialty Equipment Procurements and Critical Bulk Materials CD-3C –** Long lead procurement of major bulk materials and specialty equipment in support of start of HFTOC construction.

## Project Cost History

### Overall Project (21-D-511-02, 21-D-511-03 and 21-D-511-05)

(\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Other | TEC, Total | OPC       | OPC, Total | TPC                     |
|-------------|-------------|-------------------|------------|------------|-----------|------------|-------------------------|
| FY 2021     | 241,896     | 0                 | N/A        | 241,896    | 110,000   | 110,000    | 4,590,000 <sup>1</sup>  |
| FY 2022     | TBD         | TBD               | TBD        | TBD        | TBD       | TBD        | 11,100,000              |
| FY 2023     | 1,550,896   | 6,779,766         | 589,104    | 8,919,766  | 2,180,234 | 2,180,234  | 11,100,000              |
| FY 2024     | 1,686,388   | 6,629,274         | 604,104    | 8,919,766  | 2,180,234 | 2,180,234  | 11,100,000 <sup>2</sup> |
| FY 2025     | 2,386,388   | TBD               | TBD        | TBD        | TBD       | TBD        | TBD                     |
| FY 2026     | 2,821,596   | 15,928,404        | N/A        | 18,750,000 | 6,250,000 | 6,250,000  | 25,000,000 <sup>3</sup> |
| FY 2027     | 2,828,078   | 16,390,649        | N/A        | 19,218,727 | 5,781,273 | 5,781,273  | 25,000,000 <sup>3</sup> |

### MPB Subproject (21-D-511-02)

(\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Other | TEC, Total | OPC       | OPC, Total | TPC                       |
|-------------|-------------|-------------------|------------|------------|-----------|------------|---------------------------|
| FY 2022     | TBD         | TBD               | TBD        | TBD        | TBD       | TBD        | TBD                       |
| FY 2023     | 1,318,896   | 5,704,766         | 441,104    | 7,464,766  | 1,935,234 | 1,935,234  | 9,400,000                 |
| FY 2024     | 1,454,388   | 5,297,274         | 441,104    | 7,192,766  | 1,866,234 | 1,866,234  | 9,059,000                 |
| FY 2025     | 2,154,388   | TBD               | TBD        | TBD        | TBD       | TBD        | TBD                       |
| FY 2026     | 2,650,596   | 14,508,204        | N/A        | 17,158,800 | 5,548,000 | 5,548,000  | 22,706,800 <sup>3</sup>   |
| FY 2027     | 2,643,709   | 15,265,091        | N/A        | 17,908,800 | 5,598,000 | 5,598,000  | \$23,506,800 <sub>3</sub> |

### ADMIN Subproject (21-D-511-03)

(\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Other | TEC, Total | OPC    | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|------------|--------|------------|--------|
| FY 2022     | TBD         | TBD               | TBD        | TBD        | TBD    | TBD        | TBD    |
| FY 2023     | 5,500       | 46,500            | 6,000      | 58,000     | 22,000 | 22,000     | 80,000 |
| FY 2024     | 5,500       | 46,500            | 6,000      | 58,000     | 22,000 | 22,000     | 80,000 |
| FY 2025     | 5,500       | 73,700            | 12,000     | 91,200     | 2,000  | 2,000      | 93,200 |
| FY 2026     | 6,000       | 85,200            | N/A        | 91,200     | 2,000  | 2,000      | 93,200 |
| FY 2027     | 5,387       | 85,813            | N/A        | 91,200     | 2,000  | 2,000      | 93,200 |

<sup>1</sup> TEC and OPC amounts reflect estimated costs for FY 2021 only, the TPC amount reflects the high end of the cost range developed during the *Plutonium Pit Production Engineering Assessment* (EA) in 2018.

<sup>2</sup> TPC amount reflects the high-end cost range developed for the CD-1 package.

<sup>3</sup> TPC values are budgetary placeholders representing the high end of the \$18B - \$25B estimate range.



**HFTOC Subproject (21-D-511-05)**

(\$K)

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Other</b> | <b>TEC, Total</b> | <b>OPC</b> | <b>OPC, Total</b> | <b>TPC</b>             |
|--------------------|--------------------|--------------------------|-------------------|-------------------|------------|-------------------|------------------------|
| FY 2022            | TBD                | TBD                      | TBD               | TBD               | TBD        | TBD               | TBD                    |
| FY 2023            | 33,000             | 262,000                  | 22,000            | 317,000           | 53,000     | 53,000            | 370,000                |
| FY 2024            | 33,000             | 262,000                  | 22,000            | 317,000           | 53,000     | 53,000            | 370,000                |
| FY 2025            | 48,000             | 247,000                  | 22,000            | 317,000           | 53,000     | 53,000            | 370,000                |
| FY 2026            | 165,000            | 1,335,000                | N/A               | 1,500,000         | 700,000    | 700,000           | 2,200,000 <sup>1</sup> |
| FY 2027            | 178,982            | 1,039,745                | N/A               | 1,218,727         | 181,273    | 181,727           | 1,400,000              |

**2. Project Scope and Justification****Scope**

The 21-D-511 project scope includes repurposing Building 226-F, including removal of previously installed equipment and support systems as necessary to accommodate the new pit production mission. Scope includes turnover of all necessary design and quality documentation from the previous mission, any required modifications to Building 226-F and the design, construction and installation of processing equipment, process support systems and buildings, utilities and security features for a capability to produce 50 ppy. The 21-D-511 project will also include transfer, stewardship, and incorporation of select MFFF project government property into the SRPPF project, conversion of the Building 226-2F warehouse building into a high-fidelity training facility, and design and construction of support facilities. Given the special nuclear material (SNM) expected during operations in the SRPPF, Building 226-F will be a Hazard Category 2, Security Category I facility.

The SRPPF approved tailoring strategy includes the following subprojects.

**MPB Subproject (21-D-511-02):** The MPB includes design, procurement, 226-F construction, including CD-3A removal of equipment, partially installed commodities, and coatings from 226-F, testing and start-up of structures, systems and components necessary to produce a minimum of 50 ppy, and upgrade a facility to house first shift of Protection Force safeguards and security staff for training and construction interface purposes during overall project construction. The MPB Subproject now includes - a) the former USPI Subproject scope including: early preparation and installation for all temporary facilities, utilities (above and below ground) and other general temporary infrastructure necessary to support mobilization and onboarding of construction resources, storage / laydown of construction materials and equipment, shop / fabrication / work areas, etc., to support initiation of SRPPF construction activities; and, final site work including installation of buried process support utilities and a waste transfer line, and demolition and removal of any unneeded MFFF temporary support buildings, and final roadways and grading, b) the former S&S Subproject scope including: design and construction of entry control facilities, security fencing, reconfigure and remodel of Building 706-4F building for protective forces and other security infrastructure, and c) the S&F Subproject scope including: site preparation activities and the installation of the sandfilter and fanhouse facilities, with supporting utilities.

<sup>1</sup> TPC value was a budgetary placeholder associated with the high end of the \$18B - \$25B estimate range.

**ADMIN Subproject (21-D-511-03):** The ADMIN Subproject will include design and construction of an approximately 50,000 square foot new Maintenance and Construction support building and an approximately 22,000 square foot procurement warehouse. The Maintenance and Construction support building and procurement warehouse will be constructed to allow for offices and management support during construction and start-up.

**HFTOC Subproject (21-D-511-05):** The HFTOC includes conversion of the 226-2F warehouse building into a high-fidelity training facility for both classroom and hands-on equipment training. This high-fidelity training facility will contain select nearly identical and mock process gloveboxes and equipment lines for key processes, including balance of plant systems, simulating what will be installed in the main process building. This facility will provide the ideal location to perform cold development of future pit builds and train the future pit production workforce at SRS.

### **Justification**

NNSA's ability to produce pits in the required quantities established by the Nuclear Weapons Council (NWC) is an essential component of the nuclear deterrent. An Independent AoA was conducted after CD-0, in accordance with the requirements of Office of Management and Budget (OMB) Circular A-11. Multiple alternatives were analyzed and the AoA identified two preferred alternatives with different construction approaches at two separate locations:

- Refurbishment and repurposing of facilities at the SRS; and,
- Additional footprint to accommodate pit production requirements at LANL.

The NNSA Office of Cost Estimating and Program Evaluation (CEPE) conducted a review of the AoA in October 2017 and recommended that further refinement of the preferred alternatives be completed before selecting an alternative that meets requirements. NNSA contracted with an independent architecture and engineering (A&E) firm to complete the follow-on EA to evaluate two preferred alternatives and two additional alternatives to better inform the selection of an alternative and support conceptual design which was completed on April 20, 2018, along with a workforce analysis.

The NNSA Administrator selected a recommended alternative on May 10, 2018, to repurpose Building 226-F, a partially constructed facility at the SRS, for pit production to meet DoD plutonium pit requirements by 2030. The selected alternative will continue to invest in LANL for the capability to produce 30 ppy, and to repurpose existing facilities at SRS to produce a capability of 80 ppy (both sites) as close to 2030 as possible.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. Funds appropriated under this project may be used for contracted support services to the Federal Project Director and to conduct independent reviews and oversight of design and construction for SRPPF.

### **Key Performance Parameters (KPPs)**

KPPs will be finalized in support of CD-2 documentation, the preliminary KPPs below will be revised in support of CD-2.

| <b>Performance Measure<sup>1</sup></b>                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>226-F Dismantle and Removal (D&amp;R):</b> Complete dismantlement and removal of MFFF equipment and utility commodities in 226-F.                                                                                                                                                                                     |
| <b>50 ppy Process and Equipment:</b> Complete successful Operational Readiness Review including completion of integrated Cold System Testing and turnover of all 50 ppy facility, systems and components identified in the SRPPF PRD to Weapons Production for initiation of hot operations Process Prove-in activities. |
| <b>Physical S&amp;S Infrastructure:</b> Complete successful S&S integrated systems and components testing and reconfiguration of 706-4F including project turnover in support of the 50 PPY SRPPF Process and Equipment Operational Readiness Review.                                                                    |
| <b>HFTOC:</b> Complete Turnover to Operations, and testing of all cold development and training process equipment, and receive approval for HFTOC beneficial occupancy to allow utilization by the Project for Technology maturation and operational preparations, with ultimate turnover to Plutonium Operations        |
| <b>SRPPF Infrastructure:</b> Receive beneficial occupancy to support early project utilization and ultimate operations in accordance with the PRD.                                                                                                                                                                       |

### **3. Project Cost and Schedule**

#### **Financial Schedule (\$K)**

SRPPF funding will be appropriated at the Overall Project level (21-D-511) and be allocated to the subprojects shown in the tables below.

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |                  |
| <b>Design</b>                     |                                              |                    |                  |
| Prior - FY 2024                   | 1,657,396                                    | 1,657,396          | 1,443,676        |
| FY 2025                           | 619,879                                      | 619,879            | 759,524          |
| FY 2026                           | 550,803                                      | 550,803            | 538,376          |
| FY 2027                           | -                                            | -                  | 86,503           |
| <b>Total Design</b>               | <b>2,828,078</b>                             | <b>2,828,078</b>   | <b>2,828,078</b> |
| <b>Construction</b>               |                                              |                    |                  |
| Prior - FY 2024                   | 1,193,485                                    | 1,193,485          | 221,611          |
| FY 2025 <sup>2</sup>              | 870,217                                      | 142,217            | 556,197          |

<sup>1</sup> These Preliminary Key Performance Parameters were developed as part of the CD-1 package.

<sup>2</sup> P.L. 119-21 Working Families Tax Cut (WFTC) Act included Budget Authority of \$728M for SRPPF; obligations occurred in FY 2026.

|                           |                   |                   |                   |
|---------------------------|-------------------|-------------------|-------------------|
| FY 2026                   | 475,947           | 1,203,947         | 1,136,267         |
| FY 2027                   | 1,770,750         | 1,770,750         | 1,695,140         |
| FY 2028                   | 2,195,055         | 2,195,055         | 2,150,612         |
| FY 2029                   | 2,003,053         | 2,003,053         | 1,962,906         |
| FY 2030                   | 2,005,820         | 2,005,820         | 2,074,034         |
| FY 2031                   | 1,916,059         | 1,916,059         | 1,826,346         |
| Outyears                  | 3,960,263         | 3,960,263         | 4,767,536         |
| <b>Total Construction</b> | <b>16,390,649</b> | <b>16,390,649</b> | <b>16,390,649</b> |
| <b>TEC</b>                |                   |                   |                   |
| Prior - FY 2024           | 2,850,881         | 2,850,881         | 1,665,287         |
| FY 2025                   | 1,490,096         | 762,096           | 1,315,720         |
| FY 2026                   | 1,026,750         | 1,754,750         | 1,674,643         |
| FY 2027                   | 1,770,750         | 1,770,750         | 1,781,643         |
| FY 2028                   | 2,195,055         | 2,195,055         | 2,150,612         |
| FY 2029                   | 2,003,053         | 2,003,053         | 1,962,906         |
| FY 2030                   | 2,005,820         | 2,005,820         | 2,074,034         |
| FY 2031                   | 1,916,059         | 1,916,059         | 1,826,346         |
| Outyears                  | 3,960,263         | 3,960,263         | 4,767,536         |
| <b>Total TEC</b>          | <b>19,218,727</b> | <b>19,218,727</b> | <b>19,218,727</b> |

**Overall Project (21-D-511-02, 21-D-511-03 and 21-D-511-05)**

|                                  | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Other Project Costs (OPC)</b> |                                              |                    |                  |
| Prior - FY 2024                  | 487,463                                      | 487,463            | 379,817          |
| FY 2025                          | 37,904                                       | 37,904             | 89               |
| FY 2026                          | 103,250                                      | 103,250            | 55,450           |
| FY 2027                          | 175,773                                      | 175,773            | 128,300          |
| FY 2028                          | 79,545                                       | 79,545             | 202,128          |
| FY 2029                          | 317,039                                      | 317,039            | 391,127          |
| FY 2030                          | 360,674                                      | 360,674            | 340,492          |
| FY 2031                          | 497,765                                      | 497,765            | 541,962          |
| Outyears                         | 3,721,860                                    | 3,721,860          | 3,741,908        |
| <b>Total, OPC</b>                | <b>5,781,273</b>                             | <b>5,781,273</b>   | <b>5,781,273</b> |
| <b>Total Project Costs (TPC)</b> |                                              |                    |                  |
| Prior - FY 2024                  | 3,338,344                                    | 3,338,344          | 2,045,104        |
| FY 2025                          | 1,528,000                                    | 800,000            | 1,315,809        |
| FY 2026                          | 1,130,000                                    | 1,858,000          | 1,730,093        |
| FY 2027                          | 1,946,523                                    | 1,946,523          | 1,909,943        |
| FY 2028                          | 2,274,600                                    | 2,274,600          | 2,352,740        |
| FY 2029                          | 2,320,092                                    | 2,320,092          | 2,354,033        |

|                  |                   |                   |                   |
|------------------|-------------------|-------------------|-------------------|
| FY 2030          | 2,366,494         | 2,366,494         | 2,414,526         |
| FY 2031          | 2,413,824         | 2,413,824         | 2,368,308         |
| Outyears         | 7,682,123         | 7,682,123         | 8,509,444         |
| <b>Total TPC</b> | <b>25,000,000</b> | <b>25,000,000</b> | <b>25,000,000</b> |

**MPB (MPB) Subproject (21-D-511-02) (\$K)**

| <b>MPB</b>                        | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>      |
|-----------------------------------|--------------------------------------------------|--------------------|-------------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                   |
| <b>Design</b>                     |                                                  |                    |                   |
| Prior - FY 2024                   | 1,551,396                                        | 1,551,396          | 1,356,365         |
| FY 2025                           | 555,492                                          | 555,492            | 688,820           |
| FY 2026                           | 536,821                                          | 536,821            | 512,021           |
| FY 2027                           | -                                                | -                  | 86,503            |
| <b>Total Design</b>               | <b>2,643,709</b>                                 | <b>2,643,709</b>   | <b>2,643,709</b>  |
| <b>Construction</b>               |                                                  |                    |                   |
| Prior - FY 2024                   | 1,125,735                                        | 1,125,735          | 221,379           |
| FY 2025 <sup>1</sup>              | 728,000                                          | -                  | 500,063           |
| FY 2026                           | -                                                | 728,000            | 630,943           |
| FY 2027                           | 1,331,106                                        | 1,331,106          | 1,282,380         |
| FY 2028                           | 2,195,055                                        | 2,195,055          | 1,999,504         |
| FY 2029                           | 2,003,053                                        | 2,003,053          | 1,962,906         |
| FY 2030                           | 2,005,820                                        | 2,005,820          | 2,074,034         |
| FY 2031                           | 1,916,059                                        | 1,916,059          | 1,826,346         |
| Outyears                          | 3,960,263                                        | 3,960,263          | 4,767,536         |
| <b>Total Construction</b>         | <b>15,265,091</b>                                | <b>15,265,091</b>  | <b>15,265,091</b> |
| <b>TEC</b>                        |                                                  |                    |                   |
| Prior - FY 2024                   | 2,677,131                                        | 2,677,131          | 1,577,744         |
| FY 2025                           | 1,283,492                                        | 555,492            | 1,188,883         |
| FY 2026                           | 536,821                                          | 1,264,821          | 1,142,964         |
| FY 2027                           | 1,331,106                                        | 1,331,106          | 1,368,883         |
| FY 2028                           | 2,195,055                                        | 2,195,055          | 1,999,504         |
| FY 2029                           | 2,003,053                                        | 2,003,053          | 1,962,906         |
| FY 2030                           | 2,005,820                                        | 2,005,820          | 2,074,034         |

<sup>1</sup> P.L. 119-21 Working Families Tax Cut (WFTC) Act included Budget Authority of \$728M for SRPPF; obligations occurred in FY 2026.

|                  |                   |                   |                   |
|------------------|-------------------|-------------------|-------------------|
| FY 2031          | 1,916,059         | 1,916,059         | 1,826,346         |
| Outyears         | 3,960,263         | 3,960,263         | 4,767,536         |
| <b>Total TEC</b> | <b>17,908,800</b> | <b>17,908,800</b> | <b>17,908,800</b> |

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>      |
|----------------------------------|--------------------------------------------------|--------------------|-------------------|
| <b>Other Project Costs (OPC)</b> |                                                  |                    |                   |
| Prior - FY 2024                  | 484,213                                          | 484,213            | 379,817           |
| FY 2025                          | 23,904                                           | 23,904             | 89                |
| FY 2026                          | 53,000                                           | 53,000             | 4,550             |
| FY 2027                          | 60,000                                           | 60,000             | 55,200            |
| FY 2028                          | 79,545                                           | 79,545             | 142,855           |
| FY 2029                          | 317,039                                          | 317,039            | 391,127           |
| FY 2030                          | 360,674                                          | 360,674            | 340,492           |
| FY 2031                          | 497,765                                          | 497,765            | 541,962           |
| Outyears                         | 3,721,860                                        | 3,721,860          | 3,741,908         |
| <b>Total, OPC</b>                | <b>5,598,000</b>                                 | <b>5,598,000</b>   | <b>5,598,000</b>  |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                   |
| Prior - FY 2024                  | 3,161,344                                        | 3,161,344          | 1,957,561         |
| FY 2025                          | 1,307,396                                        | 579,396            | 1,188,972         |
| FY 2026                          | 589,821                                          | 1,317,821          | 1,147,514         |
| FY 2027                          | 1,391,106                                        | 1,391,106          | 1,424,083         |
| FY 2028                          | 2,274,600                                        | 2,274,600          | 2,142,359         |
| FY 2029                          | 2,320,092                                        | 2,320,092          | 2,354,033         |
| FY 2030                          | 2,366,494                                        | 2,366,494          | 2,414,526         |
| FY 2031                          | 2,413,824                                        | 2,413,824          | 2,368,308         |
| Outyears                         | 7,682,123                                        | 7,682,123          | 8,509,444         |
| <b>Total TPC</b>                 | <b>23,506,800</b>                                | <b>23,506,800</b>  | <b>23,506,800</b> |

**ADMIN Subproject (21-D-511-03) (\$K)**

| <b>ADMIN</b>                      | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|----------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |               |
| <b>Design</b>                     |                                              |                    |               |
| Prior - FY 2024                   | 6,000                                        | 6,000              | 5,656         |
| FY 2025                           | (613)                                        | (613)              | (269)         |
| FY 2026                           | -                                            | -                  | -             |
| FY 2027                           | -                                            | -                  | -             |
| <b>Total Design</b>               | <b>5,387</b>                                 | <b>5,387</b>       | <b>5,387</b>  |
| <b>Construction</b>               |                                              |                    |               |
| Prior - FY 2024                   | 33,750                                       | 33,750             | 232           |
| FY 2025                           | 41,217                                       | 41,217             | 28,920        |
| FY 2026                           | 10,846                                       | 10,846             | 39,501        |
| FY 2027                           | -                                            | -                  | 17,160        |
| FY 2028                           | -                                            | -                  | -             |
| FY 2029                           | -                                            | -                  | -             |
| FY 2030                           | -                                            | -                  | -             |
| FY 2031                           | -                                            | -                  | -             |
| Outyears                          | -                                            | -                  | -             |
| <b>Total Construction</b>         | <b>85,813</b>                                | <b>85,813</b>      | <b>85,813</b> |
| <b>TEC</b>                        |                                              |                    |               |
| Prior - FY 2024                   | 39,750                                       | 39,750             | 5,888         |
| FY 2025                           | 40,604                                       | 40,604             | 28,651        |
| FY 2026                           | 10,846                                       | 10,846             | 39,501        |
| FY 2027                           | -                                            | -                  | 17,160        |
| FY 2028                           | -                                            | -                  | -             |
| FY 2029                           | -                                            | -                  | -             |
| FY 2030                           | -                                            | -                  | -             |
| FY 2031                           | -                                            | -                  | -             |
| Outyears                          | -                                            | -                  | -             |
| <b>Total TEC</b>                  | <b>91,200</b>                                | <b>91,200</b>      | <b>91,200</b> |

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Other Project Costs (OPC)</b> |                                                  |                    |               |
| Prior - FY 2024                  | 750                                              | 750                | -             |
| FY 2025                          | 1,000                                            | 1,000              | -             |
| FY 2026                          | 250                                              | 250                | 900           |
| FY 2027                          | -                                                | -                  | 1,100         |
| FY 2028                          | -                                                | -                  | -             |
| FY 2029                          | -                                                | -                  | -             |
| FY 2030                          | -                                                | -                  | -             |
| FY 2031                          | -                                                | -                  | -             |
| Outyears                         | -                                                | -                  | -             |
| <b>Total, OPC</b>                | <b>2,000</b>                                     | <b>2,000</b>       | <b>2,000</b>  |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |               |
| Prior - FY 2024                  | 40,500                                           | 40,500             | 5,888         |
| FY 2025                          | 41,604                                           | 41,604             | 28,651        |
| FY 2026                          | 11,096                                           | 11,096             | 40,401        |
| FY 2027                          | -                                                | -                  | 18,260        |
| FY 2028                          | -                                                | -                  | -             |
| FY 2029                          | -                                                | -                  | -             |
| FY 2030                          | -                                                | -                  | -             |
| FY 2031                          | -                                                | -                  | -             |
| Outyears                         | -                                                | -                  | -             |
| <b>Total TPC</b>                 | <b>93,200</b>                                    | <b>93,200</b>      | <b>93,200</b> |



**HFTOC Subproject (21-D-511-05)**

| <b>HFTOC</b>                      | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|--------------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                  |
| <b>Design</b>                     |                                                  |                    |                  |
| Prior - FY 2024                   | 100,000                                          | 100,000            | 81,655           |
| FY 2025                           | 65,000                                           | 65,000             | 70,972           |
| FY 2026                           | 13,982                                           | 13,982             | 26,355           |
| FY 2027                           | -                                                | -                  | -                |
| <b>Total Design</b>               | <b>178,982</b>                                   | <b>178,982</b>     | <b>178,982</b>   |
| <b>Construction</b>               |                                                  |                    |                  |
| Prior - FY 2024                   | 34,000                                           | 34,000             | -                |
| FY 2025                           | 101,000                                          | 101,000            | 27,214           |
| FY 2026                           | 465,101                                          | 465,101            | 465,823          |
| FY 2027                           | 439,644                                          | 439,644            | 395,600          |
| FY 2028                           | -                                                | -                  | 151,108          |
| FY 2029                           | -                                                | -                  | -                |
| FY 2030                           | -                                                | -                  | -                |
| FY 2031                           | -                                                | -                  | -                |
| Outyears                          | -                                                | -                  | -                |
| <b>Total Construction</b>         | <b>1,039,745</b>                                 | <b>1,039,745</b>   | <b>1,039,745</b> |
| <b>TEC</b>                        |                                                  |                    |                  |
| Prior - FY 2024                   | 134,000                                          | 134,000            | 81,655           |
| FY 2025                           | 166,000                                          | 166,000            | 98,186           |
| FY 2026                           | 479,083                                          | 479,083            | 492,178          |
| FY 2027                           | 439,644                                          | 439,644            | 395,600          |
| FY 2028                           | -                                                | -                  | 151,108          |
| FY 2029                           | -                                                | -                  | -                |
| FY 2030                           | -                                                | -                  | -                |
| FY 2031                           | -                                                | -                  | -                |
| Outyears                          | -                                                | -                  | -                |
| <b>Total TEC</b>                  | <b>1,218,727</b>                                 | <b>1,218,727</b>   | <b>1,218,727</b> |

|                                  | Budget<br>Authority<br>(Appropriations) | Obligations      | Costs            |
|----------------------------------|-----------------------------------------|------------------|------------------|
| <b>Other Project Costs (OPC)</b> |                                         |                  |                  |
| Prior - FY 2024                  | 2,500                                   | 2,500            | -                |
| FY 2025                          | 13,000                                  | 13,000           | -                |
| FY 2026                          | 50,000                                  | 50,000           | 50,000           |
| FY 2027                          | 115,773                                 | 115,773          | 72,000           |
| FY 2028                          | -                                       | -                | 59,273           |
| FY 2029                          | -                                       | -                | -                |
| FY 2030                          | -                                       | -                | -                |
| FY 2031                          | -                                       | -                | -                |
| Outyears                         | -                                       | -                | -                |
| <b>Total, OPC</b>                | <b>181,273</b>                          | <b>181,273</b>   | <b>181,273</b>   |
| <b>Total Project Costs (TPC)</b> |                                         |                  |                  |
| Prior - FY 2024                  | 136,500                                 | 136,500          | 81,655           |
| FY 2025                          | 179,000                                 | 179,000          | 98,186           |
| FY 2026                          | 529,083                                 | 529,083          | 542,178          |
| FY 2027                          | 555,417                                 | 555,417          | 467,600          |
| FY 2028                          | -                                       | -                | 210,381          |
| FY 2029                          | -                                       | -                | -                |
| FY 2030                          | -                                       | -                | -                |
| FY 2031                          | -                                       | -                | -                |
| Outyears                         | -                                       | -                | -                |
| <b>Total TPC</b>                 | <b>1,400,000</b>                        | <b>1,400,000</b> | <b>1,400,000</b> |

#### 4. Details of Project Cost Estimate<sup>1</sup>

##### Overall Project (21-D-511-02, 21-D-511-03 and 21-D-511-05) (\$K)

|                                   | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|-----------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b> |                              |                               |                                   |
| <b>Design</b>                     |                              |                               |                                   |
| Design                            | 2,828,078                    | 2,492,500                     | N/A                               |
| Contingency                       | -                            | 329,096                       | N/A                               |
| <b>Total Design</b>               | <b>2,828,078</b>             | <b>2,821,596</b>              | <b>N/A</b>                        |

<sup>1</sup> The subprojects are pre-CD-2, so there are no validated baselines to include in the tables.

|                                    |                              |                   |                   |            |
|------------------------------------|------------------------------|-------------------|-------------------|------------|
| <b>Construction</b>                |                              |                   |                   |            |
|                                    | Site Preparation             | 1,342,618         | 1,337,250         | N/A        |
|                                    | Equipment                    | 3,866,723         | 4,021,800         | N/A        |
|                                    | Construction                 | 8,758,697         | 8,160,600         | N/A        |
|                                    | Contingency                  | 2,422,611         | 2,408,754         | N/A        |
| <b>Total Construction</b>          |                              | <b>16,390,649</b> | <b>15,928,404</b> | <b>N/A</b> |
| <b>Other TEC (if any)</b>          |                              |                   |                   |            |
|                                    | Cold Startup                 | N/A               | N/A               | N/A        |
|                                    | Contingency                  | N/A               | N/A               | N/A        |
|                                    | Total, Other TEC             | N/A               | N/A               | N/A        |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>19,218,727</b> | <b>18,750,000</b> | <b>N/A</b> |
| <b>Contingency, TEC</b>            |                              | <b>2,422,611</b>  | <b>2,737,850</b>  | <b>N/A</b> |
| <b>Other Project Costs (OPC)</b>   |                              |                   |                   |            |
| OPC except D&D                     |                              |                   |                   |            |
|                                    | Conceptual Planning & Design | 367,896           | 367,896           | N/A        |
|                                    | Post CD-1 Costs              | 4,863,127         | 5,301,854         | N/A        |
|                                    | Contingency                  | 550,250           | 580,250           | N/A        |
| <b>Total OPC</b>                   |                              | <b>5,781,273</b>  | <b>6,250,000</b>  | <b>N/A</b> |
| <b>Contingency, OPC</b>            |                              | <b>550,250</b>    | <b>580,250</b>    | <b>N/A</b> |
| <b>Total Project Cost</b>          |                              | <b>25,000,000</b> | <b>25,000,000</b> | <b>N/A</b> |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>2,972,861</b>  | <b>3,318,100</b>  | <b>N/A</b> |

**MPB Subproject (21-D-511-02) (\$K)**

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 2,643,709                             | 2,342,000                              | N/A                                        |
|                                    | Contingency                  | -                                     | 308,596                                | N/A                                        |
| <b>Total Design</b>                |                              | <b>2,643,709</b>                      | <b>2,650,596</b>                       | <b>N/A</b>                                 |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | 1,250,000                             | 1,250,000                              | N/A                                        |
|                                    | Equipment                    | 3,516,800                             | 3,516,800                              | N/A                                        |
|                                    | Construction                 | 8,306,887                             | 7,550,000                              | N/A                                        |
|                                    | Contingency                  | 2,191,404                             | 2,191,404                              | N/A                                        |
| <b>Total Construction</b>          |                              | <b>15,265,091</b>                     | <b>14,508,204</b>                      | <b>N/A</b>                                 |
| <b>Other TEC (if any)</b>          |                              |                                       |                                        |                                            |
|                                    | Cold Startup                 | N/A                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | N/A                                   | N/A                                    | N/A                                        |
| Total, Other TEC                   |                              | N/A                                   | N/A                                    | N/A                                        |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>17,908,800</b>                     | <b>17,158,800</b>                      | <b>N/A</b>                                 |
| <b>Contingency, TEC</b>            |                              | <b>2,191,404</b>                      | 2,500,000                              | <b>N/A</b>                                 |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
| OPC except D&D                     |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | 367,896                               | 367,896                                | N/A                                        |
|                                    | Post CD-1 OPC Costs          | 4,730,104                             | 4,680,104                              | N/A                                        |
|                                    | Contingency                  | 500,000                               | 500,000                                | N/A                                        |
| <b>Total OPC</b>                   |                              | <b>5,598,000</b>                      | <b>5,548,000</b>                       | <b>N/A</b>                                 |
| <b>Contingency, OPC</b>            |                              | <b>500,000</b>                        | 500,000                                | <b>N/A</b>                                 |
| <b>Total Project Cost</b>          |                              | <b>23,506,800</b>                     | <b>22,706,800</b>                      | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>2,691,404</b>                      | <b>3,000,000</b>                       | <b>N/A</b>                                 |

**ADMIN Subproject (21-D-511-03)**

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 5,387                                 | 5,500                                  | 5,000                                      |
|                                    | Contingency                  | -                                     | 500                                    | 500                                        |
| <b>Total Design</b>                |                              | <b>5,387</b>                          | <b>6,000</b>                           | <b>5,500</b>                               |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | 7,250                                 | 7,250                                  | 7,250                                      |
|                                    | Equipment                    | 5,000                                 | 5,000                                  | 5,000                                      |
|                                    | Construction                 | 61,213                                | 60,600                                 | 51,100                                     |
|                                    | Contingency                  | 12,350                                | 12,350                                 | 10,350                                     |
| <b>Total Construction</b>          |                              | <b>85,813</b>                         | <b>85,200</b>                          | <b>73,700</b>                              |
| <b>Other TEC (if any)</b>          |                              |                                       |                                        |                                            |
|                                    | Cold Startup                 | N/A                                   | N/A                                    | 10,000                                     |
|                                    | Contingency                  | N/A                                   | N/A                                    | 2,000                                      |
|                                    | Total, Other TEC             | N/A                                   | N/A                                    | 12,000                                     |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>91,200</b>                         | <b>91,200</b>                          | <b>91,200</b>                              |
| <b>Contingency, TEC</b>            |                              | <b>12,350</b>                         | <b>12,850</b>                          | <b>12,850</b>                              |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
| OPC except D&D                     |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | -                                     | -                                      | -                                          |
|                                    | Post CD-1 OPC Costs          | 1,750                                 | 1,750                                  | 1,750                                      |
|                                    | Contingency                  | 250                                   | 250                                    | 250                                        |
| <b>Total OPC</b>                   |                              | <b>2,000</b>                          | <b>2,000</b>                           | <b>2,000</b>                               |
| <b>Contingency, OPC</b>            |                              | <b>250</b>                            | <b>250</b>                             | <b>250</b>                                 |
| <b>Total Project Cost</b>          |                              | <b>93,200</b>                         | <b>93,200</b>                          | <b>93,200</b>                              |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>12,600</b>                         | <b>13,100</b>                          | <b>13,100</b>                              |

**HFTOC Subproject (21-D-511-05)**

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 178,982                               | 145,000                                | N/A                                        |
|                                    | Contingency                  | -                                     | 20,000                                 | N/A                                        |
| <b>Total Design</b>                |                              | <b>178,982</b>                        | <b>165,000</b>                         | <b>N/A</b>                                 |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | 85,368                                | 80,000                                 | N/A                                        |
|                                    | Equipment                    | 344,923                               | 500,000                                | N/A                                        |
|                                    | Construction                 | 390,597                               | 550,000                                | N/A                                        |
|                                    | Contingency                  | 218,857                               | 205,000                                | N/A                                        |
| <b>Total Construction</b>          |                              | <b>1,039,745</b>                      | <b>1,335,000</b>                       | <b>N/A</b>                                 |
| <b>Other TEC (if any)</b>          |                              |                                       |                                        |                                            |
|                                    | Cold Startup                 | N/A                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | N/A                                   | N/A                                    | N/A                                        |
|                                    | Total, Other TEC             | N/A                                   | N/A                                    | N/A                                        |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>1,218,727</b>                      | <b>1,500,000</b>                       | <b>N/A</b>                                 |
| <b>Contingency, TEC</b>            |                              | <b>218,857</b>                        | <b>225,000</b>                         | <b>N/A</b>                                 |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
| OPC except D&D                     |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | -                                     | -                                      | N/A                                        |
|                                    | Post CD-1 OPC Costs          | 131,273                               | 620,000                                | N/A                                        |
|                                    | Contingency                  | 50,000                                | 80,000                                 | N/A                                        |
| <b>Total OPC</b>                   |                              | <b>181,273</b>                        | <b>700,000</b>                         | <b>N/A</b>                                 |
| <b>Contingency, OPC</b>            |                              | <b>50,000</b>                         | <b>80,000</b>                          | <b>N/A</b>                                 |
| <b>Total Project Cost</b>          |                              | <b>1,400,000</b>                      | <b>2,200,000</b>                       | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>268,857</b>                        | <b>305,000</b>                         | <b>N/A</b>                                 |

## 5. Schedule of Appropriations Requests (\$K)

(\$K)

| Request Year | Type | Prior Years | FY2025    | FY2026    | FY2027    | FY2028    | FY2029    | FY2030    | FY2031    | Out Years  | Total      |
|--------------|------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
| FY 2021      | TEC  | 241,896     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A        | N/A        |
|              | OPC  | 436,000     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A        | N/A        |
|              | TPC  | 677,896     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A        | N/A        |
| FY 2022      | TEC  | 686,896     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A        | N/A        |
|              | OPC  | 451,213     | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A        | N/A        |
|              | TPC  | 1,138,109   | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | N/A       | 9,961,891  | 11,100,000 |
| FY 2023      | TEC  | 2,199,131   | 984,508   | 1,001,339 | 877,000   | 1,100,000 | 450,000   | 800,000   | 1,000,000 | 507,788    | 8,919,766  |
|              | OPC  | 497,213     | 30,000    | 50,000    | 75,000    | 100,000   | 750,000   | 400,000   | 200,000   | 78,021     | 2,180,234  |
|              | TPC  | 2,696,344   | 1,014,508 | 1,051,339 | 952,000   | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 585,809    | 11,100,000 |
| FY 2024      | TEC  | 2,699,131   | 1,070,000 | 1,150,000 | 1,125,000 | 1,130,500 | 450,000   | 600,000   | 400,000   | 295,135    | 8,919,766  |
|              | OPC  | 497,213     | 30,000    | 50,000    | 75,000    | 99,500    | 749,000   | 399,500   | 202,000   | 78,021     | 2,180,234  |
|              | TPC  | 3,196,344   | 1,100,000 | 1,200,000 | 1,200,000 | 1,230,000 | 1,199,000 | 999,500   | 602,000   | 373,156    | 11,100,000 |
| FY 2025      | TEC  | 2,708,881   | 1,158,000 | 1,402,750 | 1,545,000 | 1,307,875 | 1,386,979 | TBD       | TBD       | TBD        | TBD        |
|              | OPC  | 487,463     | 42,000    | 77,250    | 215,000   | 622,125   | 782,021   | TBD       | TBD       | TBD        | TBD        |
|              | TPC  | 3,196,344   | 1,200,000 | 1,480,000 | 1,760,000 | 1,930,000 | 2,169,000 | TBD       | TBD       | TBD        | TBD        |
| FY 2026      | TEC  | 1,870,896   | 979,985   | 758,000   | 1,618,750 | N/A       | N/A       | N/A       | N/A       | 13,522,369 | 18,750,000 |
|              | OPC  | 467,213     | 20,250    | 42,000    | 107,250   | N/A       | N/A       | N/A       | N/A       | 5,613,287  | 6,250,000  |
|              | TPC  | 2,338,109   | 1,000,235 | 800,000   | 1,726,000 | N/A       | N/A       | N/A       | N/A       | 19,135,656 | 25,000,000 |
| FY 2027      | TEC  | 2,850,881   | 1,490,096 | 1,026,750 | 1,770,750 | 2,195,055 | 2,003,053 | 2,005,820 | 1,916,059 | 3,960,263  | 19,218,727 |
|              | OPC  | 487,463     | 37,904    | 103,250   | 175,773   | 79,545    | 317,039   | 360,674   | 497,765   | 3,721,860  | 5,781,273  |
|              | TPC  | 3,338,344   | 1,528,000 | 1,130,000 | 1,946,523 | 2,274,600 | 2,320,092 | 2,366,494 | 2,413,824 | 7,682,123  | 25,000,000 |

## 6. Related Operations and Maintenance Funding Requirements

Start of Operation or Beneficial Occupancy (fiscal quarter or date)

1Q FY 2032 – 4Q FY 2035

Expected Useful Life (number of years)

50

Expected Future Start of D&D of this capital asset (fiscal quarter)

1Q FY 2082 – 4Q FY 2085

Related Funding Requirements  
(Budget Authority in Millions of Dollars)

|                            | Annual Costs            |                        | Life Cycle Costs <sup>1</sup> |                        |
|----------------------------|-------------------------|------------------------|-------------------------------|------------------------|
|                            | Previous Total Estimate | Current Total Estimate | Previous Total Estimate       | Current Total Estimate |
| Operations and Maintenance | 600                     | 600                    | 48,100                        | 48,100                 |

## 7. D&D Information

The SRPPF plutonium processing capability will be constructed within the existing partially completed 226-F building. This will require dismantlement and removal of previously installed MFFF equipment and support systems and facilities as necessary to accommodate the new plutonium production mission. Costs for dismantlement and removal of previously installed MFFF equipment will be part of the MPB Subproject.

## 8. Acquisition Approach

On May 10, 2018, in support of CD-1, NNSA requested SRNS to lead the SRPPF CD-1 Conceptual Design development activities while leveraging the LANL plutonium processing knowledge and ongoing project and operation activities. SRNS utilized a LANL subcontract with Merrick to provide the process conceptual design. The SRNS utilized an affiliate sub-contract relationship with Fluor Inc., located in Greenville S.C., to provide design of the balance of plant systems. SRNS was responsible for the nuclear safety and Environmental Safety & Health (ES&H) system conceptual design development while relying on the Physical Security Center of Excellence (PSCOE) from Sandia National Laboratories (SNL) for the physical security conceptual design.

In FY 2022, NNSA directed the M&O contractor to solicit and award a CM Contractor to assume all the Engineering, Procurement, and Construction (EPC) responsibilities. The CM and design partners will continue engaging qualified specialty equipment and materials suppliers to improve the quality of design enabling optimum procurements and construction execution. Transition of the EPC activities is complete to the CM contractor, and SRNS remains responsible as the Facility Design Authority (FDA) for the facility, the production equipment, balance of plant support systems, and nuclear safety and security systems. SRNS also remains as the operational authority for ensuring SRPPF operability, maintainability, and sustainability requirements flowed down to the CM are implemented and controlled throughout the project execution. As the plutonium program and project integrator, SRNS is also responsible for the program and operational assurance during design, procurement, construction, start-up and properly sequencing of the project operational readiness and transition. LANL will continue to support the FDA by providing process inputs and oversight for specialty process equipment. LANL will also support the FDA and serve as the Weapons Design Agency for the first pit type to be produced at SRS. The SRNS contract will include Contract Line-Item Numbers (CLINS) to execute NNSA capital line items at SRS to align the applicable requirements and appropriate incentives to optimize the project execution and completion.

Additionally, as a result of M&O performance issues after approval of CD-2/3, an acquisition strategy change was proposed to, and approved by, the PME for the ADMIN Subproject. The ADMIN Subproject is now being executed through an IA with the USACE. The USACE will be considered a construction execution option for other scopes of work if NNSA determines the USACE would provide better value to the government and improve the confidence of project completion.

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<sup>1</sup> Current Life Cycle Costs and Annual Costs are based on an updated Life Cycle Cost Estimate performed in January 2021.



The SRPPF project is continuing to look for opportunities to expedite execution and has implemented concurrent review processes to support the technical, acquisition and project management submittal processes. Federal reviews are being executed in parallel with the contractor's independent team and management reviews. A consolidated comment resolution process is being implemented. The Contractor providing complete, quality submittals will be key to successful implementation and minimizing the Federal oversight and risk acceptance.

The SRPPF project continues to utilize lessons learned in acquisition and execution of similarly sized nuclear projects, including the execution of the Los Alamos Plutonium Pit Production Project and Y-12 UPF Project. These lessons learned include:

- early long-lead material and engineered procurements, including gloveboxes, BOP equipment, and bulk materials; and
- early site preparation, to include D&R required to prepare existing SRS facilities for SRPPF CD-2/3 design and construction activities.
- Construction planning and productivity factors
- Testing, Start-up and Transition to Operations

The approved CD-1 package identified a multi-subproject construction execution approach. This acquisition approach is continuing to be refined as design matures, along with integration with the national supply chain. Within each subproject, where appropriate, a phasing approach is being applied that includes the following to optimize project schedule and cash flow:

- early site preparation and installation of temporary facilities / utilities necessary to enable construction mobilization, demolition and removal actions, long lead procurements (i.e., CD-3A);
- performance of independent and usable segments of project scope as subprojects utilizing a “phasing” tailoring strategy approach per DOE O 413.3B, (i.e., a phased subproject that would be managed under its own independent CD-2/3 and CD-4.).

**07-D-220-04 Transuranic Liquid Waste (TLW) Treatment Facility Upgrade Project,  
Los Alamos National Laboratory (LANL), Los Alamos, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 request is \$10,000,000 for Total Estimated Cost (TEC) activities. The FY 2027 Request includes funds to finish construction and commissioning, as well as continued execution of the transition to operations activities that will enable the next project phases with the completion of construction and commissioning. Critical Decision (CD) 2/3 was approved on January 6, 2022, with a Total Estimated Cost (TEC) of \$193,228,000, Total Project Cost (TPC) of \$215,327,000, and a CD-4 Approval date of 4Q FY 2027.

**Significant Changes:**

This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year. It was recognized that the TLW project was likely going to deviate from the performance baseline (PB) established in FY 2022.

The current schedule estimate indicates that beneficial occupancy and construction completion are anticipated in 1Q FY 2027. The Project team recently developed an Over-Target Baseline (OTB)/Over-Target Schedule (OTS) baseline change proposal (BCP) based on a comprehensive estimate at completion (CEAC) that recognizes schedule delays and cost growth currently under review.

NNSA initiated a root cause analysis (RCA) and DOE independent review of the package consistent with DOE O 413.3B. The RCA review was completed in 2Q FY2026. The FY 2027 funding request provides funding that will support the completion of the project in accordance with the replan BCP.

The OTB/OTS accounts for past challenges and a better understanding of the required testing, commissioning, and readiness activities that will be required to achieve CD-4. The project expects to complete within the FY27 request which reflects a TEC of \$204,890,000, TPC of \$266,272,000, and a CD-4 date of 2Q FY 2030. After construction completion and commissioning, the project will transition to system testing and evaluation, including surrogate testing to demonstrate the achievement of key performance parameters. The project will then begin the required operational readiness reviews required for nuclear facility operation.

A Federal Project Director has been appointed.

**Critical Milestone History**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2014            | 10/04/2004  |                                   | 09/16/2011  | 4QFY 2016   | 1QFY 2017                    | 1Q FY 2017  | N/A                     | 4Q FY 2020  |
| FY 2015            | 10/04/2004  |                                   | 09/23/2013  | 4QFY 2016   | 1QFY 2017                    | 2Q FY 2017  | N/A                     | 4Q FY 2020  |
| FY 2016            | 10/04/2004  | 09/23/2013                        | 09/23/2013  | 4QFY 2017   | 1QFY 2017                    | 4Q FY 2017  | N/A                     | 4Q FY 2020  |

|         |            |            |            |            |            |            |     |            |
|---------|------------|------------|------------|------------|------------|------------|-----|------------|
| FY 2017 | 10/04/2004 | 09/23/2013 | 09/23/2013 | 4Q FY 2017 | 1Q FY 2017 | 4Q FY 2017 | N/A | 4Q FY 2021 |
| FY 2018 | 10/04/2004 | 09/23/2013 | 09/23/2013 | 2Q FY 2018 | 02/06/2017 | 2Q FY 2018 | N/A | 4Q FY 2023 |
| FY 2021 | 10/04/2004 | 09/23/2013 | 09/23/2013 | 4Q FY 2020 | 1Q FY 2021 | 4Q FY 2020 | N/A | 4Q FY 2024 |
| FY 2023 | 10/04/2004 | 09/23/2013 | 09/23/2013 | 01/06/2022 | 04/15/2021 | 01/06/2022 | N/A | 4Q FY 2027 |
| FY 2026 | 10/04/2004 | 09/23/2013 | 01/06/2022 | 01/06/2022 | 04/15/2021 | 01/06/2022 | N/A | 2Q FY 2028 |
| FY 2027 | 10/04/2004 | 09/23/2013 | 01/06/2022 | 01/06/2022 | 04/15/2021 | 01/06/2022 | N/A | 2Q FY 2030 |

**CD-0** – Approve Mission Need

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Project Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Construction/Execution

**D&D Complete** – Completion of D&D work (see Section 9)

**CD-4** – Approve Start of Operations or Project Completion

### Project Cost History

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|----------------|----------|------------|---------|
| FY 2014     | 20,546      | 74,270            | 94,816     | 12,780         | -        | 12,780     | 107,596 |
| FY 2015     | 25,605      | 60,000            | 85,605     | 10,428         | -        | 10,428     | 96,033  |
| FY 2016     | 25,605      | 66,997            | 92,602     | 10,428         | -        | 10,428     | 103,030 |
| FY 2017     | 25,605      | 66,997            | 92,602     | 10,428         | -        | 10,428     | 103,030 |
| FY 2018     | 25,605      | 67,244            | 92,849     | 12,940         | -        | 12,940     | 105,789 |
| FY 2021     | 40,500      | 84,260            | 124,760    | 14,464         | -        | 14,464     | 139,224 |
| FY 2023     | 44,829      | 148,399           | 193,228    | 22,099         | -        | 22,099     | 215,327 |
| FY 2026     | 44,829      | 150,061           | 194,890    | 31,182         | -        | 31,182     | 226,072 |
| FY 2027     | 44,829      | 160,061           | 204,890    | 61,382         | -        | 61,382     | 266,272 |

## 2. Project Scope and Justification

### Scope

The project will design and construct a new hazard category 3 nuclear facility of approximately 5,000 square feet. The facility will house processing equipment capable of treating at least 29,000 liters of transuranic (TRU) liquid waste each year, a TRU liquid influent storage system, and necessary utilities.

### Justification

The existing degraded and outdated treatment facility systems pose elevated risk to workers, public, environment and plutonium missions at LANL. Continuous workarounds are required to keep systems running and excessive corrosion threatens system availability. The replacement is needed to remediate significant

**Weapons Activities / Production Modernization / 07-D-220-04, Transuranic Liquid Waste (TLW)**

**Treatment Facility Upgrade Project, LANL**

**FY 2027 Congressional Justification**

deficiencies associated with the existing Radioactive Liquid Waste (RLW) treatment capabilities that pose a threat to the long-term availability of this function. The replacement is ultimately aimed at providing a RLW treatment capability that is safe, reliable, and effective for the next 50 years in support of primary plutonium missions at LANL. Delays in TLW could have a significant risk to the NNSA plutonium mission due to the potential risks associated with the aging existing Radioactive Liquid Waste Treatment Facility. The new facility will be built to comply with the current codes, Nuclear Safety/Quality, standards including International Building Code, seismic design/construction codes, and the National Electric Code (NEC).

The project is being executed in accordance with the project management requirements in DOE Order 413.3B. Funds appropriated under this data sheet may be used for independent assessments of the planning and execution of this project and for contracted support services to the federal project team for oversight and support.

**Key Performance Parameters (KPPs)**

The Threshold KPPs, represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of CD-4, Project Completion. The Objective KPPs represent the desired project performance.

**Key Performance Parameters (KPPs)**

| Performance Measure                                                                                                                           | Threshold KPP                               | Objective KPP                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------------------------------------|
| -Design and construct the capability to process 29,000 liters per year of TRU liquid waste                                                    | -Process 29,000 liters per year             | Any additional throughput will be accomplished through operational tempo |
| -Design and construct the TLW Facility such that the TLW effluent will meet the Waste Acceptance Criteria (WAC) for the LLW collection system | -Meet the WAC for the LLW collection system |                                                                          |

### 3. Financial Schedule<sup>1</sup>

| (\$K)                             |                                      |                |                |
|-----------------------------------|--------------------------------------|----------------|----------------|
|                                   | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
| <b>Total Estimated Cost (TEC)</b> |                                      |                |                |
| <b>Design</b>                     |                                      |                |                |
| Prior - FY 2024                   | 44,829                               | 44,829         | 44,829         |
| <b>Total Design</b>               |                                      |                |                |
| <b>Construction</b>               |                                      |                |                |
| Prior - FY 2024                   | 144,196                              | 139,196        | 126,054        |
| FY 2025                           | -                                    | 5,000          | 15,924         |
| FY 2026                           | 5,865                                | 5,865          | 8,083          |
| FY 2027                           | 10,000                               | 10,000         | 10,000         |
| <b>Total Construction</b>         | <b>160,061</b>                       | <b>160,061</b> | <b>160,061</b> |
| <b>TEC</b>                        |                                      |                |                |
| Prior - FY 2024                   | 189,025                              | 184,025        | 170,883        |
| FY 2025                           | -                                    | 5,000          | 15,924         |
| FY 2026                           | 5,865                                | 5,865          | 8,083          |
| FY 2027                           | 10,000                               | 10,000         | 10,000         |
| <b>Total TEC</b>                  | <b>204,890</b>                       | <b>204,890</b> | <b>204,890</b> |
| <b>Other Project Costs (OPC)</b>  |                                      |                |                |
| Prior - FY 2024                   | 17,464                               | 17,464         | 4,244          |
| FY 2025                           | 4,635                                | 4,635          | 12,093         |
| FY 2026                           | 9,083                                | 9,083          | 14,707         |
| FY 2027                           | 20,000                               | 20,000         | 12,500         |
| FY 2028                           | 10,200                               | 10,200         | 12,200         |
| FY 2029                           | -                                    | -              | 5,000          |
| FY 2030                           | -                                    | -              | 638            |
| <b>Total, OPC</b>                 | <b>61,382</b>                        | <b>61,382</b>  | <b>61,382</b>  |
| <b>Total Project Costs (TPC)</b>  |                                      |                |                |
| Prior - FY 2024                   | 206,489                              | 201,489        | 175,127        |
| FY 2025                           | 4,635                                | 9,635          | 28,017         |
| FY 2026                           | 14,948                               | 14,948         | 22,790         |
| FY 2027                           | 30,000                               | 30,000         | 22,500         |
| FY 2028                           | 10,200                               | 10,200         | 12,200         |
| FY 2029                           | -                                    | -              | 5,000          |
| FY 2030                           | -                                    | -              | 638            |
| <b>Total TPC</b>                  | <b>266,272</b>                       | <b>266,272</b> | <b>266,272</b> |

<sup>1</sup>TLW received \$5M through an internal reprogramming in FY 2025. The funds received were \$2M in AY 2021 and \$3M in AY 2022, so the budget authority is reflected in the Prior – FY 2024 row of the Construction section.

#### 4. Details of Project Cost Estimate

| Details of Project Cost Estimate   |                        | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                        |                              |                               |                                   |
| <b>Design</b>                      |                        |                              |                               |                                   |
|                                    | Design                 | 44,829                       | 44,829                        | 44,711                            |
|                                    | Federal Support        | -                            | -                             | -                                 |
|                                    | Contingency            | -                            | -                             | 118                               |
| <b>Total Design</b>                |                        | <b>44,829</b>                | <b>44,829</b>                 | <b>44,829</b>                     |
| <b>Construction</b>                |                        |                              |                               |                                   |
|                                    | Other Construction     | 153,827                      | 141,485                       | 112,150                           |
|                                    | Equipment (GFE)        | 1,011                        | 1,279                         | -                                 |
|                                    | Safety Basis           | -                            | 2,539                         | 2,421                             |
|                                    | Federal Support        | 2,100                        | 2,100                         | 5,275                             |
|                                    | Contingency            | 3,123                        | 2,658                         | 28,553                            |
| <b>Total Construction</b>          |                        | <b>160,061</b>               | <b>150,061</b>                | <b>148,399</b>                    |
| <b>Total Estimated Cost (TEC)</b>  |                        | <b>204,890</b>               | <b>194,890</b>                | <b>193,228</b>                    |
| <i>Contingency, TEC</i>            |                        | <i>8,877</i>                 | <i>2,658</i>                  | <i>28,671</i>                     |
| <b>Other Project Costs (OPC)</b>   |                        |                              |                               |                                   |
| OPC except D&D                     |                        |                              |                               |                                   |
|                                    | Conceptual<br>Planning | -                            | -                             | -                                 |
|                                    | Conceptual Design      |                              |                               |                                   |
|                                    | Design Support         | 1,547                        | 1,547                         | 1,547                             |
|                                    | Start-Up               | 49,629                       | 28,553                        | 15,904                            |
|                                    | Safety Basis           | 4,623                        | -                             | -                                 |
|                                    | Federal Support        | 500                          | -                             | 725                               |
|                                    | Contingency            | 5,083                        | 1,082                         | 3,923                             |
| <b>Total OPC</b>                   |                        | <b>61,382</b>                | <b>31,182</b>                 | <b>22,099</b>                     |
| <i>Contingency,<br/>OPC</i>        |                        | <i>5,083</i>                 | <i>1,082</i>                  | <i>3,923</i>                      |
| <b>Total Project Cost</b>          |                        | <b>266,272</b>               | <b>226,072</b>                | <b>215,327</b>                    |
| <b>Total Contingency (TEC+OPC)</b> |                        | <b>13,960</b>                | <b>3,740</b>                  | <b>32,594</b>                     |

## 5. Schedule of Appropriations Requests

| Schedule of Appropriation Requests Year | Type | Prior Years | FY2025 | FY2026 | FY 2027 | FY 2028 | Total   |
|-----------------------------------------|------|-------------|--------|--------|---------|---------|---------|
| FY 2014                                 | TEC  | 86,053      | -      | -      | -       | -       | 86,053  |
|                                         | OPC  | 12,780      | -      | -      | -       | -       | 12,780  |
|                                         | TPC  | 98,833      | -      | -      | -       | -       | 98,833  |
| FY 2015                                 | TEC  | 85,605      | -      | -      | -       | -       | 85,605  |
|                                         | OPC  | 10,428      | -      | -      | -       | -       | 10,428  |
|                                         | TPC  | 96,033      | -      | -      | -       | -       | 96,033  |
| FY 2016                                 | TEC  | 85,102      | -      | -      | -       | -       | 85,102  |
|                                         | OPC  | 10,428      | -      | -      | -       | -       | 10,428  |
|                                         | TPC  | 95,530      | -      | -      | -       | -       | 95,530  |
| FY 2017                                 | TEC  | 85,102      | -      | -      | -       | -       | 85,102  |
|                                         | OPC  | 10,428      | -      | -      | -       | -       | 10,428  |
|                                         | TPC  | 95,530      | -      | -      | -       | -       | 95,530  |
| FY 2018                                 | TEC  | 92,849      | -      | -      | -       | -       | 92,849  |
|                                         | OPC  | 7,746       | -      | -      | -       | -       | 7,746   |
|                                         | TPC  | 100,595     | -      | -      | -       | -       | 100,595 |
| FY 2021                                 | TEC  | 129,536     | -      | -      | -       | -       | 129,536 |
|                                         | OPC  | 14,464      | -      | -      | -       | -       | 14,464  |
|                                         | TPC  | 144,000     | -      | -      | -       | -       | 144,000 |
| FY 2023                                 | TEC  | 193,228     | -      | -      | -       | -       | 193,228 |
|                                         | OPC  | 17,464      | 4,635  | -      | -       | -       | 22,099  |
|                                         | TPC  | 210,692     | 4,635  | -      | -       | -       | 215,327 |
| FY 2026                                 | TEC  | 184,025     | 5,000  | 5,865  | -       | -       | 194,890 |
|                                         | OPC  | 17,464      | 4,635  | 9,083  | -       | -       | 31,182  |
|                                         | TPC  | 201,489     | 9,635  | 14,948 | -       | -       | 226,072 |
| FY 2027                                 | TEC  | 189,025     | -      | 5,865  | 10,000  | -       | 204,890 |
|                                         | OPC  | 17,464      | 4,635  | 9,083  | 20,000  | 10,200  | 61,382  |
|                                         | TPC  | 206,489     | 4,635  | 14,948 | 30,000  | 10,200  | 266,272 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | Q2 FY 2030 |
| Expected Useful Life (number of years)                              | 50         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | Q2 FY 2080 |

Related Funding Requirements  
(Budget Authority in Millions of Dollars)  
2013 Base Dollars

|                      | Annual Costs           |                         | Life Cycle Costs       |                         |
|----------------------|------------------------|-------------------------|------------------------|-------------------------|
|                      | Current Total Estimate | Previous Total Estimate | Current Total Estimate | Previous Total Estimate |
| Operations           | 1.400                  | 1.400                   | 70.0                   | 70.0                    |
| Utilities            | 0.050                  | 0.050                   | 2.5                    | 2.5                     |
| Maintenance & Repair | 0.400                  | 0.400                   | 20.0                   | 20.0                    |
| Total                | 1.850                  | 1.850                   | 92.5                   | 92.5                    |

## 7. D&D Information

The one-for-one offset requirement will be met by utilizing site-banked square footage. A plan for D&D of the existing facility will be developed at the end of construction of the new facility when characterization data is available.

|                                                                                                                | Square Feet |
|----------------------------------------------------------------------------------------------------------------|-------------|
| New area being constructed by this project at LANL                                                             | 5,000       |
| Area of D&D in this project at LANL                                                                            | -           |
| Area at LANL to be transferred, sold, and/or D&D outside the project including area previously “banked”        | 5,000       |
| Area of D&D in this project at other sites                                                                     | -           |
| Area at other sites to be transferred, sold, and/or D&D outside the project including area previously “banked” | -           |
| Total area eliminated                                                                                          | 5,000       |

## 8. Acquisition Approach

The TLW acquisition strategy assigns project execution activities to the LANL Management and Operating (M&O) Contractor. The final design was completed by the M&O prior to CD-2/3. CD-2/3 approval was received on January 6, 2022, and a firm fixed price contract for construction was awarded on March 23, 2022. Most construction activities were performed by the construction sub-contractor Hensel Phelps, with some activities performed by the M&O. Specifically, the startup/commissioning, along with Turnover to Operations and Readiness will be performed by the M&O as cost plus.



**06-D-141 Uranium Processing Facility (UPF)  
Y-12 National Security Complex, Oak Ridge, Tennessee  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 Request for the Uranium Processing Facility (UPF) is \$290,000,000<sup>1</sup>. The most recent Critical Decision (CD)-2/3 was approved on March 21, 2018, by the Deputy Secretary of Energy, with a Total Project Cost (TPC) of \$6,500,000,000 and a Critical Decision (CD)-4 of December 31, 2025. A Level 4 Federal Project Director has been assigned to this project and has approved this Construction Project Data Sheet (CPDS). An increase in the TPC and a change to the CD-4 date was approved by the Deputy Secretary on December 4, 2024, with the TPC increased to \$10,350,000,000 and the CD-4 date of January 2032.

The project plans to allocate \$84,232,000 in FY 2027 for the Salvage and Accountability Building (SAB) Subproject (06-D-141-09). The CD-2/3 for this subproject was approved on March 21, 2018, by the Deputy Secretary of Energy with a TPC of \$1,180,000,000. The long-lead equipment authorized as part of the Main Process Building (MPB) CD-3B for the SAB was included in the SAB TPC at CD-2/3. An increase in the TPC and change in CD-4 date for the SAB was approved by the Deputy Secretary on December 4, 2024. The TPC was increased from \$1,180,000,000 to \$2,250,000,000, and the CD-4 date was extended from December 2025 to January 2032.

The project plans to allocate \$455,768,000 in FY 2027 for the MPB Subproject (06-D-141-04). The CD-2/3 was approved on March 21, 2018, by the Deputy Secretary of Energy with a TPC of \$4,731,786,000. The CD-3A for Long-Lead Procurement and Site Preparation was approved on March 30, 2016. The long-lead equipment authorized as part of CD-3B for the MPB was included in the MPB TPC at CD-2/3. An increase in the TPC and change in CD-4 date for the MPB was approved by the Deputy Secretary on December 4, 2024. The TPC was increased from \$4,731,786,000 to \$7,450,000,000, and the CD-4 date was extended from December 2025 to January 2032.

As represented since the FY 2012 Request, design, construction, and Other Project Costs (OPC) will continue to be executed through the line-item funding. Since October 1, 2011, OPC work has been and will only be performed using funding specifically appropriated by Congress for the project.

**Significant Changes:**

Construction associated with the UPF project is ongoing, and the project is performing startup and commissioning activities for completed scope as appropriate. Significant activities completed in FY 2025 include the completion of Process Support Facilities (PSF); the energization of Medium and Low voltage electrical systems, the cumulative installation of 463 miles of electrical cable in the MPB/SAB (out of a total of 603 miles of electrical cable to be installed); and turning over of 93 of 192 total systems from construction to startup in the SAB, and 51 of 159 total systems from construction to startup in the MPB.

The PSF subproject achieved CD-4 on September 24, 2025 (16 months ahead of the revised baseline), at a TPC of \$178,000,000 (\$16,000,000 under the revised baseline). The unspent contingency will be held on the top line UPF project to support MPB and SAB completion, if required.

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<sup>1</sup> P.L. 119-21 (Working Families and Tax Cut Act or WFTC) provided \$3,885,000,000 in funding to DOE/NSA, of which \$250 million is for the Uranium Processing Facility project.

FY 2027 and prior year funds will be used for ongoing construction, startup, and commissioning activities for the MPB, and SAB subprojects. Subproject descriptions are included in Section 2.

### **Critical Milestone History**

Table 1: Uranium Processing Facility Project (06-D-141)  
Critical Milestone History by Fiscal Quarter or Date

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b>   |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|---------------|
| FY 2011            | 12/17/2004  | N/A                               | 7/25/2007   | TBD         | 2Q FY 2014                   | TBD         | TBD                     | TBD           |
| FY 2012            | 12/17/2004  | N/A                               | 7/25/2007   | 4Q FY 2013  | 2Q FY 2014                   | 4Q FY 2013  | TBD                     | TBD           |
| FY 2013            | 12/17/2004  | N/A                               | 7/25/2007   | 4Q FY 2013  | 2Q FY 2014                   | 4Q FY 2013  | N/A                     | TBD           |
| FY 2014            | 12/17/2004  | N/A                               | 6/8/2012    | 3Q FY 2014  | 4Q FY 2015                   | 3Q FY 2015  | N/A                     | TBD           |
| FY 2015            | 12/17/2004  | N/A                               | 6/8/2012    | TBD         | TBD                          | TBD         | N/A                     | TBD           |
| FY 2016            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | TBD         | TBD                          | TBD         | N/A                     | TBD           |
| FY 2017            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 4Q FY 2017  | 4Q FY 2017                   | 4Q FY 2017  | N/A                     | 4Q FY 2025    |
| FY 2018            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 4Q FY 2017                   | 2Q FY 2018  | N/A                     | 4Q FY 2025    |
| FY 2019            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 8/25/2017                    | 2Q FY 2018  | N/A                     | 4Q FY 2025    |
| FY 2020<br>PB      | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2021            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2022            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2023            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2024            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 1Q-2Q FY 2029 |
| FY 2025            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 3Q-4Q FY 2030 |
| FY 2026            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 2Q FY 2032    |
| FY 2027            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 2Q FY 2032    |

**Table 1.1: Site Readiness Subproject (06-D-141-01)**  
**Critical Milestone History by Fiscal Quarter or Date**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2014 PB         | 12/17/2004  | N/A                               | 6/8/2012    | 1/29/2013   | 1/29/2013                    | 1/29/2013   | N/A                     | 2Q FY 2015  |
| FY 2015            | 12/17/2004  | N/A                               | 6/8/2012    | 1/29/2013   | 1/29/2013                    | 1/29/2013   | N/A                     | 2Q FY 2015  |
| FY 2016            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 1/29/2013   | 1/29/2013                    | 1/29/2013   | N/A                     | 2Q FY 2015  |
| FY 2017            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 1/29/2013   | 1/29/2013                    | 1/29/2013   | N/A                     | 2/27/2015   |

**Table 1.2: Site Infrastructure and Services Subproject (06-D-141-05)**  
**Critical Milestone History by Fiscal Quarter or Date**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2015            | 12/17/2004  | N/A                               | 7/25/2007   | 4Q FY 2014  | 4Q FY 2013                   | 4Q FY 2014  | N/A                     | 4Q FY 2016  |
| FY 2016            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 2Q FY 2015  | 3Q FY 2015                   | 2Q FY 2015  | N/A                     | 4Q FY 2016  |
| FY 2017 PB         | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 3/12/2015   | 3/12/2015                    | 3/12/2015   | N/A                     | 4/28/2018   |
| FY 2018            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 3/12/2015   | 3/12/2015                    | 3/12/2015   | N/A                     | 4/28/2018   |
| FY 2019            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 3/12/2015   | 3/12/2015                    | 3/12/2015   | N/A                     | 4/28/2018   |
| FY 2020            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | 3/12/2015   | 3/12/2015                    | 3/12/2015   | N/A                     | 2/28/2018   |

**Table 1.3: Substation Subproject (06-D-141-07)**  
**Critical Milestone History by Fiscal Quarter or Date**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2017            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 4Q FY 2016  | 4Q FY 2016                   | 4Q FY 2016  | N/A                     | 1Q FY 2019  |
| FY 2018 PB         | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 9/14/2016   | 9/30/2017                    | 9/14/2016   | N/A                     | 6/30/2020   |
| FY 2019            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 9/14/2016   | 12/22/2017                   | 9/14/2016   | N/A                     | 6/30/2020   |
| FY 2020            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 9/14/2016   | 12/22/2017                   | 9/14/2016   | N/A                     | 6/30/2020   |
| FY 2021            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 9/14/2016   | 12/22/2017                   | 9/14/2016   | N/A                     | 12/20/2019  |

**Table 1.4: Mechanical Electrical Building Subproject (06-D-141-06)**  
**Critical Milestone History by Fiscal Quarter or Date**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2017            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2017  | 4Q FY 2017                   | 2Q FY 2017  | N/A                     | 4Q FY 2021  |
| FY 2018 PB         | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 4Q FY 2017                   | 12/13/2016  | N/A                     | 1/31/2022   |
| FY 2019            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 1/31/2022   |
| FY 2020            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 1/31/2022   |
| FY 2021            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 1/31/2022   |
| FY 2022            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 1/31/2022   |
| FY 2023            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 8/31/2022   |
| FY 2024            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 12/13/2016  | 9/30/2017                    | 12/13/2016  | N/A                     | 7/8/2022    |

**Table 1.5: Process Support Facilities Subproject (06-D-141-08)**  
**Critical Milestone History by Fiscal Quarter or Date**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2017            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3Q FY 2017  | 3Q FY 2017                   | 3Q FY 2017  | N/A                     | 4Q FY 2021  |
| FY 2018            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 4Q FY 2017                   | 2Q FY 2018  | N/A                     | 4Q FY 2025  |
| FY 2019            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 9/30/2017                    | 2Q FY 2018  | N/A                     | 4Q FY 2025  |
| FY 2020 PB         | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 12/31/2025  |
| FY 2021            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 12/31/2025  |
| FY 2022            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 12/31/2025  |
| FY 2023            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 12/31/2025  |
| FY 2024            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 12/31/2026  |
| FY 2025            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 1Q FY 2027  |
| FY 2026            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 1Q FY 2027  |
| FY 2027            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/16/2018   | 9/30/2017                    | 3/16/2018   | N/A                     | 9/24/2025   |

Table 1.6: Salvage and Accountability Building Subproject (06-D-141-09)  
Critical Milestone History by Fiscal Quarter or Date

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual<br/>Design<br/>Complete</b> | <b>CD-1</b> | <b>CD-2</b>   | <b>Final<br/>Design<br/>Complete</b> | <b>CD-3</b>   | <b>D&amp;D<br/>Complete</b> | <b>CD-4</b>   |
|--------------------|-------------|-------------------------------------------|-------------|---------------|--------------------------------------|---------------|-----------------------------|---------------|
| FY 2017            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 4Q FY<br>2017 | 4Q FY<br>2017                        | 4Q FY<br>2017 | N/A                         | 4Q FY 2025    |
| FY 2018            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 4Q FY<br>2017                        | 3/21/2018     | N/A                         | 4Q FY 2025    |
| FY 2019            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 4Q FY 2025    |
| FY 2020 PB         | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 12/31/2025    |
| FY 2021            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 12/31/2025    |
| FY 2022            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 12/31/2025    |
| FY 2023            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 12/31/2025    |
| FY 2024            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 1Q-2Q FY 2029 |
| FY 2025            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 3Q-4QFY 2030  |
| FY 2026            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 2Q FY 2032    |
| FY 2027            | 12/17/2004  | 6/24/2015                                 | 6/8/2012    | 3/21/2018     | 8/25/2017                            | 3/21/2018     | N/A                         | 2Q FY 2032    |

Table 1.7: Main Process Building Subproject (06-D-141-04)  
Critical Milestone History by Fiscal Quarter or Date

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b>   |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|---------------|
| FY 2014            | 12/17/2004  | N/A                               | 6/8/2012    | 3Q FY 2014  | 4Q FY 2015                   | 3Q FY 2015  | N/A                     | TBD           |
| FY 2015            | 12/17/2004  | N/A                               | 6/8/2012    | TBD         | TBD                          | TBD         | N/A                     | TBD           |
| FY 2016            | 12/17/2004  | 2/9/2006                          | 6/8/2012    | TBD         | TBD                          | TBD         | N/A                     | TBD           |
| FY 2017            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 4Q FY 2017  | 4Q FY 2017                   | 4Q FY 2017  | N/A                     | 4Q FY 2025    |
| FY 2018            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 4Q FY 2017                   | 2Q FY 2018  | N/A                     | 4Q FY 2025    |
| FY 2019            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 2Q FY 2018  | 8/25/2017                    | 2Q FY 2018  | N/A                     | 4Q FY 2025    |
| FY 2020            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2021            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2022            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2023            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 12/31/2025    |
| FY 2024            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 1Q-2Q FY 2029 |
| FY 2025            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 3Q-4Q FY 2030 |
| FY 2026            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 2Q FY 2032    |
| FY 2027            | 12/17/2004  | 6/24/2015                         | 6/8/2012    | 3/21/2018   | 8/25/2017                    | 3/21/2018   | N/A                     | 2Q FY 2032    |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete (d)

**CD-3** – Approve Start of Construction

**D&D Complete** – Completion of D&D work

**CD-4** – Approve Start of Operations or Project Closeout

Table 2: Uranium Processing Facility Project (06-D-141) Baseline  
and Long-Lead Approval by Fiscal Quarter or Date

| Fiscal Year | UPF CD-<br>2/3 | MPB CD-<br>3A | MPB CD-<br>3B | MPB CD-<br>3C | Substation CD-<br>3A |
|-------------|----------------|---------------|---------------|---------------|----------------------|
| FY 2017     | N/A            | 2Q FY<br>2016 | 1Q F<br>Y2017 | 1Q FY 2017    | 3Q FY 2016           |
| FY 2018     | 3/21/2018      | 3/30/2016     | 1/13/2017     | N/A           | N/A                  |

**MPB CD-3A** – Long Lead Procurement for site preparation and long lead procurements

**MPB CD-3B** – Long Lead Procurements

**MPB CD-3C** – Cancelled as reflected in the FY 2018 CPDS

**Substation CD-3A** – Cancelled as reflected in the FY 2018 CPDS

### Project Cost History

Table 3: Uranium Processing Facility Project (06-D-141) Financial Data (\$K)

| Fiscal Year          | TEC, Design | TEC, Construction       | TEC, Total              | OPC, Except D&D     | OPC, D&D | OPC, Total          | TPC                     |
|----------------------|-------------|-------------------------|-------------------------|---------------------|----------|---------------------|-------------------------|
| FY 2011              | 351,149     | 935,000-<br>1,604,000   | 1,124,000-<br>1,928,000 | 276,000-<br>472,000 | TBD      | TBD                 | 1,400,000-<br>3,500,000 |
| FY 2012              | 528,690     | 3,174,779-<br>5,320,310 | 3,703,000-<br>5,849,000 | 497,000-<br>651,000 | N/A      | 497,000-<br>651,000 | 4,200,000-<br>6,500,000 |
| FY 2013              | 566,192     | 3,136,808-<br>5,150,808 | 3,703,000-<br>5,717,000 | 497,000-<br>783,000 | N/A      | 497,000-<br>783,000 | 4,200,000-<br>6,500,000 |
| FY 2014              | 1,164,000   | TBD                     | TBD                     | TBD                 | N/A      | TBD                 | TBD                     |
| FY 2015              | TBD         | TBD                     | TBD                     | TBD                 | N/A      | TBD                 | TBD                     |
| FY 2016              | TBD         | TBD                     | TBD                     | TBD                 | N/A      | TBD                 | TBD                     |
| FY 2017              | 1,880,000   | 4,103,000               | 5,983,000               | 517,000             | -        | 517,000             | 6,500,000               |
| FY 2018              | 1,926,000   | 4,148,500               | 6,074,500               | 425,500             | -        | 425,500             | 6,500,000               |
| FY 2019              | 1,855,809   | 4,463,724               | 6,319,533               | 180,467             | -        | 180,467             | 6,500,000               |
| FY 2020              | 1,838,000   | 4,283,337               | 6,121,337               | 378,663             | -        | 378,663             | 6,500,000               |
| FY 2021              | 1,838,000   | 4,283,337               | 6,121,337               | 378,663             | -        | 378,663             | 6,500,000               |
| FY 2022              | 1,838,000   | 4,283,337               | 6,121,337               | 378,663             | -        | 378,663             | 6,500,000               |
| FY 2023              | 1,838,000   | 4,283,337               | 6,121,337               | 378,663             | -        | 378,663             | 6,500,000               |
| FY 2024              | 1,838,000   | 6,356,467               | 8,194,467               | 378,663             | -        | 378,663             | 8,500,000-<br>8,950,000 |
| FY 2025              | 1,838,000   | 7,122,504               | 8,960,504               | 378,663             | -        | 378,663             | 9,339,167               |
| FY 2026              | 1,838,000   | 6,979,259               | 8,817,259               | 1,532,741           | -        | 1,532,741           | 10,350,000              |
| FY 2027 <sup>1</sup> | 1,838,000   | 6,963,259               | 8,801,259               | 1,532,741           | -        | 1,532,741           | 10,350,000              |

<sup>1</sup> \$16M of unspent contingency from PSF is held on the top line UPF project to support MPB and SAB completion, in the event its required. Value is not reflected in subprojects' tables or in overall project TEC.

Table 3.1: Site Readiness Subproject (06-D-141-01) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|--------|
| FY 2015     | N/A         | 64,000            | 64,000     | 1,000           | N/A      | 1,000      | 65,000 |
| FY 2016     | -           | 64,000            | 64,000     | 1,000           | N/A      | 1,000      | 65,000 |
| FY 2017     | -           | 43,277            | 43,277     | -               | -        | -          | 43,277 |
| FY 2018     | -           | 43,277            | 43,277     | -               | -        | -          | 43,277 |
| FY 2019     | -           | 43,714            | 43,714     | -               | -        | -          | 43,714 |

Table 3.2: Site Infrastructure and Services Subproject (06-D-141-05) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|--------|
| FY 2015     | N/A         | 58,000            | 58,000     | 1,500           | N/A      | 1,500      | 59,500 |
| FY 2016     | N/A         | 84,500            | 84,500     | 500             | N/A      | 500        | 85,000 |
| FY 2017     | -           | 78,000            | 78,000     | 500             | -        | 500        | 78,500 |
| FY 2018     | -           | 78,000            | 78,000     | 500             | -        | 500        | 78,500 |
| FY 2019     | -           | 78,000            | 78,000     | 500             | -        | 500        | 78,500 |
| FY 2020     | -           | 60,500            | 60,500     | -               | -        | -          | 60,500 |

Table 3.3: Substation Subproject (06-D-141-07) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|--------|
| FY 2017     | -           | 48,000            | 48,000     | 2,000           | -        | 2,000      | 50,000 |
| FY 2018     | -           | 60,000            | 60,000     | -               | -        | -          | 60,000 |
| FY 2019     | -           | 60,000            | 60,000     | -               | -        | -          | 60,000 |
| FY 2020     | -           | 60,000            | 60,000     | -               | -        | -          | 60,000 |
| FY 2021     | -           | 48,568            | 48,568     | -               | -        | -          | 48,568 |
| FY 2022     | -           | 43,650            | 43,650     | -               | -        | -          | 43,650 |

Table 3.4: Mechanical Electrical Building Subproject (06-D-141-06) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2017     | -           | 540,000           | 540,000    | 60,000          | -        | 60,000     | 600,000 |
| FY 2018     | -           | 284,000           | 284,000    | -               | -        | -          | 284,000 |
| FY 2019     | -           | 283,917           | 283,917    | 83              | -        | 83         | 284,000 |
| FY 2020     | -           | 282,980           | 282,980    | 1,020           | -        | 1,020      | 284,000 |
| FY 2021     | -           | 282,980           | 282,980    | 1,020           | -        | 1,020      | 284,000 |
| FY 2022     | -           | 282,980           | 282,980    | 1,020           | -        | 1,020      | 284,000 |
| FY 2023     | -           | 307,116           | 307,116    | 1,020           | -        | 1,020      | 308,136 |



Table 3.5: Process Support Facilities Subproject (06-D-141-08) Financial Data (\$K)

| Fiscal Year          | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|----------------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2017              | -           | 55,000            | 55,000     | 5,000           | -        | 5,000      | 60,000  |
| FY 2018              | -           | 111,000           | 111,000    | 10,000          | -        | 10,000     | 121,000 |
| FY 2019              | -           | 116,702           | 116,702    | 4,298           | -        | 4,298      | 121,000 |
| FY 2020              | -           | 118,000           | 118,000    | 22,000          | -        | 22,000     | 140,000 |
| FY 2021              | -           | 118,000           | 118,000    | 22,000          | -        | 22,000     | 140,000 |
| FY 2022              | -           | 118,000           | 118,000    | 22,000          | -        | 22,000     | 140,000 |
| FY 2023              | -           | 118,000           | 118,000    | 22,000          | -        | 22,000     | 140,000 |
| FY 2024              | -           | 172,000           | 172,000    | 22,000          | -        | 22,000     | 194,000 |
| FY 2025              | -           | 172,000           | 172,000    | 22,000          | -        | 22,000     | 194,000 |
| FY 2026              | -           | 166,000           | 166,000    | 28,000          | -        | 28,000     | 194,000 |
| FY 2027 <sup>1</sup> | -           | 155,000           | 155,000    | 23,000          | -        | 23,000     | 178,000 |

Table 3.6: Salvage and Accountability Building Subproject (06-D-141-09) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC       |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|-----------|
| FY 2017     | -           | 1,200,000         | 1,200,000  | 130,000         | -        | 130,000    | 1,330,000 |
| FY 2018     | -           | 1,060,250         | 1,060,250  | 25,000          | -        | 25,000     | 1,085,250 |
| FY 2019     | -           | 1,013,761         | 1,013,761  | 16,239          | -        | 16,239     | 1,030,000 |
| FY 2020     | -           | 1,105,000         | 1,105,000  | 75,000          | -        | 75,000     | 1,180,000 |
| FY 2021     | -           | 1,105,000         | 1,105,000  | 75,000          | -        | 75,000     | 1,180,000 |
| FY 2022     | -           | 1,105,000         | 1,105,000  | 75,000          | -        | 75,000     | 1,180,000 |
| FY 2023     | -           | 1,105,000         | 1,105,000  | 75,000          | -        | 75,000     | 1,180,000 |
| FY 2024     | -           | 1,595,403         | 1,595,403  | 75,000          | -        | 75,000     | 1,670,403 |
| FY 2025     | -           | 1,801,762         | 1,801,762  | 75,000          | -        | 75,000     | 1,876,762 |
| FY 2026     | -           | 2,017,930         | 2,017,930  | 232,070         | -        | 232,070    | 2,250,000 |
| FY 2027     | -           | 2,017,930         | 2,017,930  | 232,070         | -        | 232,070    | 2,250,000 |

<sup>1</sup> Represents subproject final closeout cost.

Table 3.7: Main Process Building Subproject (06-D-141-04) Financial Data (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC       |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|-----------|
| FY 2015     | TBD         | TBD               | TBD        | TBD             | N/A      | TBD        | TBD       |
| FY 2016     | TBD         | TBD               | TBD        | TBD             | N/A      | TBD        | TBD       |
| FY 2017     | 1,880,000   | 2,138,723         | 4,018,723  | 319,500         | -        | 319,500    | 4,338,223 |
| FY 2018     | 1,926,000   | 2,511,973         | 4,437,973  | 390,000         | -        | 390,000    | 4,827,973 |
| FY 2019     | 1,855,809   | 2,867,630         | 4,723,439  | 159,347         | -        | 159,347    | 4,882,786 |
| FY 2020     | 1,838,000   | 2,613,143         | 4,451,143  | 280,643         | -        | 280,643    | 4,731,786 |
| FY 2021     | 1,838,000   | 2,613,143         | 4,451,143  | 280,643         | -        | 280,643    | 4,731,786 |
| FY 2022     | 1,838,000   | 2,613,143         | 4,451,143  | 280,643         | -        | 280,643    | 4,731,786 |
| FY 2023     | 1,838,000   | 2,603,343         | 4,441,343  | 280,643         | -        | 280,643    | 4,721,986 |
| FY 2024     | 1,838,000   | 4,132,070         | 5,970,070  | 280,643         | -        | 280,643    | 6,250,713 |
| FY 2025     | 1,838,000   | 4,693,612         | 6,513,612  | 280,643         | -        | 280,643    | 6,812,555 |
| FY 2026     | 1,838,000   | 4,340,349         | 6,178,349  | 1,271,651       | -        | 1,271,651  | 7,450,000 |
| FY 2027     | 1,838,000   | 4,335,349         | 6,173,349  | 1,276,651       | -        | 1,276,651  | 7,450,000 |

## 2. Project Scope and Justification

### Scope

The UPF Project is a design and construction project. The UPF Project consists of a series of industrial and nuclear buildings and supporting infrastructure. It is a major system acquisition that was selected in the Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement to ensure the long-term viability, safety, and security of the Enriched Uranium (EU) capability at the Y-12 National Security Complex (Y-12). The UPF consists of 6 buildings, totaling 568,524 square feet. The UPF project focuses on modernizing uranium processing capabilities at Y-12 to reduce program and safety risk. The UPF project provides new buildings to replace the Building 9212 capabilities for Highly Enriched Uranium (HEU) casting, oxide production, recovery, decontamination, and assay. Coordination between Headquarters Office of Infrastructure, Enriched Uranium Modernization Program, the National Nuclear Security Administration (NNSA) Y-12 Field Office (YFO), and the Y-12 Project Management Office (PMO) is essential as the uranium mission strategy and associated implementation plans define how the uranium capabilities are transitioned, relocated, sustained, and/or replaced.

The goals and objectives of the UPF Project are to support the following modernization strategy:

- Ensure the long-term capability and improve the reliability of EU operations;
- Replace deteriorating, end-of-life buildings with modern manufacturing buildings;
- Significantly improve the health and safety posture for workers and the public by replacing administrative controls with engineered controls to manage the risks related to worker safety, criticality safety, fire protection, and environmental compliance.

The UPF project consists of the following subprojects:

**Site Readiness Subproject (06-D-141-01):** The Site Readiness Subproject scope included Bear Creek Road relocation, including a bridge overpass of the haul road; installation of potable water lines paralleling the new road; electrical line demolition to make way for the road and clear the construction site; electrical line and communication cable installation; preparation of the West Borrow area to receive excess-soil and preparation and maintenance of a spoil area for wet soil; extension of an existing haul road for access to the construction

site; and jack-and-bore installation of casings for future utilities. The Site Readiness Subproject completed in February 2015.

**Site Infrastructure and Services (SIS) Subproject (06-D-141-05):** The SIS Subproject scope included demolition of Building 9107 and its hillside, installation of haul road security features, completion of a sedimentation basin, a concrete batch plant, and completion of the Construction Support Building, which is 66,000 square feet. The SIS Subproject completed in February 2018.

**Substation Subproject (06-D-141-07):** The Substation Subproject provided for the installation of the 161 kilovolt (kV) Main Electrical Substation for the UPF Project and capacity for most of the rest of the Y-12 plant. The Substation provides electrical power from the Tennessee Valley Authority (TVA) 161kV transmission system. The Substation Subproject includes all equipment, facilities, and structures needed for a fully operational substation. The Substation Subproject completed in December 2019.

**Mechanical Electrical Building (MEB) Subproject (06-D-141-06):** The MEB Subproject constructed a 66,384 square feet facility and installed the utility equipment and support systems required by both the MPB and the SAB. The MEB is a stand-alone building housing mechanical, electrical, heating, ventilation, air conditioning, utility equipment, and support systems. The MEB is constructed to nonnuclear commercial industrial standards. This subproject includes a leased warehouse and fabrication facility; a cooling tower; and an onsite warehouse. The MEB Subproject completed in July 2022.

**Process Support Facilities (PSF) Subproject (06-D-141-08):** The PSF Subproject constructed a 23,914 square foot building and provide facilities for instrument air, demineralized water, waste management, and chemical and gas storage needed to support the MPB and SAB. The PSF subproject achieved CD-4 on September 24, 2025.

**Salvage and Accountability Building (SAB) Subproject (06-D-141-09):** The SAB Subproject consists of two buildings totaling 160,113 square feet that will contain the following processes: waste preparation, decontamination, nondestructive analysis, the clean and contaminated shops, chemical recovery, calcination and leaching, electronics and calibration maintenance, filter room, and personnel-related rooms. The SAB will be constructed to standards commensurate with the radioactive hazard and security requirements for the materials and processes contained within. This subproject includes support buildings including a fire tank pump building as well as the Personnel Support Building which provides personnel access and monitoring station, truck bay, loading dock, and material access. Long-lead equipment purchases associated with the SAB Subproject are allocated to the SAB TPC. No change in scope since the previous Request.

**Long Lead Procurements, CD-3B:** Included long lead gloveboxes, skids, and select long-lead procurements for structural steel, rebar, embeds, and specialty items associated with SAB.

**Main Process Building (MPB) Subproject (06-D-141-04):** The MPB Subproject consists of a nuclear building totaling 252,113 square feet that will house the casting and oxide production capabilities. It also contains nondestructive analysis and waste preparations, furnaces and repacking, and spaces needed for process support such as the shift manager's office, restrooms, and other personnel-related rooms. The MPB will be constructed to nuclear standards commensurate with high-hazard materials and security for the processes to be carried out within. The MPB Subproject will include the construction of the Highly Enriched Uranium Materials Facility (HEUMF) connector, and the new Perimeter Intrusion Detection and Assessment System surrounding the UPF campus and support buildings. Design costs for the UPF project are included in the MPB Subproject baseline, as design costs are not tracked for each individual UPF subproject. No change in scope since the previous Request.

**Site Preparation and Long Lead Procurements, CD-3A:** Included excavation and fill for the MPB, SAB, and the MEB; installation of temporary facilities, power, storm water and sanitary sewers; and long lead procurements of tower cranes and rebar for the MEB slab.

**Long Lead Procurements, CD-3B:** Included long-lead gloveboxes, skids, and select long-lead procurements for structural steel, rebar, embeds, and specialty items associated with MPB.

**Justification and Mission Need**

The UPF Project is needed to ensure the long-term viability, safety, and security of the Enriched Uranium (EU) capability in the United States (U.S). The UPF Project will support the Nation’s nuclear weapons stockpile, down blending of EU in support of nonproliferation, and provide uranium as feedstock for fuel for naval reactors. Currently, these capabilities reside in aged Manhattan Project-era facilities. There is substantial risk that the existing facilities will continue to deteriorate to the point of significant impact to Defense Programs, Defense Nuclear Nonproliferation, and Naval Reactors programs. The impacts could result in loss of the U.S. capability to maintain the nuclear weapons stockpile through life extension programs, shutdown of the U.S. Navy nuclear powered fleet due to lack of EU fuel feedstock materials, and impact to the Defense Nuclear Nonproliferation program’s ability to reduce the enrichment level of foreign research reactors through supply of lower enrichment fuels manufactured at Y-12. The risk of inadvertent or accidental shutdown of the existing facilities is high and may occur prior to completion and startup of the UPF Project.

The UPF Mission Need Statement approved in December 2004, states that safe, efficient, and secure enriched uranium processing capabilities are needed within the Nuclear Weapons Complex to meet the mission of the DOE's NNSA. The UPF Project is needed to ensure the long-term viability, safety, and security of the EU capability in the U.S. The UPF Mission Need was reexamined at each of the subsequent CD phases and remains valid.

**Key Performance Parameters (KPPs)**

The Threshold KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of CD-4, Project Completion. The Objective KPPs represent the desired project performance.

Table 4: Key Performance Parameters

| Performance Measure                                 | Threshold                                                                                       | Objective                                                                                       |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| UPF supports phasing out mission dependency on 9212 | Threshold Performance Parameters are identified in the Classified Project Requirements Document | Objective Performance Parameters are identified in the Classified Project Requirements Document |

### 3. Financial Schedule

UPF funding is appropriated at the Overall Project level (06-D-141) and is allocated to the subprojects in the tables below.

Table 5: Uranium Processing Facility Project (06-D-141) (\$K)

|                                   | Budget<br>Authority<br>(Appropriations) <sup>1</sup> | Obligations      | Costs            |
|-----------------------------------|------------------------------------------------------|------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                                      |                  |                  |
| <b>Design</b>                     |                                                      |                  |                  |
| PY to FY 2018                     | 1,838,000                                            | 1,838,000        | 1,838,000        |
| <b>Total Design</b>               | <b>1,838,000</b>                                     | <b>1,838,000</b> | <b>1,838,000</b> |
| <b>Construction</b>               |                                                      |                  |                  |
| PY to FY 2024                     | 5,279,943                                            | 5,274,924        | 4,921,877        |
| FY 2025                           | 684,569                                              | 608,131          | 731,979          |
| FY 2026                           | 803,900                                              | 667,658          | 682,613          |
| FY 2027                           | 96,479                                               | 280,295          | 418,936          |
| FY 2028                           | 98,368                                               | 91,516           | 136,074          |
| FY 2029                           | -                                                    | 35,735           | 59,451           |
| FY 2030                           | -                                                    | 5,000            | 11,553           |
| FY 2031                           | -                                                    | -                | 776              |
| Outyears                          | -                                                    | -                | -                |
| <b>Total Construction</b>         | <b>6,963,259</b>                                     | <b>6,963,259</b> | <b>6,963,259</b> |
| <b>TEC</b>                        |                                                      |                  |                  |
| PY to FY 2024                     | 7,117,943                                            | 7,112,924        | 6,759,877        |
| FY 2025                           | 684,569                                              | 608,131          | 731,979          |
| FY 2026                           | 803,900                                              | 667,658          | 682,613          |
| FY 2027                           | 96,479                                               | 280,295          | 418,936          |
| FY 2028                           | 98,368                                               | 91,516           | 136,074          |
| FY 2029                           | -                                                    | 35,735           | 59,451           |
| FY 2030                           | -                                                    | 5,000            | 11,553           |
| FY 2031                           | -                                                    | -                | 776              |
| Outyears                          | -                                                    | -                | -                |
| <b>Total TEC</b>                  | <b>8,801,259</b>                                     | <b>8,801,259</b> | <b>8,801,259</b> |

<sup>1</sup> PSF completed and funding aligned to final TPC, appropriated funds remain under UPF project.

|                                  | Budget<br>Authority<br>(Appropriations) <sup>1</sup> | Obligations       | Costs             |
|----------------------------------|------------------------------------------------------|-------------------|-------------------|
| <b>Other Project Costs (OPC)</b> |                                                      |                   |                   |
| PY to FY 2024                    | 269,057                                              | 276,663           | 185,433           |
| FY 2025                          | 115,431                                              | 58,000            | 60,758            |
| FY 2026                          | 176,100                                              | 81,100            | 155,829           |
| FY 2027                          | 193,521                                              | 331,346           | 346,837           |
| FY 2028                          | 387,632                                              | 333,692           | 326,864           |
| FY 2029                          | 290,000                                              | 293,000           | 191,000           |
| FY 2030                          | 101,000                                              | 86,700            | 133,685           |
| FY 2031                          | -                                                    | 14,731            | 73,340            |
| Outyears                         | -                                                    | 57,509            | 58,995            |
| <b>Total, OPC</b>                | <b>1,532,741</b>                                     | <b>1,532,741</b>  | <b>1,532,741</b>  |
| <b>Total Project Costs (TPC)</b> |                                                      |                   |                   |
| PY to FY 2024                    | 7,387,000                                            | 7,389,587         | 6,945,310         |
| FY 2025                          | 800,000                                              | 666,131           | 792,737           |
| FY 2026                          | 980,000                                              | 748,758           | 838,442           |
| FY 2027                          | 290,000                                              | 611,641           | 765,773           |
| FY 2028                          | 486,000                                              | 425,208           | 462,938           |
| FY 2029                          | 290,000                                              | 328,735           | 250,451           |
| FY 2030                          | 117,000 <sup>2</sup>                                 | 107,700           | 161,238           |
| FY 2031                          | -                                                    | 14,731            | 74,116            |
| Outyears                         | -                                                    | 57,509            | 58,995            |
| <b>Total TPC</b>                 | <b>10,350,000</b>                                    | <b>10,350,000</b> | <b>10,350,000</b> |

<sup>2</sup> \$16M of unspent contingency from PSF is held on the top line UPF project to support MPB and SAB completion, in the event its required. Value is not reflected in subprojects' tables.

Table 5.1: Site Readiness Subproject (06-D-141-01) Financial Schedule

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| <b>Design</b>                     |                                                  |                    |               |
| PY to FY<br>2017                  | -                                                | -                  | -             |
| <b>Total Design</b>               | <b>-</b>                                         | <b>-</b>           | <b>-</b>      |
| <b>Construction</b>               |                                                  |                    |               |
| PY to FY<br>2017                  | 43,714                                           | 43,714             | 43,714        |
| <b>Total Construction</b>         | <b>43,714</b>                                    | <b>43,714</b>      | <b>43,714</b> |
| <b>TEC</b>                        |                                                  |                    |               |
| PY to FY<br>2017                  | 43,714                                           | 43,714             | 43,714        |
| <b>Total TEC</b>                  | <b>43,714</b>                                    | <b>43,714</b>      | <b>43,714</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |               |
| PY to FY<br>2017                  | -                                                | -                  | -             |
| <b>Total, OPC</b>                 | <b>-</b>                                         | <b>-</b>           | <b>-</b>      |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |               |
| PY to FY<br>2017                  | 43,714                                           | 43,714             | 43,714        |
| <b>Total TPC</b>                  | <b>43,714</b>                                    | <b>43,714</b>      | <b>43,714</b> |

Table 5.2: Site Infrastructure and Services Subproject (06-D-141-05)

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| <b>Design</b>                     |                                                  |                    |               |
| PY to FY<br>2017                  | -                                                | -                  | -             |
| <b>Total Design</b>               | -                                                | -                  | -             |
| <b>Construction</b>               |                                                  |                    |               |
| PY to FY<br>2019                  | 60,500                                           | 60,500             | 60,500        |
| <b>Total Construction</b>         | <b>60,500</b>                                    | <b>60,500</b>      | <b>60,500</b> |
| <b>TEC</b>                        |                                                  |                    |               |
| PY to FY<br>2019                  | 60,500                                           | 60,500             | 60,500        |
| <b>Total TEC</b>                  | <b>60,500</b>                                    | <b>60,500</b>      | <b>60,500</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |               |
| PY to FY<br>2017                  | -                                                | -                  | -             |
| <b>Total, OPC</b>                 | -                                                | -                  | -             |
| PY to FY<br>2017                  | 60,500                                           | 60,500             | 60,500        |
| <b>Total TPC</b>                  | <b>60,500</b>                                    | <b>60,500</b>      | <b>60,500</b> |



Table 5.3: Substation Subproject (06-D-141-07)

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| <b>Design</b>                     |                                                  |                    |               |
| PY to FY 2017                     | -                                                | -                  | -             |
| <b>Total Design</b>               | -                                                | -                  | -             |
| <b>Construction</b>               |                                                  |                    |               |
| PY to FY 2020                     | 43,650                                           | 43,650             | 43,650        |
| <b>Total Construction</b>         | <b>43,650</b>                                    | <b>43,650</b>      | <b>43,650</b> |
| <b>TEC</b>                        |                                                  |                    |               |
| PY to FY 2020                     | 43,650                                           | 43,650             | 43,650        |
| <b>Total TEC</b>                  | <b>43,650</b>                                    | <b>43,650</b>      | <b>43,650</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |               |
| PY to FY 2017                     | -                                                | -                  | -             |
| <b>Total, OPC</b>                 | -                                                | -                  | -             |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |               |
| PY to FY 2020                     | 43,650                                           | 43,650             | 43,650        |
| <b>Total TPC</b>                  | <b>43,650</b>                                    | <b>43,650</b>      | <b>43,650</b> |

Table 5.4: Mechanical Electrical Building Subproject (06-D-141-06)

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                |
| <b>Design</b>                     |                                                  |                    |                |
| PY to FY<br>2017                  | -                                                | -                  | -              |
| <b>Total Design</b>               | -                                                | -                  | -              |
| <b>Construction</b>               |                                                  |                    |                |
| PY to FY<br>2023                  | 307,116                                          | 307,116            | 307,116        |
| <b>Total Construction</b>         | <b>307,116</b>                                   | <b>307,116</b>     | <b>307,116</b> |
| <b>TEC</b>                        |                                                  |                    |                |
| PY to FY<br>2023                  | 307,116                                          | 307,116            | 307,116        |
| <b>Total TEC</b>                  | <b>307,116</b>                                   | <b>307,116</b>     | <b>307,116</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |                |
| PY to FY<br>2023                  | 1,020                                            | 1,020              | 1,020          |
| <b>Total, OPC</b>                 | <b>1,020</b>                                     | <b>1,020</b>       | <b>1,020</b>   |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |                |
| PY to FY<br>2023                  | 308,136                                          | 308,136            | 308,136        |
| <b>Total TPC</b>                  | <b>308,136</b>                                   | <b>308,136</b>     | <b>308,136</b> |

Table 5.5: Process Support Facilities Subproject (06-D-141-08)

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                |
| <b>Total Design</b>               | -                                                | -                  | -              |
| <b>Construction</b>               |                                                  |                    |                |
| PY to FY 2024                     | 155,000                                          | 155,000            | 145,309        |
| FY 2025                           | -                                                | -                  | 9,691          |
| <b>Total Construction</b>         | <b>155,000</b>                                   | <b>155,000</b>     | <b>155,000</b> |
| <b>TEC</b>                        |                                                  |                    |                |
| PY to FY 2024                     | 155,000                                          | 155,000            | 145,309        |
| FY 2025                           | -                                                | -                  | 9,691          |
| <b>Total TEC</b>                  | <b>155,000</b>                                   | <b>155,000</b>     | <b>151,000</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |                |
| PY to FY 2024                     | 23,000                                           | 23,000             | 22,044         |
| FY 2025                           | -                                                | -                  | 796            |
| FY 2026                           | -                                                | -                  | 160            |
| <b>Total, OPC</b>                 | <b>23,000</b>                                    | <b>23,000</b>      | <b>23,000</b>  |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |                |
| PY to FY 2024 <sup>1</sup>        | 178,000                                          | 178,000            | 167,353        |
| FY 2025                           | -                                                | -                  | 10,487         |
| FY 2026                           | -                                                | -                  | 160            |
| <b>Total TPC</b>                  | <b>178,000</b>                                   | <b>178,000</b>     | <b>178,000</b> |

<sup>1</sup> PSF completed and funding aligned to final TPC, appropriated funds remain under UPF project.

Table 5.6: Salvage and Accountability Building Subproject (06-D-141-09)

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|-----------------------------------|--------------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                  |
| <b>Total Design</b>               | -                                                | -                  | -                |
| <b>Construction</b>               |                                                  |                    |                  |
| PY to FY 2024                     | 1,377,003                                        | 1,377,003          | 1,346,607        |
| FY 2025                           | 330,000                                          | 274,265            | 210,348          |
| FY 2026                           | 244,179                                          | 260,179            | 265,731          |
| FY 2027                           | 48,232                                           | 76,232             | 135,832          |
| FY 2028                           | 18,516                                           | 18,516             | 47,212           |
| FY 2029                           | -                                                | 11,735             | 12,200           |
| FY 2030                           | -                                                | -                  | -                |
| FY 2031                           | -                                                | -                  | -                |
| Outyears                          | -                                                | -                  | -                |
| <b>Total Construction</b>         | <b>2,017,930</b>                                 | <b>2,017,930</b>   | <b>2,017,930</b> |
| <b>TEC</b>                        |                                                  |                    |                  |
| PY to FY 2024                     | 1,377,003                                        | 1,377,003          | 1,346,607        |
| FY 2025                           | 330,000                                          | 274,265            | 210,348          |
| FY 2026                           | 244,179                                          | 260,179            | 265,731          |
| FY 2027                           | 48,232                                           | 76,232             | 135,832          |
| FY 2028                           | 18,516                                           | 18,516             | 47,212           |
| FY 2029                           | -                                                | 11,735             | 12,200           |
| FY 2030                           | -                                                | -                  | -                |
| FY 2031                           | -                                                | -                  | -                |
| Outyears                          | -                                                | -                  | -                |
| <b>Total TEC</b>                  | <b>2,017,930</b>                                 | <b>2,017,930</b>   | <b>2,017,930</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |                  |
| PY to FY 2024                     | 27,000                                           | 27,000             | 21,187           |
| FY 2025                           | 40,000                                           | 38,000             | 19,240           |
| FY 2026                           | 30,000                                           | 25,000             | 48,644           |
| FY 2027                           | 36,000                                           | 36,000             | 26,708           |
| FY 2028                           | 47,000                                           | 45,000             | 51,645           |
| FY 2029                           | 39,000                                           | 42,000             | 37,020           |
| FY 2030                           | 13,070                                           | 19,070             | 22,626           |
| FY 2031                           | -                                                | -                  | 5,000            |
| Outyears                          | -                                                | -                  | -                |
| <b>Total, OPC</b>                 | <b>232,070</b>                                   | <b>232,070</b>     | <b>232,070</b>   |

|                                  | Budget<br>Authority<br>(Appropriations) | Obligations      | Costs            |
|----------------------------------|-----------------------------------------|------------------|------------------|
| <b>Total Project Costs (TPC)</b> |                                         |                  |                  |
| PY to FY 2024                    | 1,404,003                               | 1,404,003        | 1,367,794        |
| FY 2025                          | 370,000                                 | 312,265          | 229,588          |
| FY 2026                          | 274,179                                 | 285,179          | 314,375          |
| FY 2027                          | 84,232                                  | 112,232          | 162,540          |
| FY 2028                          | 65,516                                  | 63,516           | 98,857           |
| FY 2029                          | 39,000                                  | 53,735           | 49,220           |
| FY 2030                          | 13,070                                  | 19,070           | 22,626           |
| FY 2031                          | -                                       | -                | 5,000            |
| Outyears                         | -                                       | -                | -                |
| <b>Total TPC</b>                 | <b>2,250,000</b>                        | <b>2,250,000</b> | <b>2,250,000</b> |

Table 5.7: Main Process Building Subproject (06-D-141-04)

|                                   | <b>Budget Authority<br/>(Appropriations)<sup>1</sup></b> | <b>Obligations</b> | <b>Costs</b>         |
|-----------------------------------|----------------------------------------------------------|--------------------|----------------------|
| <b>Total Estimated Cost (TEC)</b> |                                                          |                    |                      |
| <b>Design</b>                     |                                                          |                    |                      |
| PY to FY 2023                     | 1,838,000                                                | 1,838,000          | 1,838,000            |
| <b>Total Design</b>               | <b>1,838,000</b>                                         | <b>1,838,000</b>   | <b>1,838,000</b>     |
| <b>Construction</b>               |                                                          |                    |                      |
| PY to FY 2024                     | 3,292,960                                                | 3,287,941          | 2,974,981            |
| FY 2025                           | 354,569                                                  | 333,866            | 511,940 <sup>2</sup> |
| FY 2026                           | 559,721                                                  | 407,479            | 416,882              |
| FY 2027                           | 48,247                                                   | 204,063            | 283,104              |
| FY 2028                           | 79,852                                                   | 73,000             | 88,862               |
| FY 2029                           | -                                                        | 24,000             | 47,251               |
| FY 2030                           | -                                                        | 5,000              | 11,553               |
| FY 2031                           | -                                                        | -                  | 776                  |
| Outyears                          | -                                                        | -                  | -                    |
| <b>Total Construction</b>         | <b>4,335,349</b>                                         | <b>4,335,349</b>   | <b>4,335,349</b>     |
| <b>TEC</b>                        |                                                          |                    |                      |
| PY to FY 2024                     | 5,130,960                                                | 5,125,941          | 4,812,981            |
| FY 2025                           | 354,569                                                  | 333,866            | 511,940              |
| FY 2026                           | 559,721                                                  | 407,479            | 416,882              |
| FY 2027                           | 48,247                                                   | 204,063            | 283,104              |
| FY 2028                           | 79,852                                                   | 73,000             | 88,862               |
| FY 2029                           | -                                                        | 24,000             | 47,251               |
| FY 2030                           | -                                                        | 5,000              | 11,553               |
| FY 2031                           | -                                                        | -                  | 776                  |
| Outyears                          | -                                                        | -                  | -                    |
| <b>Total TEC</b>                  | <b>6,173,349</b>                                         | <b>6,173,349</b>   | <b>6,173,349</b>     |

<sup>1</sup> PSF completed and funding aligned to final TPC, appropriated funds remain under UPF project. Annual appropriated values updated to reflect alignment.

<sup>2</sup> 2025 Updated with actual cost

|                                  | <b>Budget Authority<br/>(Appropriations)<sup>1</sup></b> | <b>Obligations</b> | <b>Costs</b>         |
|----------------------------------|----------------------------------------------------------|--------------------|----------------------|
| <b>Other Project Costs (OPC)</b> |                                                          |                    |                      |
| PY to FY 2024                    | 218,037                                                  | 225,643            | 141,182              |
| FY 2025                          | 75,431                                                   | 20,000             | 40,722               |
| FY 2026                          | 146,100                                                  | 56,100             | 107,025              |
| FY 2027                          | 157,521                                                  | 295,346            | 320,129              |
| FY 2028                          | 340,632                                                  | 288,692            | 275,219              |
| FY 2029                          | 251,000                                                  | 251,000            | 153,980              |
| FY 2030                          | 87,930                                                   | 67,630             | 111,059              |
| FY 2031                          | -                                                        | 14,731             | 68,340               |
| Outyears                         | -                                                        | 57,509             | 58,995               |
| <b>Total, OPC</b>                | <b>1,276,651</b>                                         | <b>1,276,651</b>   | <b>1,276,651</b>     |
| <b>Total Project Costs (TPC)</b> |                                                          |                    |                      |
| PY to FY 2024                    | 5,348,997                                                | 5,351,584          | 4,954,163            |
| FY 2025                          | 430,000                                                  | 353,866            | 552,662 <sup>2</sup> |
| FY 2026                          | 705,821                                                  | 463,579            | 523,907              |
| FY 2027                          | 205,768                                                  | 499,409            | 603,233              |
| FY 2028                          | 420,484                                                  | 361,692            | 364,081              |
| FY 2029                          | 251,000                                                  | 275,000            | 201,231              |
| FY 2030                          | 87,930                                                   | 72,630             | 122,612              |
| FY 2031                          | -                                                        | 14,731             | 69,116               |
| Outyears                         | -                                                        | 57,509             | 58,995               |
| <b>Total TPC</b>                 | <b>7,450,000</b>                                         | <b>7,450,000</b>   | <b>7,450,000</b>     |

<sup>2</sup> 2025 Updated with actual cost

#### 4. Details of Project Cost Estimate

Table 6: Details of UPF Project (06-D-141) (\$K)

|                                    |                     | Current<br>Total<br>Estimate  | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|---------------------|-------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                     |                               |                               |                                   |
| <b>Design</b>                      |                     |                               |                               |                                   |
|                                    | Design              | 1,838,000                     | 1,838,000                     | 1,838,000                         |
|                                    | Contingency         | -                             | -                             | -                                 |
| <b>Total Design</b>                |                     | <b>1,838,000</b>              | <b>1,838,000</b>              | <b>1,838,000</b>                  |
| <b>Construction</b>                |                     |                               |                               |                                   |
|                                    | Site Preparation    | 156,214                       | 156,214                       | 191,700                           |
|                                    | Equipment           | 1,176,641                     | 1,176,641                     | 1,370,180                         |
|                                    | Construction        | 5,409,090                     | 5,416,254                     | 2,420,463                         |
|                                    | Contingency         | 221,314                       | 230,300                       | 340,300                           |
| <b>Total Construction</b>          |                     | <b>6,963,259</b>              | <b>6,979,409</b>              | <b>4,322,643</b>                  |
| <b>Total Estimated Cost (TEC)</b>  |                     | <b>8,801,259</b>              | <b>8,817,409</b>              | <b>6,160,643</b>                  |
| <i>Contingency, TEC</i>            |                     | <i>221,314</i>                | <i>230,300</i>                | <i>340,300</i>                    |
| <b>Other Project Costs (OPC)</b>   |                     |                               |                               |                                   |
| OPC except D&D                     |                     |                               |                               |                                   |
|                                    | Conceptual Planning | 30,000                        | 30,000                        | 30,000                            |
|                                    | Conceptual Design   | 64,643                        | 64,643                        | 64,643                            |
|                                    | Start-up            | 1,068,702                     | 1,068,248                     | 225,000                           |
|                                    | Contingency         | 369,396                       | 369,850                       | 59,000                            |
| <b>Total OPC</b>                   |                     | <b>1,532,741</b>              | <b>1,532,741</b>              | <b>378,643</b>                    |
| <i>Contingency, OPC</i>            |                     | <i>369,396</i>                | <i>369,850</i>                | <i>59,000</i>                     |
| <b>Total Project Cost</b>          |                     | <b>10,350,000<sup>1</sup></b> | <b>10,350,150</b>             | <b>6,539,286</b>                  |
| <b>Total Contingency (TEC+OPC)</b> |                     | <b>590,710</b>                | <b>600,150</b>                | <b>399,300</b>                    |

<sup>1</sup> \$16M of unspent contingency from PSF is held on the top line UPF project to support MPB and SAB completion, in the event its required. Value is not reflected in subprojects' tables.



Table 6.1: Details of Site Readiness Subproject (06-D-141-01)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | -                                     | -                                      | -                                          |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | 43,714                                | 43,714                                 | 50,200                                     |
| Equipment                          | -                                     | -                                      | -                                          |
| Construction                       | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | 13,800                                     |
| <b>Total Construction</b>          | <b>43,714</b>                         | <b>43,714</b>                          | <b>64,000</b>                              |
| <b>Total Estimated Cost (TEC)</b>  | <b>43,714</b>                         | <b>43,714</b>                          | <b>64,000</b>                              |
| <i>Contingency, TEC</i>            | -                                     | -                                      | <i>13,800</i>                              |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | -                                     | -                                      | -                                          |
| Conceptual Design                  | -                                     | -                                      | -                                          |
| Start-up                           | -                                     | -                                      | 1,000                                      |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total OPC</b>                   | -                                     | -                                      | <b>1,000</b>                               |
| <i>Contingency, OPC</i>            | -                                     | -                                      | -                                          |
| <b>Total Project Cost</b>          | <b>43,714</b>                         | <b>43,714</b>                          | <b>65,000</b>                              |
| <b>Total Contingency (TEC+OPC)</b> | -                                     | -                                      | <b>13,800</b>                              |

Table 6.2: Details of Site Infrastructure and Services Subproject (06-D-141-05)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | -                                     | -                                      | -                                          |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | -                                     | -                                      | 26,000                                     |
| Equipment                          | -                                     | -                                      | -                                          |
| Construction                       | 60,500                                | 60,500                                 | 30,000                                     |
| Contingency                        | -                                     | -                                      | 22,500                                     |
| <b>Total Construction</b>          | <b>60,500</b>                         | <b>60,500</b>                          | <b>78,500</b>                              |
| <b>Total Estimated Cost (TEC)</b>  | <b>60,500</b>                         | <b>60,500</b>                          | <b>78,500</b>                              |
| <i>Contingency, TEC</i>            | -                                     | -                                      | 22,500                                     |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | -                                     | -                                      | -                                          |
| Conceptual Design                  | -                                     | -                                      | -                                          |
| Start-up                           | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total OPC</b>                   | -                                     | -                                      | -                                          |
| <i>Contingency, OPC</i>            | -                                     | -                                      | -                                          |
| <b>Total Project Cost</b>          | <b>60,500</b>                         | <b>60,500</b>                          | <b>78,500</b>                              |
| <b>Total Contingency (TEC+OPC)</b> | -                                     | -                                      | 22,500                                     |

Table 6.3: Details of Substation Subproject (06-D-141-07) (\$K)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | -                                     | -                                      | -                                          |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | -                                     | -                                      | 3,000                                      |
| Equipment                          | -                                     | -                                      | 49,700                                     |
| Construction                       | 43,650                                | 43,800                                 | -                                          |
| Contingency                        | -                                     | -                                      | 7,300                                      |
| <b>Total Construction</b>          | <b>43,650</b>                         | <b>43,800</b>                          | <b>60,000</b>                              |
| <b>Total Estimated Cost (TEC)</b>  | <b>43,650</b>                         | <b>43,800</b>                          | <b>60,000</b>                              |
| <i>Contingency, TEC</i>            | -                                     | -                                      | 7,300                                      |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | -                                     | -                                      | -                                          |
| Conceptual Design                  | -                                     | -                                      | -                                          |
| Start-up                           | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total OPC</b>                   | -                                     | -                                      | -                                          |
| <i>Contingency, OPC</i>            | -                                     | -                                      | -                                          |
| <b>Total Project Cost</b>          | <b>43,650</b>                         | <b>43,800</b>                          | <b>60,000</b>                              |
| <b>Total Contingency (TEC+OPC)</b> | -                                     | -                                      | 7,300                                      |

Table 6.4: Details of Mechanical Electrical Building Subproject (06-D-141-06) (\$K)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | -                                     | -                                      | -                                          |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | -                                     | -                                      | -                                          |
| Equipment                          | 86,180                                | 86,180                                 | 86,040                                     |
| Construction                       | 220,936                               | 220,936                                | 159,760                                    |
| Contingency                        | -                                     | -                                      | 38,200                                     |
| <b>Total Construction</b>          | <b>307,116</b>                        | <b>307,116</b>                         | <b>284,000</b>                             |
| <b>Total Estimated Cost (TEC)</b>  | <b>307,116</b>                        | <b>307,116</b>                         | <b>284,000</b>                             |
| <i>Contingency, TEC</i>            | -                                     | -                                      | 38,200                                     |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | -                                     | -                                      | -                                          |
| Conceptual Design                  | -                                     | -                                      | -                                          |
| Start-up                           | 1,020                                 | 1,020                                  | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total OPC</b>                   | <b>1,020</b>                          | <b>1,020</b>                           | -                                          |
| <i>Contingency, OPC</i>            | -                                     | -                                      | -                                          |
| <b>Total Project Cost</b>          | <b>308,136</b>                        | <b>308,136</b>                         | <b>284,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> | -                                     | -                                      | 38,200                                     |
| <b>TPC from CD-4 Documentation</b> | <b>309,000</b>                        |                                        |                                            |

Table 6.5: Details of Process Support Facilities Subproject (06-D-141-08) (\$K)

|                                    | <b>Current<br/>Total<br/>Estimate<sup>1</sup></b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                                   |                                        |                                            |
| <b>Design</b>                      |                                                   |                                        |                                            |
| Design                             | -                                                 | -                                      | -                                          |
| Contingency                        | -                                                 | -                                      | -                                          |
| <b>Total Design</b>                | -                                                 | -                                      | -                                          |
| <b>Construction</b>                |                                                   |                                        |                                            |
| Site Preparation                   | -                                                 | -                                      | -                                          |
| Equipment                          | 25,438                                            | 25,438                                 | 19,530                                     |
| Construction                       | 129,562                                           | 131,576                                | 75,970                                     |
| Contingency                        | -                                                 | 8,986                                  | 22,500                                     |
| <b>Total Construction</b>          | <b>155,000</b>                                    | <b>166,000</b>                         | <b>118,000</b>                             |
| <b>Total Estimated Cost (TEC)</b>  | <b>155,000</b>                                    | <b>166,000</b>                         | <b>118,000</b>                             |
| <i>Contingency, TEC</i>            | -                                                 | 8,986                                  | 22,500                                     |
| <b>Other Project Costs (OPC)</b>   |                                                   |                                        |                                            |
| OPC except D&D                     |                                                   |                                        |                                            |
| Conceptual Planning                | -                                                 | -                                      | -                                          |
| Conceptual Design                  | -                                                 | -                                      | -                                          |
| Start-up                           | 23,000                                            | 22,546                                 | 18,000                                     |
| Contingency                        | -                                                 | 5,454                                  | 4,000                                      |
| <b>Total OPC</b>                   | <b>23,000</b>                                     | <b>28,000</b>                          | <b>22,000</b>                              |
| <i>Contingency, OPC</i>            | -                                                 | 5,454                                  | 4,000                                      |
| <b>Total Project Cost</b>          | <b>178,000<sup>2</sup></b>                        | <b>194,000</b>                         | <b>140,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> | <b>-</b>                                          | <b>14,440</b>                          | <b>26,500</b>                              |

<sup>1</sup> Current Total Estimate contains final project closeout costs.

<sup>2</sup> \$16M of unspent contingency from PSF is held on the top line UPF project to support MPB and SAB completion, in the event its required. Value is not reflected in subprojects' tables.

Table 6.6: Details of Salvage and Accountability Building Subproject (06-D-141-09) (\$K)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | -                                     | -                                      | -                                          |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | -                                     | -                                      | -                                          |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | -                                     | -                                      | -                                          |
| Equipment                          | 312,527                               | 312,527                                | 380,160                                    |
| Construction                       | 1,618,917                             | 1,618,917                              | 599,840                                    |
| Contingency                        | 86,486                                | 86,486                                 | 125,000                                    |
| <b>Total Construction</b>          | <b>2,017,930</b>                      | <b>2,017,930</b>                       | <b>1,105,000</b>                           |
| <b>Total Estimated Cost (TEC)</b>  | <b>2,017,930</b>                      | <b>2,017,930</b>                       | <b>1,105,000</b>                           |
| <i>Contingency, TEC</i>            | <i>86,486</i>                         | <i>86,486</i>                          | <i>125,000</i>                             |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | -                                     | -                                      | -                                          |
| Conceptual Design                  | -                                     | -                                      | -                                          |
| Start-up                           | 136,030                               | 136,030                                | 60,000                                     |
| Contingency                        | 96,040                                | 96,040                                 | 15,000                                     |
| <b>Total OPC</b>                   | <b>232,070</b>                        | <b>232,070</b>                         | <b>75,000</b>                              |
| <i>Contingency, OPC</i>            | <i>96,040</i>                         | <i>96,040</i>                          | <i>15,000</i>                              |
| <b>Total Project Cost</b>          | <b>2,250,000</b>                      | <b>2,250,000</b>                       | <b>1,180,000</b>                           |
| <b>Total Contingency (TEC+OPC)</b> | <b>182,526</b>                        | <b>182,526</b>                         | <b>140,000</b>                             |

Table 6.7: Details of Main Process Building Subproject (06-D-141-04)

|                                    | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                       |                                        |                                            |
| <b>Design</b>                      |                                       |                                        |                                            |
| Design                             | 1,838,000                             | 1,838,000                              | 1,838,000                                  |
| Contingency                        | -                                     | -                                      | -                                          |
| <b>Total Design</b>                | <b>1,838,000</b>                      | <b>1,838,000</b>                       | <b>1,838,000</b>                           |
| <b>Construction</b>                |                                       |                                        |                                            |
| Site Preparation                   | 112,500                               | 112,500                                | 112,500                                    |
| Equipment                          | 752,496                               | 752,496                                | 834,750                                    |
| Construction                       | 3,335,525                             | 3,340,525                              | 1,554,893                                  |
| Contingency                        | 134,828                               | 134,828                                | 111,000                                    |
| <b>Total Construction</b>          | <b>4,335,349</b>                      | <b>4,340,349</b>                       | <b>2,613,143</b>                           |
| <b>Total Estimated Cost (TEC)</b>  | <b>6,173,349</b>                      | <b>6,178,349</b>                       | <b>4,451,143</b>                           |
| <i>Contingency, TEC</i>            | <i>134,828</i>                        | <i>134,828</i>                         | <i>111,000</i>                             |
| <b>Other Project Costs (OPC)</b>   |                                       |                                        |                                            |
| OPC except D&D                     |                                       |                                        |                                            |
| Conceptual Planning                | 30,000                                | 30,000                                 | 30,000                                     |
| Conceptual Design                  | 64,643                                | 64,643                                 | 64,643                                     |
| Start-up                           | 908,652                               | 908,652                                | 146,000                                    |
| Contingency                        | 273,356                               | 268,356                                | 40,000                                     |
| <b>Total OPC</b>                   | <b>1,276,651</b>                      | <b>1,271,651</b>                       | <b>280,643</b>                             |
| <i>Contingency, OPC</i>            | <i>273,356<sup>1</sup></i>            | <i>268,356</i>                         | <i>40,000</i>                              |
| <b>Total Project Cost</b>          | <b>7,450,000</b>                      | <b>7,450,000</b>                       | <b>4,731,786</b>                           |
| <b>Total Contingency (TEC+OPC)</b> | <b>408,184</b>                        | <b>403,184</b>                         | <b>151,000</b>                             |

<sup>1</sup> Contingency increase is a result of loading and balancing the approved re-baseline. No change to TPC.

## 5. Schedule of Appropriations Requests<sup>1</sup>

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | WFT C   | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears  | Total      |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|------------|
| FY 2022      | TE C | N/A         | TBD     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | TBD     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 5,939,411   | TBD     | 560,589 | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 6,500,000  |
| FY 2023      | TE C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 6,500,000   | -       | -       | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 6,500,000  |
| FY 2024      | TE C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 7,340,517   | 550,000 | 400,000 | N/A     | 225,000 | 57,613  | N/A     | N/A     | N/A     | N/A       | 8,573,130  |
| FY 2025      | TE C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 7,337,261   | 800,000 | 596,021 | N/A     | 354,885 | 251,000 | N/A     | N/A     | N/A     | N/A       | 9,339,167  |
| FY 2026      | TE C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 7,387,111   | 800,000 | 730,000 | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | 1,432,889 | 10,350,000 |
| FY 2027      | TE C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | OP C | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | N/A        |
|              | TP C | 7,387,111   | 800,000 | 730,000 | 250,000 | 290,000 | 486,000 | 290,000 | 117,000 | -       | -         | 10,350,000 |

<sup>1</sup> Entries for FY 2021 and prior are omitted because no DOE/NNSA requested no funding for UPF in those years for FY 2025 or beyond.



## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |           |
|---------------------------------------------------------------------|-----------|
| Start of Operation or Beneficial Occupancy                          | 1/31/2032 |
| Expected Useful Life                                                | 50 years  |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 1/31/2082 |

### Related Funding Requirements (Budget Authority in Billions of Dollars, FY 2025 constant-year dollars)

|                            | Annual Costs            |                        | Life Cycle Costs        |                        |
|----------------------------|-------------------------|------------------------|-------------------------|------------------------|
|                            | Previous Total Estimate | Current Total Estimate | Previous Total Estimate | Current Total Estimate |
| Operations and Maintenance | 0.466                   | 0.466                  | 32.915                  | 32.915                 |

## 7. D&D Information

The new area being constructed in this project is replacing existing facilities.

|                                                                                                                                    |                                 |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| New Area being constructed at Y-12 National Security Complex                                                                       | 568,524 square feet             |
| Area of D&D in this project at Y-12 National Security Complex                                                                      | 11,000 square feet <sup>1</sup> |
| Area at Y-12 National Security Complex to be transferred, sold, and/or D&D outside the project, including area previously “banked” | 1,202,000 square feet           |
| Area of D&D of this project at other sites                                                                                         | -                               |
| Area at other sites to be transferred, sold, and/or D&D outside the project, including area previously “banked”                    | -                               |
| Total Area Eliminated                                                                                                              | N/A                             |

## 8. Acquisition Approach

The NNSA Federal Project Director and the Integrated Project Team are responsible for the execution of the project. The Y-12 M&O contractor is the designated design authority. Designated officials within the Office of Defense Programs are responsible for defining program requirements and identifying project scope changes. The Office of Infrastructure is responsible for providing support for alternative studies and serves as the lead NNSA office for design and construction of the project.

The UPF Project construction scope is being performed under firm fixed price contracts or subcontracts along with cost-plus contracts as determined to be the best value for the government. The Department is administering Architect-Engineer and construction contracts utilizing the M&O contract and stand-alone contract vehicles. The United States Army Corps of Engineers and TVA have had acquisition and project management responsibility for appropriate scopes of work as determined by the Department.

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<sup>1</sup> Building 9107

**26-D-511, MESA Photolithography Capability (MPC)  
Sandia National Laboratories, Albuquerque, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The Fiscal Year (FY) 2027 Request for the Microsystem Engineering, Science, and Applications (MESA) Photolithography Capability (MPC) project is \$51,000,000 of Total Estimated Cost (TEC) and supports the initiation of preliminary design and early procurement of long lead photolithography tools.

This project is a new start in FY 2027. The MPC project is planning to receive CD-0 approval by April 2026 and CD-1/3A approval by September 2026. The Project Management Executive (PME) authority is planned to be delegated to the Principal Assistant Deputy Administrator for Production Modernization and Materials Management. A business case analysis (BCA) was completed by Sandia National Laboratories in FY 2024, and a conceptual design was completed in May 2025 which included an initial cost range of \$332M (P20) - \$350M (P80). A Total Project Cost (TPC) of \$420M and CD-4 date of 1Q FY 2034 is being proposed following external independent review comments that noted concerns with estimate optimism.

The Non-Nuclear Capability Modernization program provides funding for Other Project Costs (OPCs) associated with the MPC project. The MPC project will be a build-to-budget project. Cost management and cost reduction options will be evaluated through value engineering during preliminary design. All options will be evaluated to ensure meet the threshold operating requirements A Federal Project Director has not been assigned to this project.

**Significant Changes**

An independent design review on the conceptual design was completed in September 2025 to inform the CD-0/1/3A package. The results confirmed that the project is ready to move into the preliminary design and long lead procurement phases. The project is pursuing approval to use NNSA Supplemental Directive 413.3-7, *Project Management for Nonnuclear, Non-Complex Capital Asset Acquisition*. The project was authorized in FY 2026 NDAA but did not receive an appropriation in FY 2026, so the CD-1/3A approval is being delayed to sync up with the requested FY 2027 funding. This delay has resulted in the proposed top of the CD-1 cost range increasing to \$420M due to the escalation of costs and estimate optimism issues identified by the external independent review.

**Critical Milestone History**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b>             | <b>Final Design Complete</b> | <b>CD-2</b> | <b>CD-3</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------------------|------------------------------|-------------|-------------|-------------|
| FY 2026            | 1Q FY 2026  | 03/20/2025                        | 1Q FY 2026 <sup>1</sup> | 4Q FY 2027                   | 2Q FY 2028  | 2Q FY 2028  | 1Q FY 2032  |
| FY 2027            | 1Q FY 2027  | 05/23/2025 <sup>2</sup>           | 1Q FY 2027              | 4Q FY 2028                   | 2Q FY 2029  | 2Q FY 2029  | 1Q FY 2034  |

<sup>1</sup> An error was made with the year for proposed CD-1 in the FY 2026 CPDS and was corrected.

<sup>2</sup> An error was made with the completion date, an update was made to the conceptual design in May 2025.

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range  
**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable).  
**CD-1** – Approve Alternative Selection and Cost Range  
**CD-2** – Approve Performance Baseline  
**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)  
**CD-3** – Approve Start of Construction  
**D&D Complete** – Completion of D&D work  
**CD-4** – Approve Start of Operations or Project Complete

| Fiscal Year | CD-3A      |
|-------------|------------|
| FY 2026     | 1Q FY 2027 |
| FY 2027     | 1Q FY 2027 |

**CD-3A** – Approve Long-Lead Procurement (laboratory and facility equipment)

### Project Cost History (\$K)

| Fiscal Year | TEC,<br>Design | TEC,<br>Construction | TEC<br>Total | OPC<br>Total, | TPC     |
|-------------|----------------|----------------------|--------------|---------------|---------|
| FY 2026     | 40,000         | 340,900              | 380,900      | 19,100        | 400,000 |
| FY 2027     | 36,500         | 363,500              | 400,000      | 20,000        | 420,000 |

## 2. Project Scope and Justification

### Scope

The MPC project is a design and construction project that consists of approximately 30,000 square feet of construction, including 6,700 square feet of modern clean room space for four modern photolithography tools and associated equipment in support of the MESA complex.

The CD-3A, *Approve Long-Lead Procurement*, scope is for procurement of laboratory and facility equipment. This specialized equipment has long procurement durations of approximately 30 months.

### Justification

Microelectronics, commonly referred to as integrated circuits or semiconductors, form the basis of nearly all electronic products, including components of nuclear weapons. The long-term viability of the U.S. nuclear deterrent depends on a trustworthy supply of unique microelectronics. U.S. nuclear weapons require a supply of unique warhead strategically radiation hardened (WSRH) microelectronics that must function properly when exposed to high levels of radiation. Strategic radiation-hardened microelectronics are essential components of a nuclear weapon's arming, fuzing, and firing system, which provides the signals that initiate the nuclear explosive chain.

The MESA Complex at Sandia National Laboratories (SNL) is the approved source of WSRH microelectronics for the Nation's nuclear deterrent. These microelectronics consist of application-specific integrated circuits (ASICs), Heterojunction Bipolar Transistors (HBTs) Electrical Environment Sensing Devices (EESDs), and more. MESA has produced over 300,000 parts across 43 products.

Many of the facilities and infrastructure, tools and equipment responsible for producing these parts have exceeded end of life (EOL) and are in poor condition, which could lead to production and development shortcomings in the near future. The MESA complex is extremely limited in available clean room space for expansion. Existing tools are reaching EOL, and new modern tools require more physical space and utilities than are currently available. Expansion of clean room space is needed to allow for the installation of additional equipment to mitigate single points of failure.

Of the existing MESA facilities, the Silicon Fabrication Facility (SiFab) is in the most challenging condition. Built in 1988, it was originally designed for research and development work, then modified for microelectronics production. Of all the process tools, the two photolithography machines are considered the most critical and highest risk as all the silicon fabrication microelectronics pass through them, as each component passes 28 to 44 times through the photolithography tool for each production run. These two tools, which had a combined mean downtime in calendar year (CY) 2023 of 27.8% and in CY 2024 of 65.7%,<sup>1</sup> and are no longer supported by the original manufacturer. Without photolithography, MESA cannot produce WSRH components, and weapon modernization programs would come to a halt. The existing tools cannot be replaced with new ones as the more modern photolithography machines are much larger and heavier than the SiFab can support, thus, the need for a new clean room addition. Once the MPC photolithography tools are up and running, the existing photolithography tools in the SiFab will be removed, creating critical clean room white space for other high-risk tools.

**Key Performance Parameters (KPPs)**

KPPs will be developed along with the Preliminary Project Execution Plan that considers the requirement for redundant, modern photolithography capability.

**3. Financial Schedule (\$K)**

|                            |          | Budget Authority<br>(Appropriations) | Obligations | Costs   |
|----------------------------|----------|--------------------------------------|-------------|---------|
| Total Estimated Cost (TEC) |          |                                      |             |         |
| Design                     |          |                                      |             |         |
|                            | FY 2026  | -                                    | -           | -       |
|                            | FY 2027  | 25,000                               | 25,000      | 20,000  |
|                            | FY 2028  | 11,500                               | 11,500      | 16,500  |
| Total Design               |          | 36,500                               | 36,500      | 36,500  |
| Construction               |          |                                      |             |         |
|                            | FY 2026  | -                                    | -           | -       |
|                            | FY 2027  | 26,000                               | 26,000      | 15,000  |
|                            | FY 2028  | 40,520                               | 452,020     | 25,000  |
|                            | FY 2029  | 53,060                               | 53,060      | 70,000  |
|                            | FY 2030  | 111,980                              | 111,980     | 115,000 |
|                            | FY 2031  | 72,840                               | 72,840      | 75,000  |
|                            | Outyears | 59,100                               | 59,100      | 63,500  |

<sup>1</sup> Downtime in CY 2024 spiked due to a planned outage of one photolithography machine. This outage enabled the performance of an 18-month-long project to replace an obsolescent tool that supports that machine.

|                                  |             | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|----------------------------------|-------------|--------------------------------------|----------------|----------------|
| <b>Total Construction</b>        |             | <b>363,500</b>                       | <b>362,500</b> | <b>363,500</b> |
| <b>TEC</b>                       |             |                                      |                |                |
|                                  | FY 2026     | -                                    | -              | -              |
|                                  | FY 2027     | 51,000                               | 51,000         | 35,000         |
|                                  | FY 2028     | 52,020                               | 52,020         | 41,500         |
|                                  | FY 2029     | 53,060                               | 53,060         | 70,000         |
|                                  | FY 2030     | 111,980                              | 111,980        | 115,000        |
|                                  | FY 2031     | 72,840                               | 72,840         | 75,000         |
|                                  | Outyears    | 59,100                               | 59,100         | 63,500         |
| <b>Total TEC</b>                 |             | <b>400,000</b>                       | <b>400,000</b> | <b>400,000</b> |
| <b>Other Project Costs (OPC)</b> |             |                                      |                |                |
|                                  | Prior Years | 1,510                                | 1,510          | 1,410          |
|                                  | FY 2026     | -                                    | -              | 100            |
|                                  | FY 2027     | -                                    | -              | -              |
|                                  | FY 2028     | -                                    | -              | -              |
|                                  | FY 2029     | 1,500                                | 1,500          | 1,350          |
|                                  | FY 2030     | 5,090                                | 5,090          | 2,850          |
|                                  | FY 2031     | 6,500                                | 6,500          | 3,750          |
|                                  | Outyears    | 5,400                                | 5,400          | 10,540         |
| <b>Total, OPC</b>                |             | <b>20,000</b>                        | <b>20,000</b>  | <b>20,000</b>  |

|                                  | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|----------------------------------|--------------------------------------|----------------|----------------|
| <b>Total Project Costs (TPC)</b> |                                      |                |                |
| Prior Years                      | 1,510                                | 1,510          | 1,410          |
| FY 2026                          | -                                    | -              | 100            |
| FY 2027                          | 51,000                               | 51,000         | 35,000         |
| FY 2028                          | 52,020                               | 52,020         | 41,500         |
| FY 2029                          | 54,560                               | 54,560         | 71,350         |
| FY 2030                          | 117,070                              | 117,070        | 117,850        |
| FY 2031                          | 79,340                               | 79,340         | 78,750         |
| Outyears                         | 64,500                               | 64,500         | 74,040         |
| <b>Total TPC</b>                 | <b>420,000</b>                       | <b>420,000</b> | <b>420,000</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                   |                        | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|-----------------------------------|------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b> |                        |                              |                               |                                   |
| <b>Design</b>                     |                        |                              |                               |                                   |
|                                   | Design                 | 36,500                       | TBD                           | N/A                               |
|                                   | Federal Design Review  | TBD                          | TBD                           | N/A                               |
|                                   | Support                | TBD                          | TBD                           | N/A                               |
|                                   | Contingency            | TBD                          | TBD                           | N/A                               |
| <b>Total Design</b>               |                        | <b>36,500</b>                | <b>40,000</b>                 | <b>N/A</b>                        |
| <b>Construction</b>               |                        |                              |                               |                                   |
|                                   | Site Work              | TBD                          | TBD                           | N/A                               |
|                                   | Equipment              | TBD                          | TBD                           | N/A                               |
|                                   | Construction           | TBD                          | TBD                           | N/A                               |
|                                   | Federal Support        | TBD                          | TBD                           | N/A                               |
|                                   | Contingency            | TBD                          | TBD                           | N/A                               |
| <b>Total Construction</b>         |                        | <b>363,500</b>               | <b>340,900</b>                | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b> |                        | <b>400,000</b>               | <b>380,900</b>                | <b>N/A</b>                        |
| <i>Contingency, TEC</i>           |                        | <i>TBD</i>                   | <i>TBD</i>                    | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>  |                        |                              |                               |                                   |
| OPC except D&D                    |                        |                              |                               | N/A                               |
|                                   | Business Case Analysis | 400                          | 400                           | N/A                               |
|                                   | Conceptual Design      | 910                          | 910                           | N/A                               |
|                                   | CD-1 Documents/Fed     | 200                          | 200                           | N/A                               |
|                                   | Support                | TBD                          | TBD                           | N/A                               |
|                                   | Start-up               | TBD                          | TBD                           | N/A                               |
|                                   | Equipment Move         | TBD                          | TBD                           | N/A                               |

|                                    |                |                |            |
|------------------------------------|----------------|----------------|------------|
| Contingency                        | TBD            | TBD            | N/A        |
| <b>Total OPC</b>                   | <b>20,000</b>  | <b>19,100</b>  | <b>N/A</b> |
| <i>Contingency, OPC</i>            | <i>TBD</i>     | <i>TBD</i>     | <i>N/A</i> |
| <b>Total Project Cost</b>          | <b>420,000</b> | <b>400,000</b> | <b>N/A</b> |
| <b>Total Contingency (TEC+OPC)</b> | <b>TBD</b>     | <b>TBD</b>     | <b>N/A</b> |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years | FY2026 | FY2027 | FY2028 | FY2029 | FY2030  | FY2031 | Out Years | Total   |
|--------------|------|-------------|--------|--------|--------|--------|---------|--------|-----------|---------|
| FY 2026      | TEC  | -           | 40,000 | N/A    | N/A    | N/A    | N/A     | N/A    | 340,900   | 380,900 |
|              | OPC  | 1,510       | -      | N/A    | N/A    | N/A    | N/A     | N/A    | 17,590    | 19,100  |
|              | TPC  | 1,510       | 40,000 | N/A    | N/A    | N/A    | N/A     | N/A    | 358,490   | 400,000 |
| FY 2027      | TEC  | -           | -      | 51,000 | 52,020 | 53,060 | 111,980 | 72,840 | 59,100    | 400,000 |
|              | OPC  | 1,510       | -      | -      | -      | 1,500  | 5,090   | 6,500  | 5,400     | 20,000  |
|              | TPC  | 1,510       | -      | 51,000 | 52,020 | 54,560 | 117,070 | 79,340 | 64,500    | 420,000 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 1Q FY 2034 |
| Expected Useful Life (number of years)                              | 50         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 1Q FY 2084 |

Operations and Maintenance costs will be updated in future versions of this document, once the project has reached greater project definition and design.

## 7. D&D Information

The new area being constructed in this project is replacing a portion of an existing facility (MESA SiFab), but the existing facility will still be in use and will not be demolished as part of this project.

|                                                                                                         | Square Feet         |
|---------------------------------------------------------------------------------------------------------|---------------------|
| New area being constructed by this project                                                              | 30,000 <sup>1</sup> |
| Area of D&D in this project at SNL                                                                      | 1,773               |
| Area at SNL to be transferred, sold, and/or D&D outside the project, including area previously “banked” | 28,227 <sup>a</sup> |
| Area of D&D in this project at other sites                                                              | -                   |

<sup>1</sup> An error was made in the FY 2026 CPDS. The value was updated to include the total facility, not just the new clean room space.

## **8. Acquisition Approach**

The MPC project is planned to be managed by the SNL Management and Operating (M&O) contractor. Design and construction are expected to be performed by subcontractors specializing in this type of work under firm-fixed-price contracts. The most likely scenario is to bring the main construction subcontractor on during the design process to provide constructability support.



**22-D-513 Power Sources Capability (PSC) Facility  
Sandia National Laboratories, Albuquerque, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:** The Fiscal Year (FY) 2027 Request for the Power Sources Capability (PSC) project is \$140,000,000. Funding will be applied to Total Estimated Cost (TEC) scope and support the continued construction of the facility.

This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year. The most recent DOE O 413.3B approved Critical Decision (CD) is CD-2/3, *Approve Performance Baseline and Start of Construction*, which was approved on August 1, 2025, with a Total Project Cost (TPC) of \$400,000,000 and a CD-4 date of July 31, 2030.

A Federal Project Director has been assigned to this project and approved this CPDS. Non-Nuclear Capability Modernization provides funding for Other Project Costs (OPC). All costs associated with the conduct of independent reviews are funded by this project.

**Significant Changes:**

CD-2/3 was approved on August 1, 2025. Facility construction was initiated following construction subcontractor notice to proceed on August 11, 2025.

**Critical Milestone History**

| Fiscal Quarter or Date |            |                            |            |            |                       |            |          |
|------------------------|------------|----------------------------|------------|------------|-----------------------|------------|----------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | CD-4     |
| FY 2022                | 07/10/2019 | 4QFY2021                   | 1QFY2022   | 4QFY2023   | 1QFY2023              | 4QFY2023   | 4QFY2026 |
| FY 2024                | 07/10/2019 | 07/14/2021                 | 12/29/2022 | 3QFY2025   | 3QFY2025              | 3QFY2025   | 3QFY2030 |
| FY 2025                | 07/10/2019 | 07/14/2021                 | 12/29/2022 | 3QFY2025   | 3QFY2025              | 3QFY2025   | 3QFY2030 |
| FY 2026                | 07/10/2019 | 07/14/2021                 | 12/29/2022 | 4QFY2025   | 01/24/2025            | 4QFY2025   | 3QFY2030 |
| FY 2027                | 07/10/2019 | 07/14/2021                 | 12/29/2022 | 08/01/2025 | 01/24/2025            | 08/01/2025 | 4QFY2030 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Estimated date the conceptual design will be completed

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Construction

**D&D Complete** – N/A

**CD-4** – Approve Start of Operations or Project Closeout

| Fiscal Year | CD-3A      | CD-3B      | CD-3C      |
|-------------|------------|------------|------------|
| FY 2024     | 2QFY2024   | 2QFY2024   | N/A        |
| FY 2025     | 2QFY2025   | 4QFY2024   | N/A        |
| FY 2026     | 11/26/2024 | 10/21/2024 | 05/23/2025 |
| FY 2027     | 11/26/2024 | 10/21/2024 | 05/23/2025 |

**CD-3A** – Approve Long-Lead Procurement

**CD-3B** – Approve Site Preparation

**CD-3C** – Construction Preparation Services

### **Project Cost History (\$K)**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2022     | 27,000      | 261,000           | 288,000    | 32,000          | N/A      | 32,000     | 320,000 |
| FY 2024     | 22,379      | 353,574           | 375,953    | 24,047          | N/A      | 24,047     | 400,000 |
| FY 2025     | 22,379      | 348,047           | 370,426    | 29,574          | N/A      | 29,574     | 400,000 |
| FY 2026     | 22,244      | 349,610           | 371,854    | 28,146          | N/A      | 28,146     | 400,000 |
| FY 2027     | 23,951      | 345,935           | 369,886    | 30,114          | N/A      | 30,114     | 400,000 |

## **2. Project Scope and Justification**

### **Scope**

The PSC facility will be a new, Leadership in Energy and Environmental Design (LEED) Certified, modern building with co-located offices and operations. The PSC facility will consist of approximately 136,000 gross square feet of offices, laboratories, and support areas.

The new PSC facility will include the following high-level capabilities:

- A 50-year operating life.
- Co-located office, general use, and specialized laboratory space in one facility.
- Operational and physical security controls for all space types.
- Laboratory area infrastructure to support local exhaust ventilation, grounding and static dissipative controls, and specific engineering controls for operations.
- Controls and requirements for the varying chemicals throughout the facility, which include water reactive materials, compressed gasses (inert, oxygen, inert/5% hydrogen, etc.)
- Expanded utilities and site infrastructure to enable a future building addition, if necessary.

CD-3A, *Approve Long-Lead Procurement*, was approved in November 2024 for procurement of electrical equipment (\$3.62 million). This equipment has long procurement durations, approximately 20 to 30 months, and consists of eleven (11) medium voltage transformers and two (2) switchgear. CD-3B, *Approve Site Preparation*, was approved in October 2024 (\$20 million) to perform early site work prior to vertical construction, and consists of grading, clearing, and grubbing, installation of drainage and erosion control for the construction area, and installation of utilities. CD-3C, *Construction Preparation Services*, was approved in May 2025 (\$18 million) for pre-construction submittals and long-lead equipment and materials purchases.

## **Justification**

All modernization programs and future planned nuclear weapon systems require power source capabilities, and the NNSA has concluded there is an unacceptable risk to these capabilities due to aging and inadequate facilities and an unreliable supplier base. The full-lifecycle power sources mission for the Nuclear Security Enterprise (NSE) is carried out by Sandia National Laboratories (SNL) and this capability primarily resides in Building 894, an over 75-year-old shipping and receiving facility not designed to handle the environments necessary for the mission. The building's maintenance issues began impeding operations at an increasing rate by 2016, thus putting production capacities at significant risk. Building 894 was rated as "Poor" (Building Condition Index Score of 52) by facility and system assessments conducted in 2020. As of FY 2024, the facility had about \$30,000,000 in deferred maintenance, which is expected to grow in the next few years and further increases the risk to the power sources mission.

Successful completion of the PSC facility will:

- Enable the NNSA to meet power source requirements through 2080.
- Reduce risks to the programs associated with SNL Building 894, including environmental safety and health risks.
- Reduce the risk of mission dependence on an unstable vendor base.
- Ensure the availability of capabilities to complete RDT&E activities in addition to production.
- Ensure the flexibility and agility necessary to meet future mission needs.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. Funds requested under this data sheet may be used to provide independent assessments for planning and execution of this project, and contracted support services to the federal project team for oversight and support.

## **Key Performance Parameters (KPPs)**

The PSC CD-2/3 approved KPPs are:

**KPP 1:** Design and construct a facility that meets the full product lifecycle requirements for power sources for current and future nuclear weapons systems.

**KPP 2:** Procure, install, test, and turn over to operations programmatic equipment that will provide the capability to meet nuclear weapon demand for power systems.

KPP achievement will be demonstrated through the Project Completion Criteria and supporting evidence as documented in the approved Project Execution Plan.

### 3. Financial Schedule (\$K)

|                                   | Budget<br>Authority<br>(Appropriations) | Obligations    | Costs          |
|-----------------------------------|-----------------------------------------|----------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                         |                |                |
| <b>Design</b>                     |                                         |                |                |
| Prior Years                       | 18,835                                  | 18,835         | 17,376         |
| FY 2025                           | 5,116                                   | 5,116          | 6,575          |
| <b>Total Design</b>               | <b>23,951</b>                           | <b>23,951</b>  | <b>23,951</b>  |
| <b>Construction</b>               |                                         |                |                |
| Prior Years                       | 32,878                                  | 32,878         | -              |
| FY 2025                           | 44,884                                  | 44,884         | 35,286         |
| FY 2026                           | 105,000                                 | 105,000        | 84,000         |
| FY 2027                           | 140,000                                 | 140,000        | 170,000        |
| FY 2028                           | 23,173                                  | 23,173         | 40,000         |
| FY 2029                           | -                                       | -              | 16,649         |
| <b>Total Construction</b>         | <b>345,935</b>                          | <b>345,935</b> | <b>345,935</b> |
| <b>TEC</b>                        |                                         |                |                |
| Prior Years                       | 51,713                                  | 51,713         | 17,376         |
| FY 2025                           | 50,000                                  | 50,000         | 41,861         |
| FY 2026 <sup>1</sup>              | 105,000                                 | 105,000        | 84,000         |
| FY 2027                           | 140,000                                 | 140,000        | 170,000        |
| FY 2028                           | 23,173                                  | 23,173         | 40,000         |
| FY 2029                           | -                                       | -              | 16,649         |
| <b>Total TEC</b>                  | <b>369,886</b>                          | <b>369,886</b> | <b>369,886</b> |
| <b>Other Project Costs (OPC)</b>  |                                         |                |                |
| Prior Years                       | 14,793                                  | 14,793         | 12,754         |
| FY 2025                           | 1,250                                   | 1,250          | 500            |
| FY 2026                           | 3,000                                   | 3,000          | 1,000          |
| FY 2027                           | 2,000                                   | 2,000          | 1,000          |
| FY 2028                           | 4,000                                   | 4,000          | 3,500          |
| FY 2029                           | 5,071                                   | 5,071          | 7,500          |
| FY 2030                           | -                                       | -              | 3,860          |
| <b>Total, OPC</b>                 | <b>30,114</b>                           | <b>30,114</b>  | <b>30,114</b>  |

<sup>1</sup> The FY 2026 Budget Authority and Obligations include \$100,000K from Public Law 119–21 (Working Families and Tax Cut Act) and \$5,000K from Public Law 119-74.

|                                  | Budget<br>Authority<br>(Appropriations) | Obligations    | Costs          |
|----------------------------------|-----------------------------------------|----------------|----------------|
| <b>Total Project Costs (TPC)</b> |                                         |                |                |
| Prior Years                      | 66,506                                  | 66,506         | 30,130         |
| FY 2025                          | 51,250                                  | 51,250         | 42,361         |
| FY 2026                          | 108,000                                 | 108,000        | 85,000         |
| FY 2027                          | 142,000                                 | 142,000        | 171,000        |
| FY 2028                          | 27,173                                  | 27,173         | 43,500         |
| FY 2029                          | 5,071                                   | 5,071          | 24,149         |
| FY 2030                          | -                                       | -              | 3,860          |
| <b>Total TPC</b>                 | <b>400,000</b>                          | <b>400,000</b> | <b>400,000</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                   | Current Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|-----------------------------------|---------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b> |                           |                               |                                   |
| <b>Design</b>                     |                           |                               |                                   |
| Design                            | 22,286                    | 17,170                        | 22,286                            |
| Federal Design Review Support     | 1,665                     | 1,665                         | 1,665                             |
| Contingency                       | -                         | 3,409                         | -                                 |
| <b>Total Design</b>               | <b>23,951</b>             | <b>22,244</b>                 | <b>23,951</b>                     |
| <b>Construction</b>               |                           |                               |                                   |
| Site Work (CD-3B)                 | 18,882                    | 18,205                        | 18,882                            |
| Equipment (CD-3A)                 | 3,375                     | 16,275                        | 3,375                             |
| Construction                      | 276,869                   | 261,100                       | 276,869                           |
| Federal Support                   | 6,537                     | 4,000                         | 6,537                             |
| Contingency                       | 40,272                    | 50,030                        | 40,272                            |
| <b>Total Construction</b>         | <b>345,935</b>            | <b>349,610</b>                | <b>345,935</b>                    |
| <b>Total Estimated Cost (TEC)</b> | <b>369,886</b>            | <b>371,854</b>                | <b>369,886</b>                    |
| <i>Contingency, TEC</i>           | <i>40,272</i>             | <i>53,439</i>                 | <i>40,272</i>                     |
| <b>Other Project Costs (OPC)</b>  |                           |                               |                                   |
| OPC except D&D                    |                           |                               |                                   |
| Analysis of Alternatives          | 821                       | 821                           | 821                               |
| Conceptual Design                 | 9,616                     | 9,616                         | 9,616                             |
| CD-1 Documents                    | 1,321                     | 2,000                         | 1,321                             |
| Transition to Operations          | 11,916                    | 7,500                         | 11,916                            |
| Equipment Moves                   | 4,244                     | 5,513                         | 4,244                             |
| Federal Support                   | 679                       | N/A                           | 679                               |
| Contingency                       | 1,517                     | 2,696                         | 1,517                             |

|                                    |                |                |                |
|------------------------------------|----------------|----------------|----------------|
| <b>Total OPC</b>                   | <b>30,114</b>  | <b>28,146</b>  | <b>30,114</b>  |
| <i>Contingency, OPC</i>            | <i>1,517</i>   | <i>2,696</i>   | <i>1,517</i>   |
| <b>Total Project Cost</b>          | <b>400,000</b> | <b>400,000</b> | <b>400,000</b> |
| <b>Total Contingency (TEC+OPC)</b> | <b>41,789</b>  | <b>56,135</b>  | <b>41,789</b>  |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years | FY 2025 | FY 2026              | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears | Total   |
|--------------|------|-------------|---------|----------------------|---------|---------|---------|---------|---------|----------|---------|
| FY 2022      | TEC  | 13,827      | TBD     | TBD                  | TBD     | N/A     | N/A     | N/A     | N/A     | 274,173  | 288,000 |
|              | OPC  | 9,800       | TBD     | TBD                  | TBD     | N/A     | N/A     | N/A     | N/A     | 22,200   | 32,000  |
|              | TPC  | 23,627      | TBD     | TBD                  | TBD     | N/A     | N/A     | N/A     | N/A     | 296,373  | 320,000 |
| FY 2024      | TEC  | 51,713      | 71,083  | 73,902               | 79,824  | 45,136  | N/A     | N/A     | N/A     | 54,295   | 375,953 |
|              | OPC  | 14,793      | 2,000   | 1,361                | 1,788   | 1,450   | N/A     | N/A     | N/A     | 2,421    | 23,813  |
|              | TPC  | 66,506      | 73,083  | 75,263               | 81,612  | 46,586  | N/A     | N/A     | N/A     | 56,716   | 399,766 |
| FY 2025      | TEC  | 51,713      | 50,000  | 115,000              | 130,000 | 23,713  | -       | N/A     | N/A     | N/A      | 370,426 |
|              | OPC  | 14,793      | 1,250   | 3,000                | 4,000   | 5,500   | 1,031   | N/A     | N/A     | N/A      | 29,574  |
|              | TPC  | 66,506      | 51,250  | 118,000              | 134,000 | 29,213  | 1,031   | N/A     | N/A     | N/A      | 400,000 |
| FY 2026      | TEC  | 51,713      | 50,000  | 115,000              | N/A     | N/A     | N/A     | N/A     | N/A     | 155,141  | 371,854 |
|              | OPC  | 14,793      | 1,250   | 3,000                | N/A     | N/A     | N/A     | N/A     | N/A     | 9,103    | 28,146  |
|              | TPC  | 66,506      | 51,250  | 118,000              | N/A     | N/A     | N/A     | N/A     | N/A     | 164,244  | 400,000 |
| FY 2027      | TEC  | 51,713      | 50,000  | 105,000 <sup>1</sup> | 140,000 | 23,173  | -       | -       | -       | N/A      | 369,886 |
|              | OPC  | 14,793      | 1,250   | 3,000                | 2,000   | 4,000   | 5,071   | -       | -       | N/A      | 30,114  |
|              | TPC  | 66,506      | 51,250  | 108,000              | 142,000 | 27,173  | 5,071   | -       | -       | N/A      | 400,000 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 4Q FY 2030 |
| Expected Useful Life (number of years)                              | 50         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 4Q FY 2080 |

<sup>1</sup> FY 2026 Enacted Appropriations includes \$100,000K from Public Law 119–21 (Working Families and Tax Cut Act) and \$5,000K from Public Law 119-74.

Related Funding Requirements (\$M)

| Funding Requirements       | Annual Cost       |                  | Life Cycle Costs  |                               |
|----------------------------|-------------------|------------------|-------------------|-------------------------------|
| Estimate Totals            | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate <sup>1</sup> |
| Operations and Maintenance | 12                | 12               | 600               | 600                           |

## 7. D&D Information

The one-for-one offset requirement will be met by utilizing site-banked square footage. A plan for D&D of the existing facility will be developed at the end of construction of the new facility when characterization data is available.

|                                                                                                                | Square Feet             |
|----------------------------------------------------------------------------------------------------------------|-------------------------|
| New area being constructed by this project at SNL                                                              | 136,000 ft <sup>2</sup> |
| Area of D&D in this project at SNL                                                                             | NA                      |
| Area at SNL to be transferred, sold, and/or D&D outside the project including area previously “banked”         | 136,000 ft <sup>2</sup> |
| Area of D&D in this project at other sites                                                                     | NA                      |
| Area at other sites to be transferred, sold, and/or D&D outside the project including area previously “banked” | NA                      |

## 8. Acquisition Approach

The preliminary and final design was led by the SNL Management and Operating (M&O) contractor utilizing a subcontracted Architectural and Engineering firm. The CD-3A, *Approve Long-Lead Procurement*, and CD-3B, *Approve Site Preparation* are being executed through the existing PSC subcontract with Hensel Phelps as Optional Scope 1. The CD-3C, Early Construction Services and the facility construction are being executed through the existing subcontract with Hensel Phelps as Optional Scope 2.

<sup>1</sup> Not escalated; Base Year 2022.

**18-D-680 Material Staging Capability (MSC)  
Pantex Plant, Amarillo, Texas  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:** The FY 2027 Request for the Material Staging Capability (MSC) project is \$22,500,000 of Total Project Cost. This request is a single year request that will begin the execution of preliminary design, in support of establishing the Performance Baseline for the project. The most recent Department of Energy (DOE) Order (O) 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, approved Critical Decision (CD) is CD-0, *Approve Mission Need*, that was approved on November 24, 2015, with a Rough Order of Magnitude estimate of \$179,000,000 to \$714,000,000 and CD-4 date of 4th Quarter FY 2024. In April of 2021, the project was placed on hold after the completion of the original conceptual design and prior to achieving CD-1, due to significant cost growth for the previously selected alternative.

On November 6, 2024, the Under Secretary for Nuclear Security & Administrator, NNSA approved reactivating the project from its “on-hold” status and renamed the project from the Material Staging Facility to the Material Staging Capability (MSC) project. The Program Requirements Document (PRD), originally developed and approved in August 2018, has been updated to include a classified annex. This addition was necessary to capture new threat requirements, which could not be included within the unclassified portion of the PRD. In FY 2025, the project initiated efforts to update the conceptual design and execute a value engineering (VE) exercise that will optimize project cost, scope, and schedule by leveraging cross-agency partnerships and challenge over-prescriptive requirements that mandate specific design solutions above what is necessary to meet mission needs. Additionally, the update to the conceptual design will eliminate the storage requirements for Savannah River Site materials but may address new threat requirements referenced in the PRD classified annex. Inclusion of VE recommendations in FY 2026 and 2027 will inform the optimized cost range and outyear funding requests beyond FY 2027.

This is the initial submission of the Construction Project Data Sheet (CPDS) for the MSC project, but the project is not a new start for FY 2027. A business case analysis was conducted in August 2024 to examine phased options to ensure priority of execution of the most urgent weapon storage needs based on updated requirements. The revised conceptual design will include this phased approach. The cost range and CD-4 date of the MSC project are TBD until CD-1, *Approve Alternative Selection and Cost Range*, is approved, which is planned for FY 2027.

A CPDS was not submitted prior to FY 2027; however, funds were appropriated for this project in FY 2018 (\$5,200K) and FY 2019 (\$24,000K). The uncosted funds were reprogrammed when the project was placed on hold in FY 2021.

On May 9, 2025, the Secretary of Energy appointed a Federal Project Director to this project.

**Significant Changes:**

None



## Critical Milestone History

| Fiscal Quarter or Date |            |                            |            |      |                       |      |      |
|------------------------|------------|----------------------------|------------|------|-----------------------|------|------|
| Fiscal Year            | CD-0       | Conceptual Design Complete | CD-1       | CD-2 | Final Design Complete | CD-3 | CD-4 |
| FY 2027                | 11/24/2015 | 1Q FY 2027                 | 2Q FY 2027 | TBD  | TBD                   | TBD  | TBD  |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete

**CD-3** – Approve Start of Construction

**CD-4** – Approve Start of Operations

## Project Cost History<sup>1</sup>

| Fiscal Quarter or Date (in Thousands of Dollars) |             |                   |            |                 |            |     |
|--------------------------------------------------|-------------|-------------------|------------|-----------------|------------|-----|
| Fiscal Year                                      | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, Total | TPC |
| FY 2027                                          | TBD         | TBD               | TBD        | TBD             | TBD        | TBD |

## **2. Project Scope and Justification**

### Scope

The updated conceptual design involves dividing the originally planned underground facility into three distinct buildings outside the Pantex Zone 12 perimeter intrusion detection and assessment system . This will allow the second and third underground buildings to be constructed in a phased approach. A new loading/unloading dock inside of Zone 12 will connect via a ramp structure to the underground facility.

### Justification

The material staging mission requires secure, capacity-based infrastructure to enable nuclear weapons and nuclear component staging in a manner that ensures workload commitments for dismantlement, surveillance, stockpile refurbishment, and nuclear non-proliferation objectives are met. At present, Pantex stages Category I/II Special Nuclear Material (SNM) in the Zone 4W Material Access Area (MAA) and Zone 12S MAA. Staging of nuclear weapons and other nuclear explosive assemblies occurs only in the Zone 4W MAA. NNSA goals and objectives require sufficient capacity at Pantex for nuclear weapons and nuclear component staging, well into the future.

As part of its current mission, Pantex stages fully assembled nuclear weapons pending shipment to the military or received from the military for surveillance, life extension or modernization, or system dismantlement. Staging nuclear weapons will continue to be necessary to support on-going stockpile stewardship activities.

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<sup>1</sup> Due to the recent restart of the project and ongoing conceptual design activities, updated costs have not been established.

Nuclear components, required for nuclear weapon assembly or obtained because of disassembly/dismantlement, require staging at Pantex pending use during system assembly, surveillance, or designation as national security pits or surplus assets. NNSA must provide long-term staging of strategic reserve and national security pits and staging of the surplus pit population pending final disposition. Pits are also staged as necessary to support continued stockpile stewardship and nuclear nonproliferation activities as required by NNSA.

The current inventory of pits and fully assembled nuclear weapon systems exceeds existing staging capacity. Pantex has therefore converted some operational bays in Zone 12 South to staging space to maintain pace with production demands. Presently, the majority of inventory is staged in 70-year-old conventional munitions magazines in Zone 4 West, an area remote from the Weapons Operations spaces in Zone 12 South where weapons mission work and inventory surveillance take place. This separation of the inventory requires additional security measures during transportation to the Weapons Operations spaces and can sometimes impact delivery schedules as inclement weather delays are experienced. Operational efficiency and flexibility are significantly reduced by the need to transport materials between Zones 4 and 12 as well as by the conversion of operational spaces to staging areas.

As represented in this FY 2027 request, design, construction and Other Project Costs (OPC) will be executed through the line-item funding.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B and funds appropriated under this data sheet may be used for contracted support services to the Federal Project Director and to conduct reviews of design and construction.

#### **Preliminary Key Performance Parameters (KPPs)**

Preliminary KPPs will be developed as part of the CD-1 approval process. The preliminary Threshold KPPs will represent the minimum acceptable performance that the project must achieve. Achieving Threshold KPPs will be a prerequisite for approval of CD-4, *Project Completion*. The preliminary Objective KPPs will represent the desired project performance.

### 3. Financial Schedule (\$K)

The financial tables reflect the upper end of the conceptual design cost range.

|                                   | Budget<br>Authority                     | Obligations | Costs      |
|-----------------------------------|-----------------------------------------|-------------|------------|
| <b>Total Estimated Cost (TEC)</b> |                                         |             |            |
| <b>Design</b>                     |                                         |             |            |
| FY 2026                           | -                                       | -           | -          |
| FY 2027                           | 22,500                                  | 22,500      | 11,000     |
| FY 2028                           | TBD                                     | TBD         | 11,500     |
| <b>Total Design</b>               | <b>TBD</b>                              | <b>TBD</b>  | <b>TBD</b> |
| <b>Construction</b>               |                                         |             |            |
| FY 2026                           | -                                       | -           | -          |
| FY 2027                           | -                                       | -           | -          |
| FY 2028                           | TBD                                     | TBD         | TBD        |
| FY 2029                           | TBD                                     | TBD         | TBD        |
| FY 2030                           | TBD                                     | TBD         | TBD        |
| FY 2031                           | TBD                                     | TBD         | TBD        |
| FY 2032                           | TBD                                     | TBD         | TBD        |
| <b>Total Construction</b>         | <b>TBD</b>                              | <b>TBD</b>  | <b>TBD</b> |
| <b>TEC</b>                        |                                         |             |            |
| FY 2026                           | -                                       | -           | -          |
| FY 2027                           | 22,500                                  | 22,500      | 11,000     |
| FY 2028                           | TBD                                     | TBD         | 11,500     |
| FY 2029                           | TBD                                     | TBD         | TBD        |
| FY 2030                           | TBD                                     | TBD         | TBD        |
| FY 2031                           | TBD                                     | TBD         | TBD        |
| FY 2032                           | TBD                                     | TBD         | TBD        |
| <b>Total TEC</b>                  | <b>TBD</b>                              | <b>TBD</b>  | <b>TBD</b> |
|                                   | Budget<br>Authority<br>(Appropriations) | Obligations | Costs      |
| <b>Other Project Costs (OPC)</b>  |                                         |             |            |
| Prior Years                       | 15,372                                  | 15,372      | 15,372     |
| FY 2025                           | 7,150                                   | 7,150       | 2,136      |
| FY 2026                           | 14,150                                  | 14,150      | 11,000     |
| FY 2027                           | -                                       | -           | 8,164      |
| FY 2028                           | TBD                                     | TBD         | TBD        |
| FY 2029                           | TBD                                     | TBD         | TBD        |
| FY 2030                           | TBD                                     | TBD         | TBD        |
| FY 2031                           | TBD                                     | TBD         | TBD        |
| FY 2032                           | TBD                                     | TBD         | TBD        |
| <b>Total, OPC</b>                 | <b>TBD</b>                              | <b>TBD</b>  | <b>TBD</b> |
| <b>Total Project Costs (TPC)</b>  |                                         |             |            |

|                  | <b>Budget<br/>Authority</b> | <b>Obligations</b> | <b>Costs</b> |
|------------------|-----------------------------|--------------------|--------------|
| Prior Years      | 15,372                      | 15,372             | 15,372       |
| FY 2025          | 7,150                       | 7,150              | 2,136        |
| FY 2026          | 14,150                      | 14,150             | 11,000       |
| FY 2027          | 22,500                      | 22,500             | 11,000       |
| FY 2028          | TBD                         | TBD                | 11,500       |
| FY 2029          | TBD                         | TBD                | TBD          |
| FY 2030          | TBD                         | TBD                | TBD          |
| FY 2031          | TBD                         | TBD                | TBD          |
| Out Years        | TBD                         | TBD                | TBD          |
| <b>Total TPC</b> | <b>TBD</b>                  | <b>TBD</b>         | <b>TBD</b>   |

#### 4. Details of Project Cost Estimate (\$K)

|                                    |                            | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|----------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                            |                              |                               |                                   |
| <b>Design</b>                      |                            |                              |                               |                                   |
|                                    | Design                     | TBD                          | N/A                           | N/A                               |
|                                    | Federal Design Review      | TBD                          | N/A                           | N/A                               |
|                                    | Support                    | TBD                          | N/A                           | N/A                               |
|                                    | Contingency                | TBD                          | N/A                           | N/A                               |
| <b>Total Design</b>                |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Construction</b>                |                            |                              |                               |                                   |
|                                    | Site Work                  | TBD                          | N/A                           | N/A                               |
|                                    | Equipment                  | TBD                          | N/A                           | N/A                               |
|                                    | Construction               | TBD                          | N/A                           | N/A                               |
|                                    | Federal Support            | TBD                          | N/A                           | N/A                               |
|                                    | Contingency                | TBD                          | N/A                           | N/A                               |
| <b>Total Construction</b>          |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, TEC</i>            |                            | <i>TBD</i>                   | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>   |                            |                              |                               |                                   |
| OPC except D&D                     |                            |                              | N/A                           | N/A                               |
|                                    | Analysis of Alternatives   | 1,334                        | N/A                           | N/A                               |
|                                    | Conceptual Design/CD-1/Fed | 35,338                       | N/A                           | N/A                               |
|                                    | Support                    | TBD                          | N/A                           | N/A                               |
|                                    | Start-up                   | TBD                          | N/A                           | N/A                               |
|                                    | Equipment Move             | TBD                          | N/A                           | N/A                               |
|                                    | Contingency                | TBD                          | N/A                           | N/A                               |
| <b>Total OPC</b>                   |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                            | <i>TBD</i>                   | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                            | <b>TBD</b>                   | <b>N/A</b>                    | <b>N/A</b>                        |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|-----------|-------|
| FY 2027      | TEC  | -           | -       | 22,500  | TBD     | TBD     | TBD     | TBD     | TBD       | TBD   |
|              | OPC  | 22,522      | 14,150  | -       | TBD     | TBD     | TBD     | TBD     | TBD       | TBD   |
|              | TPC  | 22,522      | 14,150  | 22,500  | TBD     | TBD     | TBD     | TBD     | TBD       | TBD   |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | TBD |
| Expected Useful Life (number of years)                              | 50  |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | TBD |

Operations and Maintenance costs will be updated in future versions of this document, once the project has reached greater project definition and design.

## 7. D&D Information

Deactivation and Decommissioning (D&D) of existing facilities will be captured in NNSA's infrastructure planning system and funded outside of the line-item project once MSC is operational.

## 8. Acquisition Approach

The design and construction acquisition approaches will be determined as part of the CD-1 approval process.

## **Stockpile Research, Technology, and Engineering**

### **Overview**

NNSA's Stockpile Research, Technology, and Engineering (SRT&E) portfolio conducts weapons design, certification, and assessment activities in support of the nuclear stockpile. SRT&E provides the foundation for science-based stockpile decisions; delivers advanced capabilities to support Department of War (DoW) requirements and counter emerging threats; and innovates across the nuclear security enterprise (NSE) to improve productivity, efficiency, and responsiveness. These activities ensure confidence in the nuclear stockpile of today and tomorrow.

A key activity supported by SRT&E includes the annual assessment and report to the President and Congress regarding the reliability of the United States' nuclear weapons stockpile. This assessment represents a significant effort leveraging the experimental facilities, weapons modeling codes and high-performance computational systems, and the NNSA's subject matter expertise to deliver a comprehensive, engineering-based determination on the safety, security, and military effectiveness of the nuclear deterrent.

SRT&E activities are also essential to a responsive enterprise, among them the development and maturation of new materials, physics and engineering models, novel technologies, and processes to modernize nuclear systems and the production complex. Rapid development is essential to provide timely delivery of advanced systems to the DoW to meet emerging requirements or urgent needs. Under NNSA's Rapid and Advanced Capabilities, SRT&E is pursuing design, prototyping, and accelerated testing to deliver integrated and proven system concepts to Stockpile Modernization for acquisition and fielding, as directed by the Nuclear Weapons Council.

In addition to its essential role in the nuclear deterrent, SRT&E capabilities advance NNSA's nonproliferation, counterterrorism, and counterproliferation missions. Partners in the DoW, the Intelligence Community, Homeland Security, and State Department also apply SRT&E enabled capabilities to their respective national security missions.

As part of the FY 2027 submission a structure change is proposed, specifically the Engineering & Integrated Assessments program is split into the programs of Engineering and Rapid & Advanced Capabilities (RAC). The Integrated Demonstrators subprogram within the Weapon Technology and Manufacturing Maturation program is moved into RAC. The emergence of the Rapid & Advanced Capabilities program is the result of a priority to exercise the nuclear weapon design-build-test cycle. Integral to that is maturing technologies and validating designs, as well as advancing prototype and test capabilities. Although the component subprograms were within SRT&E in FY 2026, this new program will ensure this scope is judiciously managed.

#### **The SRT&E programs are:**

1. Assessment Science (AS)
2. Engineering
3. Rapid & Advanced Capabilities (RAC)
4. Inertial Confinement Fusion (ICF)
5. Advanced Simulation and Computing (ASC)
6. Weapon Technology and Manufacturing Maturation (WTMM)

**Stockpile Research, Technology, and Engineering  
Funding by Budget Control (\$K)<sup>12</sup>**

|                                                                                                       | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted |             |
|-------------------------------------------------------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|----------------------------------------|-------------|
|                                                                                                       |                    |                    |                 |                    | \$                                     | %           |
| Assessment Science                                                                                    | 862,609            | 955,791            | -               | 1,243,267          | +287,476                               | 30%         |
| <i>Primary Assessment Technologies</i>                                                                | 160,000            | 160,000            | -               | 318,184            | +158,184                               | 99%         |
| <i>Dynamic Materials Properties</i>                                                                   | 139,982            | 139,982            | -               | 186,533            | +46,551                                | 33%         |
| <i>Advanced Diagnostics</i>                                                                           | 31,500             | 35,989             | -               | -                  | -35,989                                | -100%       |
| <i>Secondary Assessment Technologies</i>                                                              | 56,581             | 92,162             | -               | 88,130             | -4,032                                 | -4%         |
| <i>Enhanced Capabilities for Subcritical Experiments</i>                                              | 292,373            | 292,373            | -               | 354,314            | +61,941                                | 21%         |
| <i>Hydrodynamic &amp; Subcritical Experiments Execution Support</i>                                   | 182,173            | 235,285            | -               | 296,106            | +60,821                                | 26%         |
| 27-D-511 Defense Materials Science Sector (DMSS) Project, ANL                                         | -                  | -                  | -               | -                  | -                                      | -           |
| 26-D-512 LANSCE Modernization Project (LAMP), LANL                                                    | -                  | 20,000             | -               | 15,200             | -4,800                                 | -24%        |
| 24-D-513 Z-pinch Experimental Underground System (ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS | -                  | -                  | -               | 91,700             | +91,700                                | N/A         |
| 17-D-640 U1a Complex Enhancements Project, NNSS                                                       | 73,083             | -                  | 53,000          | 154,142            | +154,142                               | N/A         |
| <b>Total, Assessment Science</b>                                                                      | <b>935,692</b>     | <b>975,791</b>     | <b>53,000</b>   | <b>1,504,309</b>   | <b>+528,518</b>                        | <b>+54%</b> |
| Engineering & Integrated Assessments                                                                  | 425,765            | 319,777            | -               | 230,043            | -89,734                                | -28%        |
| <i>Archiving &amp; Support</i>                                                                        | -                  | 22,739             | -               | 40,791             | +18,052                                | +79%        |
| <i>Delivery Environments</i>                                                                          | -                  | 38,820             | -               | 59,163             | +20,343                                | +52%        |
| <i>Weapons Survivability</i>                                                                          | -                  | 60,444             | -               | 61,284             | +840                                   | +1%         |
| <i>Studies and Assessments</i>                                                                        | -                  | -                  | -               | -                  | -                                      | -           |
| <i>Aging &amp; Lifetimes</i>                                                                          | -                  | 65,833             | -               | 68,805             | +2,972                                 | +4.5%       |
| <i>Stockpile Responsiveness</i>                                                                       | -                  | 70,000             | -               | -                  | -70,000                                | -100%       |
| <i>Advanced Certification &amp; Qualification</i>                                                     | -                  | 61,941             | -               | -                  | -61,941                                | -100%       |
| 26-D-513 Combined Radiation Environments for Survivability Testing, SNL                               | -                  | 52,248             | -               | 105,000            | +52,752                                | +101%       |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act) provided \$3.885 billion in funding to DOE/NNSA. From this funding, DOE/NNSA has allocated \$368 million to SRT&E.

<sup>2</sup> Deltas reflect discretionary only.



|                                                               | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted |             |
|---------------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|----------------------------------------|-------------|
|                                                               |                    |                    |                 |                    | \$                                     | %           |
| Total, Engineering & Integrated Assessments                   | 425,765            | 372,025            | -               | 335,043            | -36,982                                | -10%        |
| <i>Stockpile Responsiveness</i>                               | -                  | -                  | 80,000          | 174,501            | +174,501                               | N/A         |
| <i>Studies and Assessments</i>                                | -                  | -                  | 80,000          | 153,315            | +153,315                               | N/A         |
| <i>Advanced Certification &amp; Qualification</i>             | -                  | -                  | -               | 65,397             | +65,397                                | N/A         |
| <i>Integrated Demonstrators Program</i>                       | -                  | -                  | -               | 105,996            | +105,996                               | N/A         |
| Total, Rapid & Advanced Capabilities                          | -                  | -                  | 160,000         | 499,209            | +499,209                               | N/A         |
| Inertial Confinement Fusion                                   | 699,830            | 803,000            | -               | 829,736            | +26,736                                | +3%         |
| <i>HED &amp; Ignition Science for Stockpile Applications</i>  | 112,926            | 117,500            | -               | 116,973            | -527                                   | N/A         |
| <i>ICF Diagnostics and Instrumentation</i>                    | 73,341             | 76,000             | -               | 74,599             | -1,401                                 | N/A         |
| <i>Facility Operations</i>                                    | 513,563            | 609,500            | -               | 626,585            | +17,085                                | +3%         |
| <i>High Yield Driver Development</i>                          | -                  | -                  | -               | 11,579             | +11,579                                | N/A         |
| 26-D-514 NIF Enhanced Fusion Yield Capability, LLNL           | -                  | 26,000             | -               | 84,000             | +58,000                                | +223%       |
| <b>Total, Inertial Confinement Fusion</b>                     | <b>699,830</b>     | <b>829,000</b>     | <b>-</b>        | <b>913,736</b>     | <b>+84,736</b>                         | <b>+10%</b> |
| <i>Integrated Codes</i>                                       | 178,133            | 181,876            | -               | 184,796            | +2,920                                 | +2%         |
| <i>Physics &amp; Engineering Models</i>                       | 107,219            | 109,473            | -               | 110,778            | +1,305                                 | +1%         |
| <i>Verification &amp; Validation</i>                          | 72,984             | 74,519             | -               | 75,121             | +602                                   | +1%         |
| <i>Computational Systems &amp; Software Environment</i>       | 264,296            | 258,649            | 9,000           | 263,708            | +5,059                                 | +2%         |
| <i>Facility Ops &amp; User Support</i>                        | 207,368            | 221,478            | -               | 222,362            | +884                                   | +0.4%       |
| <i>Capabilities for Nuclear Intelligence</i>                  | 20,000             | 20,000             | -               | 23,000             | +3,000                                 | +15%        |
| <i>Artificial Intelligence for Nuclear Security</i>           | -                  | -                  | 106,000         | 30,000             | +30,000                                | N/A         |
| <b>Total, Advanced Simulation and Computing</b>               | <b>850,000</b>     | <b>865,995</b>     | <b>115,000</b>  | <b>909,765</b>     | <b>+43,770</b>                         | <b>+5%</b>  |
| <i>Surety Technology</i>                                      | 35,891             | 32,331             | -               | 63,397             | +31,066                                | +96%        |
| <i>Weapon Technology Development</i>                          | 121,137            | 73,545             | -               | 141,725            | +68,180                                | +93%        |
| <i>Advanced Manufacturing Development</i>                     | 116,161            | 105,998            | 40,000          | 154,524            | +48,526                                | +46%        |
| <i>Integrated Demonstrators Program</i>                       | 13,300             | 13,300             | -               | -                  | -13,300                                | -100%       |
| <i>Microelectronics and Digital Development</i>               | -                  | 42,105             | -               | 45,767             | +3,662                                 | +9%         |
| <b>Total, Weapon Technology and Manufacturing Maturation</b>  | <b>286,489</b>     | <b>267,279</b>     | <b>40,000</b>   | <b>405,413</b>     | <b>+138,134</b>                        | <b>+52%</b> |
| <b>Total, Stockpile Research, Technology, and Engineering</b> | <b>3,197,776</b>   | <b>3,310,090</b>   | <b>368,000</b>  | <b>4,567,475</b>   | <b>+1,257,385</b>                      | <b>+38%</b> |

Weapons Activities /  
Stockpile Research, Technology, and Engineering

FY 2027 Congressional Justification

**Stockpile Research, Technology, and Engineering  
Outyear Funding (\$K)**

|                                                                            | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|----------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Assessment Science                                                         | 1,086,555                  | 1,055,691                  | 1,054,604                  | 1,038,722                  |
| <i>Primary Assessment Technologies</i>                                     | 304,512                    | 300,602                    | 306,614                    | 312,747                    |
| <i>Dynamic Materials Properties</i>                                        | 169,883                    | 173,281                    | 176,746                    | 180,281                    |
| <i>Advanced Diagnostics</i>                                                | -                          | -                          | -                          | -                          |
| <i>Secondary Assessment Technologies</i>                                   | 98,863                     | 100,840                    | 102,857                    | 104,914                    |
| <i>Enhanced Capabilities for Subcritical Experiments</i>                   | 169,846                    | 130,648                    | 111,061                    | 36,282                     |
| <i>Hydrodynamic and Subcritical Experiments</i>                            | 343,451                    | 350,320                    | 357,326                    | 404,498                    |
| <i>Execution Support</i>                                                   |                            |                            |                            |                            |
| 27-D-511 Defense Materials Science Sector (DMSS)<br>Project, ANL           | 36,842                     | 36,978                     | 39,369                     | 45,138                     |
| 26-D-512 LANSCE Modernization Project (LAMP),<br>LANL                      | 88,000                     | 119,760                    | 122,156                    | 104,599                    |
| <b>Total, Assessment Science</b>                                           | <b>1,211,397</b>           | <b>1,212,429</b>           | <b>1,216,129</b>           | <b>1,188,459</b>           |
| Engineering                                                                | 232,372                    | 237,020                    | 241,760                    | 246,595                    |
| <i>Archiving and Support</i>                                               | 41,607                     | 42,439                     | 43,288                     | 44,153                     |
| <i>Delivery Environments</i>                                               | 60,346                     | 61,553                     | 62,784                     | 64,040                     |
| <i>Weapons Survivability</i>                                               | 60,238                     | 61,443                     | 62,672                     | 63,925                     |
| <i>Aging and Lifetimes</i>                                                 | 70,181                     | 71,585                     | 73,016                     | 74,477                     |
| 26-D-513 Combined Radiation Environments for<br>Survivability Testing, SNL | 176,000                    | 210,572                    | 247,866                    | 302,177                    |
| <b>Total, Engineering</b>                                                  | <b>408,372</b>             | <b>447,592</b>             | <b>489,626</b>             | <b>548,772</b>             |
| <i>Stockpile Responsiveness</i>                                            | 141,845                    | 144,682                    | 147,576                    | 150,527                    |
| <i>Studies and Assessments</i>                                             | 142,448                    | 145,097                    | 137,799                    | 140,555                    |
| <i>Advanced Certification and Qualification</i>                            | 76,705                     | 83,239                     | 84,904                     | 86,602                     |
| <i>Integrated Demonstrators Program</i>                                    | 101,061                    | 103,082                    | 105,143                    | 107,246                    |
| <b>Total, Rapid &amp; Advanced Capabilities</b>                            | <b>462,059</b>             | <b>476,100</b>             | <b>475,422</b>             | <b>484,930</b>             |
| Inertial Confinement Fusion                                                | 813,832                    | 821,635                    | 848,924                    | 865,902                    |
| <i>HED &amp; Ignition Science for Stockpile Applications</i>               | 118,363                    | 120,075                    | 123,053                    | 125,514                    |
| <i>ICF Diagnostics and Instrumentation</i>                                 | 74,533                     | 73,256                     | 73,214                     | 74,678                     |
| <i>Facility Operations</i>                                                 | 611,675                    | 618,858                    | 643,022                    | 655,883                    |
| <i>High Yield Driver Development</i>                                       | 9,261                      | 9,446                      | 9,635                      | 9,827                      |
| 26-D-514 NIF Enhanced Fusion Yield Capability,<br>LLNL                     | 148,480                    | 115,000                    | 52,000                     | 55,000                     |
| <b>Total, Inertial Confinement Fusion</b>                                  | <b>962,312</b>             | <b>936,635</b>             | <b>900,924</b>             | <b>920,902</b>             |
| <i>Integrated Codes</i>                                                    | 188,492                    | 192,262                    | 196,107                    | 200,029                    |
| <i>Physics &amp; Engineering Models</i>                                    | 112,994                    | 115,253                    | 117,558                    | 119,910                    |
| <i>Verification &amp; Validation</i>                                       | 75,580                     | 75,290                     | 75,961                     | 77,480                     |
| <i>Computational Systems &amp; Software Environment</i>                    | 265,439                    | 270,748                    | 276,163                    | 281,686                    |
| <i>Facility Ops &amp; User Support</i>                                     | 224,387                    | 229,122                    | 232,139                    | 236,782                    |
| <i>Capabilities for Nuclear Intelligence</i>                               | 25,460                     | 26,871                     | 29,409                     | 31,997                     |
| <i>Artificial Intelligence for Nuclear Security</i>                        | 80,742                     | 80,000                     | 81,600                     | 83,231                     |
| <b>Total, Advanced Simulation and Computing</b>                            | <b>973,094</b>             | <b>989,546</b>             | <b>1,008,937</b>           | <b>1,031,115</b>           |

| <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|----------------------------|----------------------------|----------------------------|----------------------------|
| <i>64,515</i>              | <i>65,655</i>              | <i>59,318</i>              | <i>60,505</i>              |
| <i>144,160</i>             | <i>146,643</i>             | <i>129,176</i>             | <i>131,759</i>             |
| <i>157,014</i>             | <i>159,555</i>             | <i>147,146</i>             | <i>150,089</i>             |
| <i>49,182</i>              | <i>45,118</i>              | <i>41,500</i>              | <i>42,330</i>              |
| <b>414,871</b>             | <b>416,971</b>             | <b>377,140</b>             | <b>384,683</b>             |
| <b>4,432,105</b>           | <b>4,479,273</b>           | <b>4,468,178</b>           | <b>4,558,861</b>           |

*Surety Technology*

*Weapon Technology Development*

*Advanced Manufacturing Development*

*Microelectronics and Digital Development*

**Total, Weapon Technology and Manufacturing  
Maturation**

**Total, Stockpile Research, Technology, and  
Engineering**

Rapid and Advanced Capabilities  
Funding - Comparable (\$K)

|                                                       | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |              |
|-------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|---------------------------------------|--------------|
|                                                       |                    |                    |                 |                    | \$                                    | %            |
| Stockpile Research, Technology, and<br>Engineering    |                    |                    |                 |                    |                                       |              |
| Rapid & Advanced Capabilities                         |                    |                    |                 |                    |                                       |              |
| <i>Stockpile Responsiveness</i>                       | 69,000             | 70,000             | 80,000          | 153,315            | +83,315                               | +119%        |
| <i>Studies and Assessments</i>                        | 69,882             | -                  | 80,000          | 174,501            | +174,501                              | N/A          |
| <i>Advanced Certification &amp;<br/>Qualification</i> | 59,000             | 61,941             | -               | 65,397             | +3,456                                | +6%          |
| <i>Integrated Demonstrators Program</i>               | 13,300             | 13,300             | -               | 105,996            | +92,696                               | +697%        |
| <b>Total, Rapid &amp; Advanced<br/>Capabilities</b>   | <b>211,182</b>     | <b>145,241</b>     | <b>160,000</b>  | <b>499,209</b>     | <b>353,968</b>                        | <b>+244%</b> |

Rapid and Advanced Capabilities  
Funding - Non-Comparable (\$K)

|                                                   | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |              |
|---------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|--------------|
|                                                   |                    |                    |                    | \$                                    | %            |
| Engineering                                       | 197,882            | -                  | -                  | -                                     | -            |
| <i>Studies and Assessments</i>                    | -                  | -                  | -                  | -                                     | -            |
| <i>Stockpile Responsiveness</i>                   | -                  | 70,000             | -                  | -70,000                               | -100%        |
| <i>Advanced Certification &amp; Qualification</i> | -                  | 61,941             | -                  | -61,941                               | -100%        |
| Weapon Technology and Manufacturing Maturation    | 13,300             | -                  | -                  | -                                     | -            |
| <i>Integrated Demonstrators Program</i>           | -                  | 13,300             | -                  | -13,300                               | -100%        |
| <b>Total, Non-Comparable</b>                      | <b>211,182</b>     | <b>145,241</b>     | <b>-</b>           | <b>-145,241</b>                       | <b>-100%</b> |
|                                                   |                    |                    |                    |                                       |              |
| <i>Studies and Assessments</i>                    | -                  | -                  | 153,315            | +153,315                              | N/A          |
| <i>Stockpile Responsiveness</i>                   | -                  | -                  | 174,501            | +174,501                              | N/A          |
| <i>Advanced Certification &amp; Qualification</i> | -                  | -                  | 65,397             | +65,397                               | N/A          |
| <i>Integrated Demonstrators Program</i>           | -                  | -                  | 105,996            | +105,996                              | N/A          |
| <b>Total, Rapid &amp; Advanced Capabilities</b>   | <b>-</b>           | <b>-</b>           | <b>499,209</b>     | <b>499,209</b>                        | <b>N/A</b>   |

## Stockpile Research, Technology, and Engineering Assessment Science

### Overview

The Assessment Science (AS) program provides the knowledge and expertise needed to maintain confidence in the nuclear stockpile. The experimental and testing assets developed and maintained in the AS program support the entire Nuclear Security Enterprise (NSE). The AS program provides: (1) the scientific foundation required to conduct annual assessments of weapon performance and to support the qualification and certification of Life Extension Programs (LEPs), the modernization programs, and future systems being considered now to address emerging threats; (2) the scientific insight to inform our understanding on the impacts of surveillance findings to ensure the nuclear stockpile remains safe, secure, and effective; and (3) the core technical expertise required to be responsive to technical developments and geopolitical drivers. AS also facilitates the assessment of current weapon and weapon component lifetimes, the development and qualification of modern materials and manufacturing processes, the exploration of concepts for component reuse, and the development of modern safety concepts for sustainment.

AS performs experiments to obtain the materials and nuclear data required to develop underlying physics models and through integrated scale testing validate the physics of nuclear weapons performance. AS experiments include hydrodynamic and subcritical experiments (SCEs) to obtain data on the dynamic behavior of plutonium and surrogate materials in integral geometries. The AS program experimentation and data analyses also facilitate safety, security, and evaluations of sustainment concepts without the need for nuclear explosive testing. These activities develop, exercise, and maintain the expertise and competence of the nuclear weapon design, engineering, and assessment community.

AS is responsible for research, development, platform deployment, and experimental execution to address and support key stockpile decisions. For example:

- Supporting the congressionally mandated *Research Program Plan for Plutonium/Pit Aging*.
- Establishing the Enhanced Capabilities for Subcritical Experiments (ECSE).
- Developing and characterizing detonation and safety properties of new high explosives (HE) formulations by partnering across SRT&E and modernization programs.
- Initial development and physics qualification of alternate materials options for secondaries of future systems.
- Executing hydrodynamic and SCEs at Dual Axis Radiographic Hydrodynamic Test (DARHT), Contained Firing Facility (CFF), PULSE, and the proton radiography (pRad) capability at LANSCE.
- Conducting high-energy-density (HED) experiments to address weapons physics questions and anticipate needs of the Stockpile Management and Production Modernization portfolios using National Ignition Facility (NIF), Z Pulsed Power Facility (Z), and Omega Laser Facility (Omega).
- Supporting hostile environment platform development and experiments at Z and NIF.

The AS program has strong programmatic coupling within SRT&E, Production Modernization, and Stockpile Management programs.

The AS program is comprised of five subprograms.

**Primary Assessment Technologies (PAT)** provides capabilities for the annual assessment of stockpile primaries, improvement of the nuclear explosive test modeling suite in the common model framework, certification of future modernization programs, improvements in primary safety and security, and resolution of Significant Finding Investigations (SFIs). A major effort within PAT is conducting SCEs. SCEs are the most

direct linkage between the focused physics experiments conducted within NNSA and the integral nuclear performance of the underground test history providing confidence in NNSA's simulation capabilities. SCEs are simultaneously being developed for execution in the existing Cygnus testbed and future ECSE ZEUS and Scorpius testbeds.

**Dynamic Materials Properties (DMP)** develops and maintains the experimental capabilities needed to inform modern, physics-based models that describe and predict the behavior of weapon materials in extreme pressure, temperature, and strain rates to understand fundamental material properties. DMP provides experimental data and assessment of Special Nuclear Material (SNM), metals, conventional high explosives (CHE), insensitive high explosives (IHE), polymers, and foams under dynamic conditions required for annual assessment and certification of the stockpile as well as for future options.

**Secondary Assessment Technologies (SAT)** provides capabilities essential for the annual assessment and modernization of stockpile secondaries through validating weapons physics models using experimental platforms, improving models, expanding the nuclear explosive test modeling suite in the common model framework, and supporting the evaluation of new manufacturing processes, replacement materials, and aged materials in the stockpile. Key elements of SAT include radiation transport, complex hydrodynamics and thermonuclear burn, material properties, and weapons outputs and effects. For stockpile systems, core SAT R&D facilitates: (1) the re-acceptance of canned sub-assemblies (CSAs) and other NEP components for future sustainment options and (2) the development of the science basis for physics performance assessments supporting qualification of remanufactured CSAs and other components and stockpile assessments.

**Enhanced Capabilities for Subcritical Experiments (ECSE)** establishes key test capabilities at the Nevada National Security Site (NNSS) and closes a capability gap to evaluate the response of plutonium to aging, modern manufacturing techniques, modern materials, and evolving design philosophies. It also will enable design certification of nuclear systems. It will deliver a solid-state linear induction accelerator, Advanced Sources and Detectors (ASD) and a reactivity diagnostic. In conjunction with Zeus Test Bed Facility Improvement (ZTBFI) and U1a Complex Enhancements Project (UCEP), this subprogram provides two new underground test beds for executing integrated weapon experiments with plutonium, directly supporting current and future weapon system requirements

**Hydrodynamic and Subcritical Experiments Execution Support (HSEES)** provides the services required to maintain a robust testing capability that supplies critical data on weapon performance, safety and surety due to design changes, material substitutions, or component changes associated with LEPs, Alterations (Alts), or Modifications (Mods) and for new weapon systems under development. Other activities include diagnostics research and development for improved data acquisition and analysis. These diagnostic technologies provide the basis for stockpile assessment using NNSA experimental facilities such as PULSE, DARHT, Flash X-Ray (FXR)/CFF, Z, and pRad.

#### **Line-Item Construction**

**17-D-640 U1a Complex Enhancements Project (UCEP)**, NNSS provides the underground U1a Complex laboratory space for Advanced Sources and Detectors (Scorpius).

**24-D-513 Z-Pinch Experimental Underground System Test Bed Facilities Improvement (ZTBFI)**, NNSS includes the design, construction, and commissioning of the ZEUS Test Bed in U1a to support dense plasma focus diagnostics for neutron diagnosed subcritical experiments.

**26-D-512 Los Alamos Neutron Science Center (LANSCE) Modernization Project (LAMP)**, LANL will improve reliability and mission readiness to support the NSE by addressing the high-risk single-point failure

associated with the aging front end for LANSCE. LANSCE provides complementary capabilities to subcritical experiments (SCEs) and X-ray radiography to support the certification process. No other facilities in the NSE provide the cumulative capabilities collocated at LANSCE.

### **Highlights of the FY 2027 Budget Request**

- Support the design, assembly, and analysis of four SCE campaigns to study plutonium aging and understand the impacts of design modifications and changes in materials for the future stockpile.
- Execute the decadal Plutonium/Pit Aging plan by studying properties of aged plutonium and replacement materials to increase confidence in stockpile performance and LEPs.
- Develop new molecules and measure detonation and safety properties of candidate IHE to provide better performing and more efficiently producible HE.
- Use X-ray light sources to develop new methodologies of examining high-interest materials (e.g., metals, HE, additively manufactured materials) under extreme conditions, leading to advanced models with reduced uncertainties.
- Continue design-supported physics qualification work to advance secondary materials R&D initiatives and new manufacturing approaches, enabling responsive design solutions for the future stockpile and mitigating risks for the modernization programs.
- Expand the weapon science validation basis using studies of relevant nuclear explosive test data, focusing on off-nominal and non-stockpile designs, supporting modernization decisions, assessments, and responsiveness to emerging threats to address future national security requirements.
- Continue delivery of ECSE capabilities in support of annual assessments and certifications plans for the W80-4, W87-1, W93, and future weapon systems.
- Support procurements, assembly, and testing of ASD components above ground needed prior to final installation into PULSE.
- Ensure the operational and diagnostic capabilities of the NNSA complex firing facilities are sufficient to execute hydrodynamic tests in support of specific weapon systems (LEP/ALT/MOD), nuclear weapon stockpile, global security, and experimental science.
- Procure, assemble, and field impulsively loaded steel vessels in support of integral weapon experiments/hydrodynamic tests.
- Provide operationally reliable facilities to obtain the key data that reduce uncertainty in modeling and simulation of nuclear weapons performance.

### **Explanations of Change**

#### **Assessment Science (+\$277.476 million)**

- Increase in PAT reflects execution of multiple SCE campaigns which were deferred from FY 2026 as well as supports two additional pRad experiments at LANSCE and assesses off-nominal performance scenarios, the development of a novel experimental platform, leveraging existing LDRD efforts, to investigate boost physics mechanisms. This platform would expand the dataset supporting predictive capabilities for primary performance.
- Increase in DMP reflects support of other project costs for DMSS and supports execution of high explosives work which was deferred from FY 2026 including new formulation and detonation science
- Increase in ECSE reflects Advanced Sources & Detectors work needed to continue procurement and assembly of Accelerator cells and modules originally scheduled for FY 2026
- Increase in HSEES reflects deferred DARHT and Site 300 sustainment activities
- The increase supports Other Project Costs (OPCs) for technology maturation efforts for LAMP curtailed from FY 2026 and the Defense Materials Science Sector (DMSS) Project

- Realigns Advanced Diagnostics pulsed power driver development scope from Assessment Science Advanced Diagnostics to Inertial Confinement Fusion High Yield Driver Development and all other Advanced Diagnostics scope into HSEES

**17-D-640 U1a Complex Enhancements Project (UCEP) (+\$154.142 million)**

- Increase reflects completion of construction activities and the beginning of startup, testing, and commissioning. The total funding request has been reduced by \$20M due to the savings in changing the fire protection strategy. Increase supports the funding profile of the project and CD-4 date of 11/2029.

**24-D-513 Z-Pinch Experimental Underground System Test Bed Facilities Improvement (ZTBFI) (+\$91.7 million)**

- Increase reflects continued construction activities and closeout activities; because the project received no TEC funding in FY 2026, the project is delayed by 9-12 months, as Subproject 020 will not be able to start until FY 2027 funding is available. Subproject 020 will pursue CD-2/3 on current schedule and then pause for funding.

**26-D-512 Los Alamos Neutron Science Center (LANSCE) Modernization Project (LAMP) (-\$4.800 million)**

- Decrease reflects the prioritization of Other Project Costs in PAT to support tech maturation and decrease impact to LANSCE operations.



## **Stockpile Research, Technology, and Engineering Engineering**

### **Overview**

The Engineering program is responsible for ensuring system survivability in present and future stockpile-to-target sequences (STS) through four key mission areas: (1) strengthening the science, technology and engineering base; (2) providing tools for qualifying weapon components and certifying weapons; (3) supporting annual stockpile assessments through improved weapons surveillance technologies and warhead component aging assessments; and (4) digitizing and curating legacy NNSA scientific datasets to inform current and future activities.

Engineering is comprised of four subprograms. Funding for the Advanced Certification and Qualification, Studies and Assessments and Stockpile Responsiveness subprograms are now requested in the Rapid and Advanced Capabilities program.

**Archiving and Support** preserves and maintains historic knowledge, records, and data related to U.S. nuclear weapons testing and Stockpile Stewardship, and executes requirements set forth in 10 U.S.C. 6117(c) Dual validation teams in support of assessments. Archiving and Support enables NNSA's mission using world-class science, technology, and engineering while adapting to a specialized workforce through advanced knowledge and records management technologies. This digitization and curation of legacy NNSA scientific datasets informs current and future activities.

**Delivery Environments** ensures delivery systems and platforms survive current and future STSs in Normal and Abnormal environments. Select environmental examples include reentry environments, atmospheric gliding, evolving thermal and pressure differentials for prolonged periods of time, shock phenomena, and combined environments. Delivery Environments accomplishes these goals by predicting, identifying, and evaluating delivery platform system and sub-system performance and responses to such environmental phenomena. The program develops representative prototypes and conducts modeling and simulation of responses to new environmental demands and requirements, advanced diagnostics, and strategic and informed experiments. Delivery Environments furthers its objectives by collaborating with various interagency and interoffice partners to ensure alignment.

**Weapons Survivability** provides the tools and technologies necessary for ensuring U.S. nuclear weapons survivability in hostile and fratricide environments. Since weapons entering the stockpile are expected to be fielded for decades, Weapons Survivability includes projections for the evolution of defensive technologies and threats. Weapons Survivability scope includes: (1) developing scientific and engineering models for understanding radiation effects; (2) improving laboratory radiation sources and diagnostics to support code validation and hardware qualification experiments; (3) generating experimental data to validate scientific and engineering models; (4) understanding radiation-hardened design strategies; and (5) evaluating candidate and evolving stockpile technologies for radiation hardness capabilities in a generalized, weapon-relevant configuration.

**Aging and Lifetimes** detects and predicts the onset of harmful material incompatibility and aging phenomena in nuclear weapon materials, components, and subsystems before they degrade the nuclear deterrent. It also ensures new materials introduced into the stockpile or likely to be introduced, whether through life extension programs or entirely new designs, will not cause aging problems in the future. These activities require a deep understanding of the material, chemical, metallurgical, physical, and engineering behaviors that control the performance, aging, and degradation of various components in the weapon systems. Aging and Lifetimes

conducts aging studies, which provide fundamental materials for aging knowledge and inform decisions on when to replace weapons components and materials, whether materials can be reused, or if new materials could cause aging issues; computational modeling, which predicts the aging rates, mechanisms, and impacts for weapon components and materials and provides component and materials lifetime estimates, and diagnostic tool development which develops and provides diagnostic tools for improving the quantity and quality of surveillance data for the enduring and future stockpiles.

### **Line-Item Construction**

- **26-D-513 Combined Radiation Environments for Survivability Testing (CREST)** will provide an advanced radiation environmental test capability to fill a mission gap for research and development, qualification, and certification data in combined survivability/threat environments. The age, condition, and security posture of the facilities housing the current capability limits the reliability, availability, and sample size of the Annular Core Research Reactor for operations supporting the NSE. CREST will replace the aging legacy facilities and enhance the capabilities available to assess higher fidelity combined hostile nuclear environments and enable use of full-size samples.

### **Highlights of the FY 2027 Budget Request**

- Accelerate the digitization process of all media types (e.g., paper, films, microfilm, microfiche, aperture cards, and other media) through implementation of Artificial Intelligence/Machine Learning (AI/ML) tools to ingest, index, catalog, and create metadata on weapons-related documents in a centralized, searchable database to increase accessibility of preserved information.
- Mature existing integrated computational toolsets for predicting weapon system flight characteristics and ensure warhead performance in emerging and future delivery environments. Verification and validation efforts build confidence in the predictive capability of the toolset. Develop capabilities necessary to quantify multi-disciplinary failure margins for weapon systems and components in normal, abnormal, and combined normal-hostile environments. These projects will support experimental capability development for combined physics testing as well as diagnostic development and environment characterization. Collaborate with ASC to develop agile predictive capability required to design and qualify weapon systems to combined thermal and mechanical conditions.
- Execute research and development and qualification capability development shots on high energy density (NIF and Z) and radiation environment (e.g., Saturn, Hermes, ACRR) machines and facilities. Gather data in these experiments for modeling and simulation code validation and to inform current and future weapons systems.
- Provide experimental tools and simulation capabilities for systems to qualify the behavior of electronics in radiation and combined environments.
- Transition non-destructive diagnostics and modernized capabilities to Core Surveillance (Stockpile Operations).
- Enhance high explosive qualification and surveillance by transitioning a new test Shell Acceleration Initiation Train to Programs of Record, replacing an outdated capability.
- Support material compatibility and aging assessments required to mature the W93 and other modernization program's component technologies.
- Continue developing digital twin pilots and assess their viability to predict lifetimes of individual weapon components and systems.

## **Explanations of Change**

### **Engineering (-\$36.982 million)**

- Decrease is due to budget restructure with Advanced Certification and Qualification, Studies and Assessments and Stockpile Responsiveness subprograms are now requested in the Rapid and Advanced Capabilities program
- Using a comparable budget structure, the FY 2027 request for Engineering is a \$42.207 million increase compared to FY 2026 enacted.
- Increase accelerates development of reduced order models, models that are faster running and less computationally intensive, to support faster trade studies and design iterations for Rapid Capability needs
- Tailored diagnostics to support Rapid Capability data acquisition needs, including ground-based, rapidly deployable data harvesting sensors and arrays.
- Ground testing activities, specifically focusing on environments validation via ground-test surrogate design and development, to include stressing flight dynamics, supporting the Rapid Capability projects.
- Accelerate the digitization process of all media types (e.g., paper, films, microfilm, microfiche, aperture cards, and other media) through implementation of Artificial Intelligence/Machine Learning (AI/ML) tools to ingest, index, catalog, and create metadata on weapons-related documents in a centralized, searchable database to increase accessibility of preserved information.

### **26-D-513 Combined Radiation Environments for Survivability Testing (CREST) (+\$52.752 million)**

- Increase supports awarding preliminary design contracts for Nuclear Facility, Accelerator and Office Light Laboratory.

## **Stockpile Research, Technology, and Engineering Rapid & Advanced Capabilities**

### **Overview**

Rapid & Advanced Capabilities (RAC) strengthens the nation's responsive nuclear deterrent by assessing, designing, prototyping, and demonstrating advanced systems, as well as accelerating the delivery of new nuclear capabilities to meet national security needs.

The RAC program supports four key mission areas:

1. Rapidly designing, prototyping, and testing options for potential acquisition as part of NNSA's Nuclear Deterrence Rapid Capabilities Team (ND RCT).
2. Developing and assessing advanced integrated warhead designs from early concept through major validation activities—including flight tests, hydrodynamic tests, and system demonstrations.
3. Executing Pre-Phase 1 activities and risk-reduction efforts in partnership with the Department of War (DoW).
4. Leading Phase 1 Concept Assessments as directed by the Nuclear Weapons Council (NWC).

ND RCT is a cross-program, cross-enterprise collaboration among NNSA and its laboratories, plants, and production sites. Its mission is to rapidly develop advanced system prototypes and ensure readiness for accelerated acquisition and fielding, when directed.

Rapid & Advanced Capabilities is comprised of four subprograms:

**Stockpile Responsiveness (SRP)** provides efforts that sustain, enhance, and exercise capabilities required to conceptualize, design, develop, engineer, certify, produce, and deploy nuclear weapons. Capabilities are exercised through and accelerated design-build-test cycle of weapon proof of concepts. However, these efforts do not include the actual production or deployment of a stockpile weapon system, nor do they engage in the acquisition of nuclear weapons for the U.S. stockpile. SRP is the pathfinder subprogram that most directly supports the ND RCT efforts in FY 2027. The SRP subprogram was funded out of Engineering and Integrated Assessments Program before being moved to RAC in the FY2027 budget restructure.

**Studies and Assessments (SA)** funds pre-Phase X / 6.X activities to inform NWC decision-makers of the strategic impacts from the pursuit of various Nuclear Security Enterprise and weapon capabilities in coordination with DoW partners. Coordination of Phase 1 (Concept Assessment) efforts with DoW partners and risk-reduction activities are funded through investments within RAC. The SA subprogram was funded out of Engineering and Integrated Assessments Program before being moved to RAC in the FY2027 budget restructure.

**Advanced Certification & Qualification (ACQ)** funds tools and methods to ensure that there is a certification path for stockpile systems and new components without underground explosive nuclear testing. This is done by integrating computing, science, technology, and engineering advancements to facilitate certification of future life extensions and other warhead needs. ACQ provides the advanced capabilities to support qualification and certifiability projects for the ND RCT. The ACQ subprogram was funded out of Engineering and Integrated Assessments Program before being moved to RAC in the FY2027 budget restructure.

**Integrated Demonstrators (ID)** provides integrated flight testing in relevant environments with approximate system context for the purposes of evaluation and risk reduction of future programs. ID leverages flight demonstration opportunities to test, analyze, and evaluate the architectures, components, and processes directly

taking the components produced by other programs and puts them into realistic scenarios for assessment and technology maturation. ID is being moved from Weapons Technology and Manufacturing Maturation to RAC in FY 2027 and will provide flight test, ground test, and integration expertise for both ND RCT and to support traditional demonstrator efforts with DoW partners.

### **Highlights of the FY 2027 Budget Request**

- Exercise the ability to rapidly prove new system concepts as part of NNSA's Nuclear Deterrence Rapid Capability Team. In FY 2027, mature two new designs for advanced ground testing and to be integrated into a developmental flight test.
- Transition the Responsive Demonstration Experiment (ReDX) project that developed low-cost high-tempo flight-testing capabilities in partnership with industry from Stockpile Responsiveness to Integrated Demonstrators. Continue to develop new warhead system concepts and use these platforms to enable rapid prototyping of exploratory payloads.
- Complete the multi-year Phase 1 (Concept Assessment) of the WXX program per NWC strategic direction.
- Begin the Future Strategic Sea-Based Warhead (FSSW) Pre-Phase Study.
- Execute hydrodynamic test series to support future certification of rapid capabilities concepts.
- Complete a certification exercise to assess the readiness of proposed modular architectures to improve the flexibility and maintainability of stockpile systems and reduce lifecycle costs.
- Conduct performance testing of HE formulations to inform future qualification of new HE options
- Develop Advanced Materials qualification methodology to enable component material replacement options with a qualification path to reduce production time constraints.
- Complete Experimental Flight Test #2 (EFT-2) requirements (FY 2027 launch), by delivering the RV to the system integrator for flight and conducting post-flight test analysis. EFT-2 will support flight instrumentation efforts with environmental sensors to better characterize future flight conditions, as well as simulation capability-focused data acquisition efforts to gather data to help validate flight codes.

### **Explanations of Change**

#### **Rapid & Advanced Capabilities (+\$499.209 million)**

- Using a comparable budget structure, the FY 2027 request for RAC is a \$353.968 million increase compared to FY 2026 enacted. That delta does not include \$160 million mandatory resources applied to subprograms now included in RAC.
- Increase reflects the flight test needs for Nuclear Weapons Council (NWC)-directed Phase 1, Concept Assessment, for the WXX Project and a variety of Hard and Deeply Buried Target / Prompt (HDBT) defeat efforts by the Studies and Assessments program.
- Increase provides ground test capabilities, flight test integration, supporting rapid capabilities executing at least two concurrent rapid development projects, full large scale development flights with DoW and industry partners, and manages the responsive commercial flight-testing capabilities for challenge problems and experimental payloads.
- Increase provides all flight and ground testing needs for the execution of concurrent rapid deterrent capability developments under the auspices of Nuclear Deterrent Rapid Capabilities Team.
- Increase supports needed qualification and certifiability testing to support ND RCT projects, primarily hydrodynamic testing.

## **Stockpile Research, Technology, and Engineering Inertial Confinement Fusion (ICF)**

### **Overview**

The ICF program provides high energy density (HED) science capabilities and expertise that support research and testing across the range of NNSA's stockpile and national security missions. ICF meets the immediate and emerging HED science needs to support today's deterrent while advancing R&D capabilities required to meet future deterrent needs. Since most of the energy in a nuclear weapon detonation is generated by matter in the HED regime, understanding the behavior of matter and energy in this regime is critical to predicting the performance of both nuclear weapon primaries and secondaries, as well as the response of weapon components to extreme hostile radiation environments.

The ICF program leverages its experimental design expertise and computational modeling tools, diagnostic technology, target engineering and fabrication infrastructure, and national HED facilities to ensure high fidelity experimental capabilities and data are available to support stockpile modernization and national security objectives. Its capabilities are used across the NNSA to assess and certify the existing stockpile, inform design decisions for current life extension programs, investigate hostile nuclear environments, address weapons relevant HED science challenges, and support research by DoW and key international partners.

The ICF program is comprised of four subprograms:

**HED and Ignition Science for Stockpile Applications** develops and matures HED experimental platforms and computational tools, enabling partners across the nuclear weapons programs to investigate weapons physics phenomena and material behaviors for near-term weapon science and survivability applications and designs. The execution of complex physics experiments will push the boundaries of understanding within HED science to support pursuit of high yield capabilities for next-generation stockpile science.

**ICF Diagnostics and Instrumentation** establishes new diagnostic capabilities and experimental support systems through the R&D of specialized technologies necessary to execute experiments studying matter under extreme HED conditions relevant to nuclear weapons performance.

**Facility Operations** provides the support and services required to ensure the safe and efficient operation of the national HED facilities, including conducting experimental operations, performing preventative and backlogged maintenance, supplying load and target consumables, and providing research and engineering to sustain facility capabilities. These facilities, the NIF at LLNL, Z at SNL, and Omega at the University of Rochester's Laboratory for Laser Energetics (LLE), represent a complementary set of capabilities designed to meet the diverse needs of weapons physics, the pursuit of higher yields, and the exploration of fundamental HED science.

**High Yield Driver Development** advances engineering solutions for laser and pulsed power technologies necessary to generate material conditions, radiation environments, and plasma conditions that will fulfill future stockpile needs in the coming decades. ICF plans to continue leveraging public private partnerships (e.g., cooperative research and development agreements) to accelerate high yield driver technology maturation for the benefit of NNSA's nuclear deterrence mission.

## **Line-Item Construction**

- **26-D-514 NIF Enhanced Fusion Yield Capability**, LLNL will improve NIF laser energy (2.2 to 2.6 MJ) to enable access to conditions important for certification and assessment of the future stockpile that are currently out of reach. The project will increase expected fusion yield by a factor of 5-10x over current capabilities.

## **Highlights of the FY 2027 Budget Request**

- Develop and mature experimental assessment platforms that support near-term applications of ignition to answer critical stockpile questions, and in the long-term, develop fusion yield platforms to inform how to achieve higher energy yields reliably and repeatedly for stockpile applications.
- Develop and execute focused experiments at NIF, with consideration for future experiments using EYC, to mitigate identified next generation high energy density (NGHED) design uncertainties. This will include executing experiments at NIF and Z to understand high-yield driver requirements for the future.
- Build and deliver the highest-priority transformational diagnostics identified in the National Diagnostics Plan for HED Science to enhance the accuracy of data used in stockpile research and predictive modeling of relevant physical phenomena.
- Provide operationally reliable facilities to obtain the key data that reduce uncertainty in modeling and simulation of nuclear weapons performance.

## **Explanations of Change**

### **Inertial Confinement Fusion (+\$26.736 million)**

- Supports increased target production at General Atomics to meet the FY 2027 shot schedules at NIF, Z, and Omega. Requested targets to investigate specific stockpile science capabilities have grown in complexity, making them more costly. Addresses sustainment requirements to extend NNSA facility lifetime with completion of activities at NIF by FY 2030 and at Z by 2031.
- Expands target fabrication research and development for continuous improvement in experimental design and performance at NIF, Z, and Omega.
- Transitions pulsed power technology maturation for next generation HED capabilities from Assessment Science Advanced Diagnostics to Inertial Confinement Fusion High Yield Driver Development.

### **26-D-514 NIF Enhanced Fusion Yield Capability, LLNL (+\$58.000 million)**

- Increase supports CD-3A and CD-2/3 work required to advance the EYC project. Provides second year of NIF EYC line-item funding, specifically to continue crucial long-lead procurement of components that are at final design.

## **Stockpile Research, Technology, and Engineering Advanced Simulation and Computing**

### **Overview**

The Advanced Simulation and Computing (ASC) program provides high-end simulation and computing capabilities (e.g., modeling codes, platforms, and supporting infrastructure) to meet the requirements of the SSP. Modeling the complexity of nuclear weapons systems is essential to maintaining confidence in the performance of the nation's stockpile. The ASC program creates, maintains, and optimizes the weapon codes that provide integrated assessment capability, supporting annual assessment and future sustainment program qualification, and certification of the stockpile. ASC's capabilities also inform decision-making related to the sustainment of the nuclear stockpile. The program coordinates with other NNSA program offices and government agencies, including the Intelligence Community, to support nonproliferation, emergency response, nuclear forensics, and attribution activities.

ASC computing capabilities act as integrators for many of the capabilities in SRT&E and are the foundational tools that support multiple defense programs. The integrated design codes (IDCs) are mathematical and computational descriptions of nuclear weapons systems and their functions. Combined with weapon-specific data and fundamental data measured by the experimental programs, the IDCs support design studies, maintenance analyses, the Annual Assessment Reports, sustainment programs, SFIs, and weapons dismantlement activities.

The IDCs routinely benefit from improvements to NNSA's understanding of physics through experimental programs. The IDCs also make use of improved algorithms that utilize new computational hardware, which enable responses to issues such as material aging, emerging threats, and support for manufacturing and production. ASC capabilities that support the stockpile stewardship mission were built on the computing technologies commercially available over the past two decades. As industry evolves beyond and away from NNSA's scientific computing needs to provide increased computing power for general consumer markets, ASC must maintain currency with the computing industry to ensure continued performance of the IDCs on the next-generation computer platforms.

Other initiatives across the nuclear security enterprise include quantum computing (QC) and the Production Simulation Initiative (PSI). In QC, ASC seeks to develop new methods and expertise in algorithm development and hardware evaluations to develop promising QC technologies suitable for nuclear weapon applications. Through PSI, the ASC subprogram aims to drive efficiencies within the manufacturing process, encompassing efforts such as the Simulation First initiative at KCNSC which aims to incorporate physics-based simulation into production processes and operations to optimize solutions.

Due to synergistic connection and technical dependencies, ASC is tightly coordinated with the other SRT&E programs to meet its commitments to the stockpile stewardship, management, and modernization missions.

The Advanced Simulation and Computing program is comprised of seven subprograms:

**Integrated Codes** produces integrated design codes (IDCs) that enable detailed nuclear weapons assessments. These full-system, multi-scale physics and engineering codes are used for stockpile assessments to support concept studies, certification, maintenance analyses, LEPs, Alts, SFIs, and weapons dismantlement activities.



**Physics and Engineering Models** provides the models and databases used in simulations supporting the U.S. nuclear stockpile. These models and databases describe a wide variety of physical and engineering processes occurring in a nuclear weapon's lifecycle. The capability to accurately simulate these processes is required for annual assessment; design, qualification, and certification of warheads undergoing sustainment programs; resolution (and in some cases generation) of SFIs; and the development of future stockpile technologies. The PEM subprogram is closely linked to the Assessment Science program within SRT&E, which provides the experimental data that informs development of new models used in simulation codes.

**Verification and Validation** provides confidence in integrated simulation capabilities by collecting evidence that the numerical methods and simulation models are being solved precisely ("verification"), and that the simulation results from mathematical and computational models implemented into the codes reflect real-world observations ("validation"). The V&V subprogram funds the critical skills needed to apply systematic measurement, documentation, and demonstration of the ability of the models and codes to predict physical behavior.

**Computational Systems and Software Environment** supports a portfolio of integrated, balanced, and scalable computational capabilities to provide NNSA's IDCs with a stable computing environment. The CSSE subprogram fields powerful Commodity Technology (CT), Advanced Technology (AT), and Advanced Architecture Prototype (AAP) systems as well as supporting software infrastructure that is deployed on these platforms, including system software, input/output (I/O) services, storage and networking, post-processing (visualization and data analysis tools), and next-generation computing technologies. CSSE also examines and develops possible future technologies beyond exascale, such as quantum, neuromorphic, artificial intelligence, and reconfigurable computing components.

**Facility Operations and User Support** provides the facilities and services required to support nuclear weapons simulation workloads. Facility Operations includes the physical space, power, and other utility infrastructure used for supercomputing hardware; Local Area/Wide Area Networking for local and remote access; and system administration, cybersecurity, and operations services for ongoing support. User Support includes computer center hotline and help-desk services, account management, web-based system documentation, system status information tools, user training, trouble-ticketing systems, common computing environment, and application analyst support.

**Capabilities for Nuclear Intelligence** advances and adapts SRT&E capabilities developed for the weapons program to serve the needs of the intelligence community in assessing foreign nuclear weapon activities. CNI focuses on activities related to non-stockpile weapons training, high explosive knowledge development, weapon modeling advancements and computational platforms, weaponization studies, and experimental capabilities and assessments.

**Artificial Intelligence for Nuclear Security** develops artificial intelligence and machine learning capabilities for deployment into stockpile stewardship mission areas. The portfolio will focus on: (1) the development of secure and trusted AI infrastructure to protect national security information; (2) the deployment of AI to accelerate design, manufacturing, and certification; (3) supporting AI-assisted materials discovery for stockpile use cases; and (4) the deployment of dedicated AI compute capability for use by NNSA program offices at the required security classification levels.

## Highlights of the FY 2027 Budget Request

- Provides validated weapons code capabilities to the Nuclear Security Enterprise to support annual assessments, SFI investigations, LEP qualification and certification, and related nuclear security assessments.
- Continues effective high performance computing operations of ATS-3/Crossroads, ATS-4/El Capitan, and CTS systems while deploying and testing the ATS-5/Mission supercomputer.
- Evaluates data-flow architecture software and hardware using the AAPS-2/Vanguard-II architecture prototype system at SNL.
- Continues to establish a digital data infrastructure to allow the Nuclear Security Enterprise's design and production agencies (DAs and PAs) to adequately communicate, exchange information, and collaborate on research, development and deployment of projects and capabilities to support DP mission priorities.
- Advances state-of-the-art simulation capability to support critical missions, such as delivery environments.
- Develops and deploys production-relevant material and phenomenological models to optimize production processes and to inform new approaches for critical materials such as high explosives.
- Provides the computational and simulation environments needed to support AI tools across the enterprise, including complex design and scientific workflows, analysis of data to support certification of vital components (e.g., pit CT scans)
- Completes CNI Practicum 9, a design study that challenges early- to mid-career U.S. nuclear designers and engineers to develop an understanding and appreciation for non-stockpile-like nuclear design space.
- Evaluates AI models to enforce national security data protection and to understand the impact of AI in non-US stockpile nuclear security missions.

## Explanations of Change

### Advanced Simulation and Computing (+\$43.77 million)

- The delta does not reflect \$115 million of mandatory funding to support AI efforts.
- Increase continues support for the second year of high priority AI for Nuclear Security (AI4NS) pilot projects, allowing capabilities to be extended and hardened. Several capabilities will be transitioned into early production use.

## **Stockpile Research, Technology, and Engineering Weapon Technology and Manufacturing Maturation**

### **Overview**

The Weapon Technology and Manufacturing Maturation program develops agile, affordable, assured, and responsive technologies and capabilities for nuclear stockpile sustainment and modernization.

The core areas of work include:

- **Impactful Technologies:** Developing and modernizing stockpile technologies, architectures, and processes so that realized risks have technical solutions that mitigate the cost, schedule, or performance impact to the programs of record. Techniques are agile, assured, and responsive to change, shortening design, qualification, certification, and manufacturing cycles and timelines to improve future affordability and meet future military requirements.
- **Meeting novel weapon requirements:** Developing and testing novel technologies to ensure that DOE/NNSA is capable of fielding weapon systems that meet emerging requirements from the Department of War.
- **Robust and responsive production capabilities:** Developing and modernizing the production techniques and technologies utilized for weapons manufacturing and testing in order to enable more throughput, reduce health and environmental impacts, and enable lower operating costs.
- **Partnership with Stakeholders to Meet Stockpile and Customer Requirements:** Identifying, sustaining, enhancing, integrating, and continually exercising all capabilities, tools, and technologies across the science, engineering, design, certification, and manufacturing cycle, working together with the Department of War, national security laboratories, nuclear weapon production facilities, and other partners.
- **Skilled Technical Workforce and Enhanced Capabilities:** Maintaining a qualified technical workforce and enhanced capabilities by transferring knowledge, skills, and direct experience with respect to all stockpile technologies and processes.

### **Primary responsibilities of this program include:**

- Developing innovative technologies that both minimize the probability of unauthorized use and maximize reliability for authorized use of nuclear weapons.
- Leading technology and system demonstration efforts, with various mission partners, to speed development and improve acceptance of advanced technologies and processes into the stockpile and the Nuclear Security Enterprise.
- Improving agility, effectiveness, safety, and efficiency in the design and manufacture of war reserve components using advanced technologies and manufacturing processes.
- Improving, developing and leveraging novel manufacturing technologies to reduce impact of realized risks to the cost schedule and performance of weapon programs.
- Evaluating and developing materials to enable novel designs, address supply chain concerns and improve weapon performance.
- Collaborating with intelligence agencies and ensure that development capabilities and expertise are available and pacing global concerns to enable evaluation.
- Exploring and leveraging emerging digital capabilities to advance the capabilities of weapon design and manufacturing.

The Weapon Technology and Manufacturing Maturation program is comprised of four subprograms:

**Surety Technologies (ST)** is committed to minimizing the likelihood of unauthorized use of U.S. nuclear weapons while maximizing the reliability of authorized use, all while upholding the highest safety standards. The ST Program creates, develops, and advances cutting-edge safety, security, and use control technologies to minimize the risk of accidental nuclear explosions, and in the unlikely event of a security breach and unauthorized access, reduce the risk of nuclear yield to the lowest practical level.

**Weapon Technology Development (WTD)** develops state-of-the-art weapon components, architectures, and processes responsible for the functionality of the weapons system ensuring the reliable performance, safety, and handling of current and future stockpile systems. Demonstrations and testing of components and architectures in environments relevant to military requirements are also covered under this subprogram.

**Advanced Manufacturing Development (AMD)** rapidly develops and deploys advanced materials to address supply chain impacts, and to enable replacement of critical materials for use in weapons applications. It is also responsible for developing and evaluating manufacturing methodologies and processes that reduce the cost and footprint of weapons production that will enable new production spaces to be better optimized and have great throughput.

**Microelectronics & Digital Development (MDD)** seeks to design, fabricate, and produce microelectronic processes, architectures, components, and technologies, as well as production/manufacturing data software and engineering practices for integration into the weapons stockpile. MDD's goal in microelectronics is to provide warhead strategic radiation-hardened (WSRH) microelectronics solutions to address technological gaps while optimizing size, weight, and power (SWaP), maintaining a pulse on state-of-the-art (SOTA) in partnership with industry through commercial off the shelf (COTS) products. In the digital space, MDD aims to reduce lifecycle costs and tailor manufacturing/component production for rapid prototyping for readiness into the stockpile.

### **Highlights of the FY 2027 Budget Request**

- Coordinate development of a universal container prototype, as well as a suite of technologies to improve the various current containers used by the enterprise for weapon shipment and storage.
- Mature quantum computer resistant coded control and weapon architecture for future insertion opportunities to meet Commercial National Security Algorithm (CNSA) Suite 2.0 that requires quantum-resilient algorithms and coded control on all weapon systems by 2033 to counter adversarial quantum computing capabilities.
- Develop and mature the Megasonics Information Based Safety technology to provide a faster and cheaper technological alternative to Stronglink-based safety architectures.
- Synthesize a binder replacement for PBX 9502 due to supply chain issues with perfluoroalkyl substances (PFAS) materials.
- Develop in-situ process monitoring to mature “born qualified” component manufacturing capabilities with additive manufacturing processes i.e., a successful print yields a QA-approved part.
- Strengthen predictive simulation and data analytics capabilities for manufacturing processes, substantially augmenting the enterprise's capabilities to rapidly mature novel manufacturing processes and produce acceptable stockpile components.
- Advance development of On Machine Inspection using automated optical inspection to improve throughput for Direct Ink Write components
- Mature and initiate transition processes for metal spinning production for rapid prototyping and metal part fabrication.

- Increase producibility rating on next-gen strategic rad-hard complementary metal oxide semiconductor (CMOS8) products development and yield through process improvements. Maturation of three-axis microelectromechanical systems (MEMS)-based accelerometer customized for harsh environmental loading through testing and application-specific integrated circuit (ASIC) design.

## **Explanation of Change**

### **Weapon Technology and Manufacturing Maturation (+140.6 million).**

- Increase reflects an additional investment to mitigate the impacts of material and supply chain shortages, accelerate the development of critical technologies to enable novel stockpile to target sequences, critical materials that are sunsetting, subject to legal or adversarial actions, critical gaps in production science to accomplish the current strategic deterrence plan and integration of technologies into prototyping spaces. Specifically, but not limited to:
  - Novel integrated circuits for power conversion and data processing/computing.
  - Critical components such as neutron generators and gas transfer systems.
  - Replacements for legacy materials inside of the nuclear explosives package.
  - Other component gaps to enable a rapid response to emergent requirements.
- Increase would also enable additional investments in new technology options to meet the needs of the stockpile through design, analysis, test, and demonstration.
  - For secondary modernization, WTMM is focused on novel production processes, production process improvements, and material developments to expand the available materials for secondary design options, increase throughput and mature options to reduce strategic materials risks. WTMM is also investing in enhancing the R&D prototyping capabilities at LANL, LLNL and Y-12 for demonstration of new design concepts and incorporation of new secondary materials and production techniques, such as installation of advanced manufacturing for prototype tooling and high explosive testing at LANL.
  - Additional capability enhancements will include the completion of the final design for classified machining expansion at the Nevada Hardware Support Facility, which will increase enterprise production capacity in coordination with KCNSC and SNL.

**Stockpile Research, Technology, and Engineering  
Capital Equipment Summary (\$K)**

|                                                                                                  | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY<br/>2025<br/>Enacted</b> | <b>FY<br/>2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------------------------------------------------|--------------|------------------------|--------------------------------|--------------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                                           |              |                        |                                |                                |                            |
| Total Non-MIE Capital Equipment (TEC <\$10M)                                                     | N/A          | N/A                    | 83,774                         | 85,449                         | 87,158                     |
| Advanced Sources and Detector, LANL                                                              | 2,411,161    | 1,092,302              | 276,956                        | 274,656                        | 344,917                    |
| ATS-5 System, LANL                                                                               | 250,000      | 2,000                  | 20,000                         | 108,000                        | 88,500                     |
| Crossroads (ATS-3) System, LANL                                                                  | 115,000      | 109,000                | 6,000                          | -                              |                            |
| AT System – ATS-6, LLNL                                                                          | 250,000      | -                      | -                              | 2,000                          | 8,000                      |
| Commodity Technology System (CTS) 2, LLNL<br>(previously CTS-2) <sup>1</sup>                     | 90,000       | 50,000                 | 20,000                         | 20,000                         |                            |
| Commodity Technology System (CTS) 3, LLNL <sup>1</sup>                                           | 80,000       | -                      | -                              | -                              | 20,000                     |
| Commodity Technology System-NextGeneration<br>(CTS-NG) <sup>1</sup>                              | 125,000      | -                      | -                              | -                              | -                          |
| El Capitan (ATS-4), LLNL                                                                         | 620,433      | 569,147                | 51,286                         | -                              |                            |
| Final Optic Damage Inspection System<br>Replacement, LLNL                                        | 18,350       | -                      | -                              | -                              | 5,220                      |
| High Yield X-ray Imager, LLNL                                                                    | 10,000       | 6,000                  | 4,000                          | -                              | -                          |
| Target and Beam Alignment System Replacement<br>(formerly Target Alignment Sensor Upgrade), LLNL | 29,290       | -                      | -                              | -                              | 9,790                      |
| Tuolumne (formerly Unclassified El Capitan-like<br>System (ATS-4)), LLNL <sup>1,2</sup>          | 17,000       | 7,000                  | 3,000                          | 3,000                          | 3,000                      |
| Unclassified ATS-6 System, LLNL                                                                  | 10,000       | -                      | -                              | -                              | -                          |
| Secure AI compute capabilities for NNSA, PNNL                                                    | 70,000       | -                      | -                              | -                              | 70,000                     |
| ZEUS Detector Wall, NNSA                                                                         | 15,865       | 13,035                 | 2,830                          | -                              | -                          |
| Commodity Technology System (CTS) 2, SNL <sup>1</sup>                                            | 20,000       | -                      | 10,000                         | 10,000                         | -                          |
| Commodity Technology System (CTS) 3, SNL <sup>1</sup>                                            | 40,000       | -                      | -                              | -                              | 10,000                     |
| <b>Total, Capital Equipment</b>                                                                  | <b>N/A</b>   | <b>N/A</b>             | <b>477,846</b>                 | <b>503,105</b>                 | <b>646,585</b>             |

<sup>1</sup> Represents a blanket contract under which multiple useful HPC systems (asset) are purchased annually, some of which are financed using lease-to-own (LTO) agreements funded on a year-by-year basis as funding is made available through the annual appropriations process.

<sup>2</sup> DNN R&D and a LLNS overhead cost pool funds the remainder of costs for this MIE.

**Stockpile Research, Technology, and Engineering  
Outyear Capital Equipment Summary (\$K)**

|                                                                                               | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|-----------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                                        |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment (TEC <\$10M)                                                  | 88,902                     | 90,680                     | 92,493                     | 94,343                     | N/A             |
| Advanced Sources and Detector, LANL                                                           | 162,095                    | 121,877                    | 102,076                    | 36,282                     | -               |
| ATS-5 System, LANL                                                                            | 14,000                     | 10,500                     | 7,000                      | -                          | -               |
| AT System – ATS-6, LLNL                                                                       | 65,000                     | 91,000                     | 54,000                     | 20,000                     | 10,000          |
| Commodity Technology System (CTS) 3, LLNL <sup>1</sup>                                        | 20,000                     | 20,000                     | 20,000                     | -                          | -               |
| Commodity Technology System-NextGeneration (CTS-NG) <sup>1</sup>                              | -                          | -                          | -                          | 25,000                     | 100,000         |
| Final Optic Damage Inspection System Replacement, LLNL                                        | 4,730                      | 5,600                      | 2,800                      | -                          | -               |
| Target and Beam Alignment System Replacement (formerly Target Alignment Sensor Upgrade), LLNL | 8,700                      | 5,400                      | 5,400                      | -                          | -               |
| Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL <sup>1,2</sup>          | 1,000                      | -                          | -                          | -                          | -               |
| Unclassified ATS-6 System, LLNL                                                               | -                          | -                          | 10,000                     | -                          | -               |
| Commodity Technology System (CTS) 3, SNL <sup>1</sup>                                         | 10,000                     | 10,000                     | 10,000                     | -                          | -               |
| <b>Total, Capital Equipment</b>                                                               | <b>364,427</b>             | <b>345,057</b>             | <b>293,769</b>             | <b>175,625</b>             | <b>110,000</b>  |

<sup>1</sup> Represents a blanket contract under which multiple useful HPC systems (asset) are purchased annually, some of which are financed using lease-to-own (LTO) agreements funded on a year-by-year basis as funding is made available through the annual appropriations process.

<sup>2</sup> DNN R&D and a LLNS overhead cost pool funds the remainder of costs for this MIE.

**26-D-512, Los Alamos Neutron Science Center Modernization Project**  
**Los Alamos National Laboratory, New Mexico**  
**Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

National Nuclear Security Administration (NNSA) requests \$15,200,000 in Total Estimated Cost (TEC) in Fiscal Year (FY) 2027 for the Los Alamos Neutron Science Center (LANSCE) Modernization Project (LAMP). Additionally, within the FY 2027 Request for Primary Assessment Technologies, NNSA requests to fund \$62,800,000 in Other Project Costs (OPCs) for a Total Project Cost (TPC) of \$78,000,000 in FY 2027. These funds will support Preliminary Design, long-lead procurements, and technology maturation activities.

The cost range for the project at CD-0 was \$456,000,000 to \$1,007,000,000. The cost range for the project is based on the estimates provided by the Office of Programming, Analysis, and Evaluation and the Office of Cost Estimating and Program Evaluation (CEPE) independent cost estimate. The History, Financial Schedule, and Detailed Cost Estimates sections below are based on a Rough Order of Magnitude (ROM) point estimate of \$1,000,000,000. Approval of CD-1, *Approve Alternate Selection and Cost Range*, is anticipated in 4Q FY 2026. Based on the conceptual design, the proposed CD-1 cost range is \$687,000,000 to \$1,007,000,000, and the high end of the projected CD-4 range, *Approve Start of Operations*, is the fourth quarter of FY 2036.

**Significant Changes**

The Conceptual Design was completed on November 21, 2025, and CD-1 Schedule and Cost Range draft information is complete. The Independent Project Review was conducted January 27, 2026 through January 29, 2026, in conjunction with the Los Alamos National Laboratory's Director's Review in advance of the anticipated 4Q FY 2026 CD-1 Approval.

NNSA reprogrammed \$2,000,000 of funds from the line-item (TEC) to the Primary Assessment Technologies program (OPC) to maintain technology maturation efforts during FY 2026. The financial table has been updated to reflect these changes.

The CD-2/3 milestone has been rescheduled to 1Q FY 2031. This will allow for balancing technology maturation, securing long-lead procurements, and completing final design activities, coupled with refined CD-1 resource-loaded scheduling. This will strategically align OPC and TEC funding profiles with the anticipated lead times for both technology maturation and construction procurements, while also reducing impacts to facility downtime. In addition, TEC funds were shifted between Design and Construction to align long lead procurement request based on the conceptual design completion.

A Federal Project Director (FPD) IV has been assigned to the project.

**Critical Milestone History**

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | CD-4       |
|-------------|------------|----------------------------|------------|------------|-----------------------|------------|------------|
| FY 2026     | 11/25/2024 | 2Q FY 2026                 | 4Q FY 2026 | 2Q FY 2028 | 2Q FY 2028            | 2Q FY 2028 | 1Q FY 2034 |
| FY 2027     | 11/25/2024 | 11/21/2025                 | 4Q FY 2026 | 1Q FY 2031 | 4Q FY 2029            | 1Q FY 2031 | 1Q FY 2034 |



**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range  
**Conceptual Design Complete** – Estimated date the conceptual design will be completed  
**CD-1** - Approve Design Scope and Project Cost and Schedule Ranges  
**CD-2** – Approve Performance Baseline  
**Final Design Complete** - Estimated date the project design will be completed  
**CD-3A** - Approve Long Lead Procurements  
**CD-3** - Approve Start of Construction  
**D&D Complete** - Completion of D&D work (see Section 9)  
**CD-4** - Approve Start of Operations or Project Closeout  
 Separate documentation will be submitted for combined CD-2/3 for each subproject

| Fiscal Year | CD-3A      |
|-------------|------------|
| FY 2026     | 4Q FY 2026 |
| FY 2027     | 4Q FY 2026 |

**Project Cost History (\$K)**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC       |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|-----------|
| FY 2026     | 170,000     | 669,670           | 839,670    | 160,330         | -        | 160,330    | 1,000,000 |
| FY 2027     | 115,000     | 724,670           | 839,670    | 160,330         | -        | 160,330    | 1,000,000 |

**2. Project Scope and Justification**

**Scope**

The LAMP project will modernize the front-end portion of the LANSCE accelerator. LAMP will provide a reliable and modern dual species ion (Hydrogen H<sup>+</sup> and H<sup>-</sup>) proton beamline source by replacing the obsolete front end of the accelerator with a modern configuration. The current front end of the accelerator consists of two Cockcroft-Walton (CW) injector systems, a low-energy beam transport system, and a drift tube linear accelerator (DTL). The modern configuration will consist of two isotopic injectors, a Low Energy Beam Transport (LEBT), a modern radiofrequency quadrupole (RFQ), a Medium Energy Beam Transport (MEBT), and a more modern DTL. The DTL will be newer, easier to repair, and match the new beam current and energy of the new injection system. Ancillary equipment such as bean diagnostics, instrumentation and controls, and the vacuum system will also be replaced to support the new system.

The Technology Readiness Evaluation Report (LA-UR-25-23980) was used to identify components requiring technology maturation to support LAMP. In addition, CEPE performed a review and a summary of the technology readiness level (TRL) for the major components is shown in the table below. Although LAMP will utilize proven accelerator technologies, differences in accelerator operations at LANSCE such as the simultaneous acceleration of the dual beam and the pre-bunched beam for Weapons Nuclear Research (WNR) facility results in unique requirements for LANSCE. Most of the identified technology maturation required is verifying that existing technology can perform to facility specific requirements. To complete technology maturation activities, a prototype will be assembled in a nearby building, allowing for the testing of the

integrated system up to up to the first DTL tank prior to taking LANSCE offline. This approach significantly minimizes facility downtime and enhances cost-effectiveness by enabling the potential reuse of prototype equipment. Furthermore, it substantially reduces the integration risks associated with deploying the new fully tested front end into the existing beamline infrastructure.

Many of the components required to support construction of the beamline have been identified as long lead procurements to mitigate schedule, contracting, and facility failure risks. As part of the CD-3A, procurements will be staggered between the FYs based on lead times, available funding and impact to project risk. This will support expediting the actual construction once CD-3 is achieved. Items such as the 6 DTLs are very long lead (~2 to 3 years), and the design definition can be completed in the early preliminary design process. Additionally, LAMP will incorporate many tried and true components also used at other accelerator facilities into the design. These components, such as power supplies, vacuum equipment, control equipment, magnets, and RF Circulators, all have significantly long lead times (18 - 24 months) and do not require additional design work to be completed.

| <b>Subsystem</b>                               | <b>TRL<sup>1</sup></b> |
|------------------------------------------------|------------------------|
| Ion Sources – H+ and H- (including HV systems) | 8                      |
| Low-Energy Beam Transport (LEBT)               | 8                      |
| RF Power Systems                               | 8                      |
| Beam Diagnostics                               | 8                      |
| Instrumentation & Controls (I&C)               | 8                      |
| Vacuum                                         | 8                      |
| Drift-Tube Linac (DTL) Structure               | 8                      |
| Choppers (100-keV LEBT and 3-MeV MEBT )        | 4                      |
| Dual-Beam RFQ Structure                        | 4                      |
| Dual-Beam MEBT                                 | 4                      |

### **Justification**

LANSCE is the only U.S. accelerator facility capable of performing diverse classes of experiments simultaneously for the weapons program at a single site, an attribute stemming from its particle beam performance parameters operating within the safety and security authorization basis infrastructure suitable for the NNSA weapon missions. The LANSCE accelerator currently supports key aspects of the enduring requirement for science-based stockpile stewardship such as (1) qualifying weapons components as part of sustainment of the current stockpile, (2) supporting modern and aging components and manufacturing initiatives, (3 and 4) providing nuclear data used in simulation and modeling to support development of the future deterrent and research and development (R&D), and (5) performing radiochemistry relevant to nuclear weapons science to support threat mitigation. LANSCE currently fulfills these missions through the capabilities of isotope production, dynamic multi-frame proton radiography, neutron scattering, neutron radiography, and nuclear physics R&D currently enabled by the LANSCE accelerator. The risk of losing these capabilities could delay multiple weapons modernization programs, create increased workload and expenses trying to rectify the loss (reactive versus proactive mitigation), and possibly burden other facilities not capable of fully supporting the NNSA defense program mission.

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<sup>1</sup> TRL8: Actual system completed and qualified through test and demonstration. TRL4: Component and/or system validation in laboratory environment.

NNSA weapon missions utilizing LANSCE data will be required into the 2050s and beyond. In recent years, the reliability of the facility has significantly deteriorated for a variety of reasons. Without modernizing the front-end of the accelerator, the LANSCE facility is at risk of not consistently delivering its mission due to frequent, unplanned interruptions, and unforeseen accelerator equipment failures.

### 3. Financial Schedule (\$K)<sup>1</sup>

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |                |
| <b>Design</b>                     |                                                  |                    |                |
| FY 2026                           | 18,000 <sup>2</sup>                              | 18,000             | 2,000          |
| FY 2027                           | 12,160                                           | 12,160             | 24,000         |
| FY 2028                           | 45,000                                           | 45,000             | 44,000         |
| FY 2029                           | 39,840                                           | 39,840             | 45,000         |
| FY 2030                           | -                                                | -                  | -              |
| FY 2031                           | -                                                | -                  | -              |
| Outyears                          | -                                                | -                  | -              |
| <b>Total Design</b>               | <b>115,000</b>                                   | <b>115,000</b>     | <b>115,000</b> |
| <b>Construction</b>               |                                                  |                    |                |
| FY 2026                           | -                                                | -                  | -              |
| FY 2027                           | 3,040                                            | 3,040              | 3,040          |
| FY 2028                           | 43,000                                           | 43,000             | 22,500         |
| FY 2029                           | 79,920                                           | 79,920             | 61,894         |
| FY 2030                           | 122,156                                          | 122,156            | 146,290        |
| FY 2031                           | 104,599                                          | 104,599            | 115,599        |
| Outyears                          | 371,955                                          | 371,955            | 375,347        |
| <b>Total Construction</b>         | <b>724,670</b>                                   | <b>724,670</b>     | <b>724,670</b> |
| <b>TEC</b>                        |                                                  |                    |                |
| FY 2025                           | -                                                | -                  | -              |
| FY 2026                           | 18,000                                           | 18,000             | 2,000          |
| FY 2027                           | 15,200                                           | 15,200             | 27,040         |
| FY 2028                           | 88,000                                           | 88,000             | 66,500         |
| FY 2029                           | 119,760                                          | 119,760            | 106,894        |
| FY 2030                           | 122,156                                          | 122,156            | 146,290        |
| FY 2031                           | 104,599                                          | 104,599            | 115,599        |
| Outyears                          | 371,955                                          | 371,955            | 375,347        |

<sup>1</sup> The project has not yet been approved for CD-2 and therefore has not been baselined. Out year funding amounts may be revised in future budget requests as NNSA baselines the project in accordance with DOE Order 413.3B.

<sup>2</sup> A correction was made to the FY 2026 funding profile. Requested TEC funding was intended to be for TEC Design rather than TEC Construction.

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|----------------------------------|--------------------------------------------------|--------------------|------------------|
| <b>Total TEC</b>                 | <b>839,670</b>                                   | <b>839,670</b>     | <b>839,670</b>   |
| <b>Other Project Costs (OPC)</b> |                                                  |                    |                  |
| FY 2025                          | 13,330                                           | 13,330             | 13,016           |
| FY 2026                          | 26,555                                           | 26,555             | 25,869           |
| FY 2027                          | 62,800                                           | 62,800             | 62,800           |
| FY 2028                          | 15,000                                           | 15,000             | 15,000           |
| FY 2029                          | 10,000                                           | 10,000             | 10,000           |
| FY 2030                          | 9,000                                            | 9,000              | 7,500            |
| FY 2031                          | 11,000                                           | 11,000             | 8,000            |
| Outyears                         | 12,645                                           | 12,645             | 18,145           |
| <b>Total, OPC</b>                | <b>160,330</b>                                   | <b>160,330</b>     | <b>160,330</b>   |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                  |
| FY 2025                          | 13,330                                           | 13,330             | 13,016           |
| FY 2026                          | 44,555                                           | 44,555             | 27,869           |
| FY 2027                          | 78,000                                           | 78,000             | 89,840           |
| FY 2028                          | 103,000                                          | 103,000            | 81,500           |
| FY 2029                          | 129,760                                          | 129,760            | 116,894          |
| FY 2030                          | 131,156                                          | 131,156            | 153,790          |
| FY 2031                          | 115,599                                          | 115,599            | 123,599          |
| Outyears                         | 384,600                                          | 384,600            | 393,492          |
| <b>Total TPC</b>                 | <b>1,000,000</b>                                 | <b>1,000,000</b>   | <b>1,000,000</b> |

#### 4. Details of Project Cost Estimate (\$K)<sup>1</sup>

|                                       | Current Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|---------------------------------------|---------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>     |                           |                               |                                   |
| <b>Design</b>                         |                           |                               |                                   |
| Design                                | 92,500                    | 132,500                       | N/A                               |
| Federal Support                       | 7,500                     | 7,500                         | N/A                               |
| Contingency                           | 15,000                    | 30,000                        | N/A                               |
| <b>Total Design</b>                   | <b>115,000</b>            | <b>170,000</b>                | <b>N/A</b>                        |
| <b>Construction</b>                   |                           |                               |                                   |
| Site Preparation                      | 102,732                   | 102,732                       | N/A                               |
| Long-Lead Procurement                 | 120,000                   | 80,000                        | N/A                               |
| Equipment                             | 129,000                   | 129,000                       | N/A                               |
| Construction                          | 75,000                    | 75,000                        | N/A                               |
| Federal Support                       | 16,000                    | 16,000                        | N/A                               |
| Contingency                           | 281,938                   | 266,938                       | N/A                               |
| <b>Total Construction</b>             | <b>724,670</b>            | <b>669,670</b>                | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>     | <b>839,670</b>            | <b>839,670</b>                | <b>N/A</b>                        |
| <i>Contingency, TEC</i>               | <i>296,938</i>            | <i>296,938</i>                | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>      |                           |                               |                                   |
| OPC except D&D                        |                           |                               |                                   |
| Analysis of Alternatives <sup>2</sup> | -                         | 230                           | N/A                               |
| Conceptual Design                     | 7,132                     | 8,000                         | N/A                               |
| Technology Maturation                 | 85,679                    | 85,449                        | N/A                               |
| Federal Support                       | 6,251                     | 6,251                         | N/A                               |
| Start-up & TTO                        | 25,200                    | 25,200                        | N/A                               |
| Project Closeout                      | 5,200                     | 5,200                         | N/A                               |
| Contingency                           | 30,868                    | 30,000                        | N/A                               |
| <b>Total OPC</b>                      | <b>160,330</b>            | <b>160,330</b>                | <b>N/A</b>                        |
| <i>Contingency, OPC</i>               | <i>30,000</i>             | <i>30,000</i>                 | <i>N/A</i>                        |
| <b>Total Project Cost</b>             | <b>1,000,000</b>          | <b>1,000,000</b>              | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b>    | <b>326,938</b>            | <b>326,938</b>                | <b>N/A</b>                        |

<sup>1</sup> CD-0 costs estimates are ROM estimates. Cost breakdowns provided are best estimates prior to completing the point estimates. Per the GAO Cost Estimating guidance, the “cone of uncertainty” is large in the early stages of a project. NNSA is depicting this uncertainty at the early stages of a project. The cost breakdown may be revised in future budget requests as NNSA baselines the project in accordance with DOE Order 413.3B.

<sup>2</sup> Cost reduced due to receipt of AoA exemption.

## 5. Schedule of Appropriations Requests (\$K)<sup>1</sup>

| Request Year | Type | Prior Years | FY2025 | FY2026 | FY2027 | FY2028  | FY2029  | FY2030  | FY2031  | Outyears | Total     |
|--------------|------|-------------|--------|--------|--------|---------|---------|---------|---------|----------|-----------|
| FY 2026      | OPC  | -           | 13,330 | 37,000 | -      | -       | -       | -       | -       | 110,000  | 160,330   |
|              | TEC  | -           | -      | 20,000 | -      | -       | -       | -       | -       | 819,670  | 839,670   |
|              | TPC  | -           | 13,330 | 57,000 | -      | -       | -       | -       | -       | 929,670  | 1,000,000 |
| FY 2027      | OPC  | -           | 13,330 | 26,555 | 62,800 | 15,000  | 10,000  | 9,000   | 11,000  | 12,645   | 160,330   |
|              | TEC  | -           | -      | 18,000 | 15,200 | 88,000  | 119,760 | 122,156 | 104,599 | 371,955  | 839,670   |
|              | TPC  | -           | 13,330 | 44,555 | 78,000 | 103,000 | 129,760 | 131,156 | 115,599 | 372,155  | 1,000,000 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |             |
|---------------------------------------------------------------------|-------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 4 Q FY 2036 |
| Expected Useful Life (number of years)                              | 20          |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 4 Q FY 2056 |

### Related Funding Requirements (Budget Authority in Base-Year 2024 Millions of Dollars)

| Funding Requirements       | Annual Costs      |                  | Life Cycle Costs  |                  |
|----------------------------|-------------------|------------------|-------------------|------------------|
| Estimate Totals            | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate |
| Operations and Maintenance | 18                | 29               | 360               | 581              |

## 7. Deactivation and Decommissioning (D&D) Information

D&D is not included in the scope of LAMP.

## 8. Acquisition Approach

The conceptual design was led by the LANL Management and Operating (M&O) contractor, which has formed a management and technical team structure to perform technology maturation, design, production, integration, and commissioning activities. It is expected that a large majority of the contracts will be firm fixed price subcontracts whenever practical. Specific accelerator technology elements of the project may require collaboration with other Department of Energy (DOE) laboratories and/or industries that have the requisite capabilities, expertise, and experience to cost-effectively design and build such elements. The Acquisition Strategy was included in the Preliminary Project Execution Plan and will be issued as part of the CD-1 approval.

<sup>1</sup> The project has not yet been approved for CD-2 and therefore has not been baselined. Out year funding amounts may be revised in future budget requests as NNSA baselines the project in accordance with DOE Order 413.3B.

**24-D-513, Z-Pinch Experimental Underground System (ZEUS) Test Bed Facilities Improvement (ZTBFI)  
Nevada National Security Site (NNSS), Mercury, Nevada  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The Fiscal Year (FY) 2027 Request for the Z-Pinch Experimental Underground System (ZEUS) Test Bed Facilities Improvement (ZTBFI) project is \$91,700,000 of Total Project Cost (TPC) funding. The FY 2027 request will continue construction activities and closeout activities. The project is divided into two subprojects. The CD-1 approval for the overall project set the preliminary cost estimate range at \$49,500,000 to \$125,500,000 and the projected CD-4 date at 2Q FY 2026. Subproject 010 was re-baselined in July 2025 to accelerate scope associated with the change in the fire protection strategy explained below, increasing the TPC to \$90,100,000 with an expected CD-4 date of January 2028. Subproject 020 is expected to achieve CD-1R/2/3 in 3Q FY 2026, with a projected TPC of \$143,061,000 and a projected CD-4 of 3Q FY 2029. The current estimated TPC for the total project is \$233,161,000 and the current estimated CD-4 is 3Q FY 2029.

A Federal Project Director has been assigned to the project.

**Significant Changes:**

- The ZTBFI project was directed to replace the Fire Extinguishing System (FES) in the project scope with an alternative Fire Protection strategy due to high technical risk and safety hazards associated with the National Fire Protection Association 700 compliant hybrid mist FES coupled with cost and schedule impacts. As a result, 1) Subproject 010 re-baselined in July 2025 to execute a portion of the activities to replace the Fire Extinguishing System including the mining of a secondary egress from the experiment area and a refuge station in the diagnostic room drift; and 2) Subproject 020 is being revised to remove the construction of the Fire Extinguishing System and complete the construction of the alternate Fire Protection strategy elements, which is expected to reduce the overall scope of Subproject 020.
- Project completion date has slipped due to no TEC funding being provided in FY 2026. This delays the project by 9-12 months, as Subproject 020 will not be able to start until projected FY 2027 funding is available. Subproject 020 will pursue CD-2/3 on current schedule and then pause for funding.
- The FYNSP does not fund the project to the current estimated TPC. Future budget submittals may update outyear funding levels, as necessary.
- Removed 1 Key Performance Parameter (KPP) from Subproject 020 (Provide an invert suitable for installation of the ZEUS NDSE System and Vessel Ops).
- The lifecycle costs were updated to include 2.48% per year escalation costs.

**Critical Milestone History**

**24-D-513: Total Project**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2     | Final Design Complete | CD-3     | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|-----------|----------|-----------------------|----------|--------------|----------|
| FY 2024     | 9/25/2014 | 9/13/2021                  | 3QFY2023  | 3QFY2024 | 4QFY2023              | 3QFY2024 | N/A          | 2QFY2026 |
| FY 2026     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 1QFY2026 | 4QFY2025              | 1QFY2026 | N/A          | 1QFY2030 |
| FY 2027     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 3QFY2026 | 2QFY2026              | 3QFY2026 | N/A          | 3QFY2029 |

**Weapons Activities / Stockpile Research, Technology, and Engineering /**

**24-D-513 Z-Pinch Experimental Underground System**

**(ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS**

**FY 2027 Congressional Justification**

**24-D-513-010: NDSE Mining and Critical Procurements**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2      | Final Design Complete | CD-3      | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|-----------|-----------|-----------------------|-----------|--------------|----------|
| FY 2026     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 4/03/2024 | 5/23/2023             | 4/03/2024 | N/A          | 2QFY2027 |
| FY 2027     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 4/03/2024 | 5/23/2023             | 4/03/2024 | N/A          | 2QFY2028 |

**24-D-513-020: NDSE Laboratory and Support Infrastructure**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1      | CD-2     | Final Design Complete | CD-3     | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|-----------|----------|-----------------------|----------|--------------|----------|
| FY 2026     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 1QFY2026 | 4QFY2025              | 1QFY2026 | N/A          | 1QFY2030 |
| FY 2027     | 9/25/2014 | 9/13/2021                  | 4/03/2024 | 3QFY2026 | 2QFY2026              | 3QFY2026 | N/A          | 3QFY2029 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)**CD-1** – Approve Alternative Selection and Cost Range**CD-2** – Approve Performance Baseline**Final Design Complete** – Estimated/Actual date the project design will be/was complete**CD-3** – Approve Start of Construction/Execution**D&D Complete** – Completion of D&D work**CD-4** – Approve Start of Operations or Project Closeout**Project Cost History (\$K)****24-D-513: Total Project**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2024     | 4,692       | 118,254           | 122,946    | 2,515           | N/A      | 2,515      | 125,461 |
| FY 2026     | 46,281      | 182,680           | 227,961    | 5,200           | N/A      | 5,200      | 233,161 |
| FY 2027     | 52,466      | 175,495           | 227,961    | 5,200           | N/A      | 5,200      | 233,161 |

**24-D-513-010: NDSE Mining and Critical Procurements**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|--------|
| FY 2026     | 4,081       | 65,019            | 69,100     | 500             | N/A      | 500        | 69,600 |
| FY 2027     | 4,081       | 85,519            | 89,600     | 500             | N/A      | 500        | 90,100 |

Weapons Activities / Stockpile Research, Technology, and Engineering /

24-D-513 Z-Pinch Experimental Underground System

(ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS

FY 2027 Congressional Justification



## 24-D-513-020: NDSE Laboratory and Support Infrastructure

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2026     | 42,200      | 116,661           | 158,861    | 4,700           | N/A      | 4,700      | 163,561 |
| FY 2027     | 48,385      | 89,976            | 138,361    | 4,700           | N/A      | 4,700      | 143,061 |

## 2. Project Scope and Justification

### Scope

The ZTBFI project includes the design, construction, and commissioning of the ZEUS Test Bed and systems to support dense plasma focus (DPF) diagnostics. This area will be used for Neutron Diagnosed Subcritical Experiments (NDSE). Also included are safety basis and implementation activities. The project underground scope includes an experimental room with two containment plugs, process control system, safety interlock system, diagnostic infrastructure, and ancillary systems (overhead handling systems, power, cooling, ventilation, and shielding).

24-D-513-010 includes providing new access drifts and inverts for the ZEUS DPF and Gamma Ray Detectors, secondary egress for the experiment area, a refuge station in the diagnostic drift, the Zero Point Operations Area (ZPOA) invert, and necessary critical procurements for infrastructure. While driven by the same mission in the ECSE subprogram, it is a subproject that can be designed and completed separately from the other subproject.

24-D-513-020 includes construction of new infrastructure for the NDSE ZPOA, construction of new utility infrastructure for power and chilled water, and support installation of neutron and other diagnostic equipment, including supporting equipment and rooms.

### Justification

The enhancements to the Principal Underground Laboratory for Subcritical Experimentation (PULSE) Complex included in this line item will provide the drifts and the supporting structures, systems, and components necessary for NDSE measurements to diagnose the subcritical hydrodynamic integrated weapons experiments using plutonium.

NNSA plans long-term investments supporting plutonium science at the NNSS. NNSS is the only site in the United States for experiments combining high explosives and plutonium, a core capability for NNSA's Stockpile Stewardship Program. Funds appropriated under this data sheet may be used for contracted support services to the Federal Program Manager and the Federal Project Director to conduct independent assessments of the planning and execution of this project and to conduct technical reviews of design and construction documents.

The ECSE program requirements include x-radiography capability (provided via the ASD/UCEP projects), and Neutron Diagnosed Subcritical Experiment (NDSE) measurement capabilities, which will be provided through the dense plasma focus system installed in the ZEUS Testbed.

The project will be conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. As allowed by DOE O 413.3B, a tailoring strategy will be employed.

**Weapons Activities / Stockpile Research, Technology, and Engineering /**

**24-D-513 Z-Pinch Experimental Underground System**

**(ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS**

**FY 2027 Congressional Justification**

### **Key Performance Parameters (KPPs)**

The KPPs represent the minimum acceptable performance that the project must achieve for approval of CD-4, *Project Completion*.

#### **24-D-513-010: NDSE Mining and Critical Procurements**

| <b>Performance Measures</b>                                                                                                                   | <b>Completion Criteria</b>                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Provide temporary ventilation and power sufficient to allow excavations in the new and extended drifts.                                       | Documented in the U1a Complex – ZEUS Test Bed Drift Demolition and Mining Plan (02141-RPT-015). |
| Provide a drift layout suitable for invert construction and permanent utility installation in support of the ZEUS NDSE System and Vessel Ops. | Documented in the U1a Complex – ZEUS Test Bed Drift Demolition and Mining Plan (02141-RPT-015). |
| Provide an invert suitable for installation of the ZEUS NDSE System and Vessel Ops.                                                           | Documented in the Program Requirements Document and the Project Execution Plan.                 |

#### **24-D-513-020: NDSE Laboratory and Support Infrastructure**

| <b>Performance Measures</b>                                                                                     | <b>Completion Criteria</b>                                                      |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Provide utilities and mechanical systems sufficient to support operation and maintenance of the NDSE systems.   | Documented in the Program Requirements Document and the Project Execution Plan. |
| Provide a structure and mechanical systems that meets requirements for conducting SCEs.                         | Documented in the Program Requirements Document and the Project Execution Plan. |
| Provide infrastructure that supports installation of a centralized control of operation system of the ZEUS DPF. | Documented in the Program Requirements Document and the Project Execution Plan. |
| Provide infrastructure that supports acquisition of experiment diagnostic data.                                 | Documented in the Program Requirements Document and the Project Execution Plan. |

### **3. Financial Schedule<sup>1</sup>**

#### **24-D-513: Total Project (\$K)**

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b> |
|-----------------------------------|--------------------------------------------------|--------------------|--------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |              |
| <b>Design</b>                     |                                                  |                    |              |
| Prior Years                       | 52,466                                           | 52,466             | 32,872       |
| FY 2025                           | -                                                | -                  | 14,770       |
| FY 2026                           | -                                                | -                  | 4,824        |

<sup>1</sup> FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting the planned Performance Baseline. As such, the FYNRP does not fund the project to the planned TPC.

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>        |
|----------------------------------|--------------------------------------------------|--------------------|---------------------|
| <b>Total Design</b>              | <b>52,466</b>                                    | <b>52,466</b>      | <b>52,466</b>       |
| <b>Construction</b>              |                                                  |                    |                     |
| Prior Years                      | 71,480                                           | 71,480             | 25,889              |
| FY 2025                          | -                                                | -                  | 16,090              |
| FY 2026                          | -                                                | -                  | 25,980              |
| FY 2027                          | 91,700                                           | 91,700             | 76,913              |
| FY 2028                          | -                                                | -                  | 18,308              |
| FY 2029                          | -                                                | -                  | -                   |
| <b>Total Construction</b>        | <b>163,180</b>                                   | <b>163,180</b>     | <b>163,180</b>      |
| <b>TEC</b>                       |                                                  |                    |                     |
| Prior Years                      | 123,946                                          | 123,946            | 58,761              |
| FY 2025                          | -                                                | -                  | 30,860              |
| FY 2026                          | -                                                | -                  | 30,804              |
| FY 2027                          | 91,700                                           | 91,700             | 76,913              |
| FY 2028                          | -                                                | -                  | 18,308              |
| FY 2029                          | -                                                | -                  | -                   |
| <b>Total TEC</b>                 | <b>215,646</b>                                   | <b>215,646</b>     | <b>215,646</b>      |
| <b>Other Project Costs (OPC)</b> |                                                  |                    |                     |
| Prior Years                      | 1,515                                            | 1,515              | 1,015               |
| FY 2025                          | -                                                | -                  | -                   |
| FY 2026                          | -                                                | -                  | -                   |
| FY 2027                          | -                                                | -                  | -                   |
| FY 2028                          | -                                                | -                  | 500                 |
| FY 2029                          | -                                                | -                  | -                   |
| <b>Total, OPC</b>                | <b>1,515</b>                                     | <b>1,515</b>       | <b>1,515</b>        |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                     |
| Prior Years                      | 125,461                                          | 125,461            | 59,776 <sup>1</sup> |
| FY 2025                          | -                                                | -                  | 30,860              |
| FY 2026                          | -                                                | -                  | 30,804              |
| FY 2027                          | 91,700                                           | 91,700             | 76,913              |
| FY 2028                          | -                                                | -                  | 18,808              |
| FY 2029                          | -                                                | -                  | -                   |
| <b>Total TPC</b>                 | <b>217,161</b>                                   | <b>217,161</b>     | <b>217,161</b>      |

<sup>1</sup> The actual costs represented here may not match the costs in the financial system because the project transitioned from a minor construction project to a line-item project in FY 2024.

**24-D-513-010: NDSE Mining and Critical Procurements (\$K)**

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| <b>Design</b>                     |                                                  |                    |               |
| Prior Years                       | 4,081                                            | 4,081              | 4,081         |
| <b>Total Design</b>               | <b>4,081</b>                                     | <b>4,081</b>       | <b>4,081</b>  |
| <b>Construction</b>               |                                                  |                    |               |
| Prior Years                       | 70,119                                           | 70,119             | 25,889        |
| FY 2025                           | -                                                | -                  | 16,090        |
| FY 2026                           | -                                                | -                  | 25,980        |
| FY 2027                           | 15,400                                           | 15,400             | 16,623        |
| FY 2028                           | -                                                | -                  | 937           |
| <b>Total Construction</b>         | <b>85,519</b>                                    | <b>85,519</b>      | <b>85,519</b> |
| <b>TEC</b>                        |                                                  |                    |               |
| Prior Years                       | 74,200                                           | 74,200             | 29,970        |
| FY 2025                           | -                                                | -                  | 16,090        |
| FY 2026                           | -                                                | -                  | 25,980        |
| FY 2027                           | 15,400                                           | 15,400             | 16,623        |
| FY 2028                           | -                                                | -                  | 937           |
| <b>Total TEC</b>                  | <b>89,600</b>                                    | <b>89,600</b>      | <b>89,600</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |               |
| Prior Years                       | 500                                              | 500                | -             |
| FY 2025                           | -                                                | -                  | -             |
| FY 2026                           | -                                                | -                  | -             |
| FY 2027                           | -                                                | -                  | -             |
| FY 2028                           | -                                                | -                  | 500           |
| <b>Total, OPC</b>                 | <b>500</b>                                       | <b>500</b>         | <b>500</b>    |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |               |
| Prior Years                       | 74,700                                           | 74,700             | 29,970        |
| FY 2025                           | -                                                | -                  | 16,090        |
| FY 2026                           | -                                                | -                  | 25,980        |
| FY 2027                           | 15,400                                           | 15,400             | 16,623        |
| FY 2028                           | -                                                | -                  | 1,437         |
| <b>Total TPC</b>                  | <b>90,100</b>                                    | <b>90,100</b>      | <b>90,100</b> |

Weapons Activities / Stockpile Research, Technology, and Engineering /

24-D-513 Z-Pinch Experimental Underground System

(ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS

FY 2027 Congressional Justification

**24-D-513-020: NDSE Laboratory and Support Infrastructure (\$K)**

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|-----------------------------------|----------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |                |
| <b>Design</b>                     |                                              |                    |                |
| Prior Years                       | 48,385                                       | 48,385             | 28,791         |
| FY 2025                           | -                                            | -                  | 14,770         |
| FY 2026                           | -                                            | -                  | 4,824          |
| <b>Total Design</b>               | <b>48,385</b>                                | <b>48,385</b>      | <b>48,385</b>  |
| <b>Construction</b>               |                                              |                    |                |
| Prior Years                       | 1,361                                        | 1,361              | -              |
| FY 2025                           | -                                            | -                  | -              |
| FY 2026                           | -                                            | -                  | -              |
| FY 2027                           | 76,300                                       | 76,300             | 60,290         |
| FY 2028                           | -                                            | -                  | 17,371         |
| FY 2029                           | -                                            | -                  | -              |
| <b>Total Construction</b>         | <b>77,661</b>                                | <b>77,661</b>      | <b>77,661</b>  |
| <b>TEC</b>                        |                                              |                    |                |
| Prior Years                       | 49,746                                       | 49,746             | 28,791         |
| FY 2025                           | -                                            | -                  | 14,770         |
| FY 2026                           | -                                            | -                  | 4,824          |
| FY 2027                           | 76,300                                       | 76,300             | 60,290         |
| FY 2028                           | -                                            | -                  | 17,371         |
| FY 2029                           | -                                            | -                  | -              |
| Outyears                          |                                              |                    |                |
| <b>Total TEC</b>                  | <b>126,046</b>                               | <b>126,046</b>     | <b>126,046</b> |
| <b>Other Project Costs (OPC)</b>  |                                              |                    |                |
| Prior Years                       | 1,015                                        | 1,015              | 1,015          |
| FY 2025                           | -                                            | -                  | -              |
| FY 2026                           | -                                            | -                  | -              |
| FY 2027                           | -                                            | -                  | -              |
| FY 2028                           | -                                            | -                  | -              |
| FY 2029                           | -                                            | -                  | -              |
| Outyears                          |                                              |                    |                |
| <b>Total, OPC</b>                 | <b>1,015</b>                                 | <b>1,015</b>       | <b>1,015</b>   |
| <b>Total Project Costs (TPC)</b>  |                                              |                    |                |
| Prior Years                       | 50,761                                       | 50,761             | 29,806         |
| FY 2025                           | -                                            | -                  | 14,770         |
| FY 2026                           | -                                            | -                  | 4,824          |
| FY 2027                           | 76,300                                       | 76,300             | 60,290         |
| FY 2028                           | -                                            | -                  | 17,731         |
| FY 2029                           | -                                            | -                  | -              |
| <b>Total TPC</b>                  | <b>127,061</b>                               | <b>127,061</b>     | <b>127,061</b> |

Weapons Activities / Stockpile Research, Technology, and Engineering /

24-D-513 Z-Pinch Experimental Underground System

(ZEUS) Test Bed Facilities Improvement (ZTBFI), NNSS

FY 2027 Congressional Justification

#### 4. Details of Project Cost Estimate

##### 24-D-513: Total Project (\$K)

|                                    |                               | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|-------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                               |                              |                               |                                   |
| <b>Design</b>                      |                               |                              |                               |                                   |
|                                    | Design                        | 50,216                       | 42,531                        | N/A                               |
|                                    | Federal Design Review Support | 1,250                        | 1,250                         | N/A                               |
|                                    | Contingency                   | 1,000                        | 2,500                         | N/A                               |
| <b>Total Design</b>                |                               | <b>52,466</b>                | <b>46,281</b>                 | <b>N/A</b>                        |
| <b>Construction</b>                |                               |                              |                               |                                   |
|                                    | Site Work                     | -                            | -                             | N/A                               |
|                                    | Equipment                     | -                            | -                             | N/A                               |
|                                    | Construction                  | 150,145                      | 153,045                       | N/A                               |
|                                    | Federal Support               | 7,250                        | 5,250                         | N/A                               |
|                                    | Contingency                   | 18,100                       | 23,385                        | N/A                               |
| <b>Total Construction</b>          |                               | <b>175,495</b>               | <b>181,680</b>                | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                               | <b>227,961</b>               | <b>227,961</b>                | <b>N/A</b>                        |
| <i>Contingency, TEC</i>            |                               | <i>19,100</i>                | <i>25,885</i>                 | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>   |                               |                              |                               |                                   |
| OPC except D&D                     |                               |                              |                               |                                   |
|                                    | Conceptual Planning           | 90                           | 90                            | N/A                               |
|                                    | Conceptual Design             | 925                          | 925                           | N/A                               |
|                                    | Other OPC Costs               | 1,200                        | 1,200                         | N/A                               |
|                                    | Start-up                      | 2,985                        | 2,985                         | N/A                               |
|                                    | Equipment Move                | -                            | -                             | N/A                               |
|                                    | Contingency                   | -                            | -                             | N/A                               |
| <b>Total OPC</b>                   |                               | <b>5,200</b>                 | <b>5,200</b>                  | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                               | <i>-</i>                     | <i>-</i>                      | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                               | <b>233,161</b>               | <b>233,161</b>                | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                               | <b>19,100</b>                | <b>25,885</b>                 | <b>N/A</b>                        |

**24-D-513-010: NDSE Mining and Critical Procurements (\$K)**

|                                    |                               | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|-------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                               |                                       |                                        |                                            |
| <b>Design</b>                      |                               |                                       |                                        |                                            |
|                                    | Design                        | 3,831                                 | 3,831                                  | 3,831                                      |
|                                    | Federal Design Review Support | 250                                   | 250                                    | 250                                        |
|                                    | Contingency                   | -                                     | -                                      | -                                          |
| <b>Total Design</b>                |                               | <b>4,081</b>                          | <b>4,081</b>                           | <b>4,081</b>                               |
| <b>Construction</b>                |                               |                                       |                                        |                                            |
|                                    | Site Work                     | -                                     | -                                      | -                                          |
|                                    | Equipment                     | -                                     | -                                      | -                                          |
|                                    | Construction                  | 78,769                                | 56,924                                 | 34,153                                     |
|                                    | Federal Support               | 1,750                                 | 1,250                                  | 1,250                                      |
|                                    | Contingency                   | 5,000                                 | 6,845                                  | 6,616                                      |
| <b>Total Construction</b>          |                               | <b>85,519</b>                         | <b>65,019</b>                          | <b>42,019</b>                              |
| <b>Total Estimated Cost (TEC)</b>  |                               | <b>89,600</b>                         | <b>69,100</b>                          | <b>46,100</b>                              |
| <i>Contingency, TEC</i>            |                               | <i>5,000</i>                          | <i>6,845</i>                           | <i>6,616</i>                               |
| <b>Other Project Costs (OPC)</b>   |                               |                                       |                                        |                                            |
| OPC except D&D                     |                               |                                       |                                        |                                            |
|                                    | Conceptual Planning           | -                                     | -                                      | -                                          |
|                                    | Conceptual Design             | -                                     | -                                      | -                                          |
|                                    | Other OPC Costs               | 500                                   | 500                                    | 500                                        |
|                                    | Start-up                      | -                                     | -                                      | -                                          |
|                                    | Equipment Move                | -                                     | -                                      | -                                          |
|                                    | Contingency                   | -                                     | -                                      | -                                          |
| <b>Total OPC</b>                   |                               | <b>500</b>                            | <b>500</b>                             | <b>500</b>                                 |
| <i>Contingency, OPC</i>            |                               | <i>-</i>                              | <i>-</i>                               | <i>-</i>                                   |
| <b>Total Project Cost</b>          |                               | <b>90,100</b>                         | <b>69,600</b>                          | <b>46,600</b>                              |
| <b>Total Contingency (TEC+OPC)</b> |                               | <b>5,000</b>                          | <b>6,845</b>                           | <b>6,616</b>                               |

**24-D-513-020: NDSE Laboratory and Support Infrastructure (\$K)**

|                                    |                       | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|-----------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                       |                                       |                                        |                                            |
| <b>Design</b>                      |                       |                                       |                                        |                                            |
|                                    | Design                | 46,385                                | 38,700                                 | N/A                                        |
|                                    | Federal Design Review | 1,000                                 | 1,000                                  | N/A                                        |
|                                    | Support               |                                       |                                        |                                            |
|                                    | Contingency           | 1,000                                 | 2,500                                  | N/A                                        |
| <b>Total Design</b>                |                       | <b>48,385</b>                         | <b>42,200</b>                          | <b>N/A</b>                                 |
| <b>Construction</b>                |                       |                                       |                                        |                                            |
|                                    | Site Work             | -                                     | -                                      | N/A                                        |
|                                    | Equipment             | -                                     | -                                      | N/A                                        |
|                                    | Construction          | 71,376                                | 96,121                                 | N/A                                        |
|                                    | Federal Support       | 5,500                                 | 4,000                                  | N/A                                        |
|                                    | Contingency           | 13,100                                | 16,540                                 | N/A                                        |
| <b>Total Construction</b>          |                       | <b>89,976</b>                         | <b>116,661</b>                         | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                       | <b>138,361</b>                        | <b>158,861</b>                         | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                       | <i>14,100</i>                         | <i>19,040</i>                          | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                       |                                       |                                        |                                            |
| OPC except D&D                     |                       |                                       |                                        |                                            |
|                                    | Conceptual Planning   | 90                                    | 90                                     | N/A                                        |
|                                    | Conceptual Design     | 925                                   | 925                                    | N/A                                        |
|                                    | Other OPC Costs       | 700                                   | 700                                    | N/A                                        |
|                                    | Start-up              | 2,985                                 | 2,985                                  | N/A                                        |
|                                    | Equipment Move        | -                                     | -                                      | N/A                                        |
|                                    | Contingency           | -                                     | -                                      | N/A                                        |
| <b>Total OPC</b>                   |                       | <b>4,700</b>                          | <b>4,700</b>                           | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                       | <i>-</i>                              | <i>-</i>                               | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                       | <b>143,061</b>                        | <b>163,561</b>                         | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                       | <b>14,100</b>                         | <b>19,040</b>                          | <b>N/A</b>                                 |



## 5. Schedule of Appropriations Requests

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears | Total   |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| FY 2024      | TEC  | 122,946     | -       | -       | -       | -       | -       | -       | -       | -        | 122,946 |
|              | OPC  | 2,515       | -       | -       | -       | -       | -       | -       | -       | -        | 2,515   |
|              | TPC  | 125,461     | -       | -       | -       | -       | -       | -       | -       | -        | 125,461 |
| FY 2026      | TEC  | 123,946     | -       | 72,000  | N/A     | N/A     | N/A     | N/A     | N/A     | 32,015   | 227,961 |
|              | OPC  | 1,515       | -       | -       | N/A     | N/A     | N/A     | N/A     | N/A     | 3,685    | 5,200   |
|              | TPC  | 125,461     | -       | 72,000  | N/A     | N/A     | N/A     | N/A     | N/A     | 35,700   | 233,161 |
| FY 2027      | TEC  | 123,946     | -       | -       | 91,700  | -       | -       | -       | -       | -        | 215,646 |
|              | OPC  | 1,515       | -       | -       | -       | -       | -       | -       | -       | -        | 1,515   |
|              | TPC  | 125,461     | -       | -       | 91,700  | -       | -       | -       | -       | -        | 217,161 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                    |            |
|----------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy         | 4Q FY 2029 |
| Expected Useful Life                               | 30         |
| Expected Future Start of D&D of this capital asset | 1Q FY 2060 |

### Related Funding Requirements (\$M)

| Funding Requirements       | Annual Costs*           |                        | Life Cycle Costs        |                        |
|----------------------------|-------------------------|------------------------|-------------------------|------------------------|
| Estimate Totals            | Previous Total Estimate | Current Total Estimate | Previous Total Estimate | Current Total Estimate |
| Operations and Maintenance | 6.3                     | 6.3                    | 189                     | 276**                  |

\* Annual Costs based on FY2029 dollars

\*\* Lifecycle cost updated to include 2.48% per year escalation (NAP 413.6, Appendix APB-24 (nuclear rates for NNSS))

## 7. D&D Information

Deactivation and Decommissioning (D&D) is not included in the scope of this project because the new area being constructed in this project is not replacing existing facilities.

## 8. Acquisition Approach

The project is being managed by the NNSS Management and Operating (M&O) contractor because of operations within the PULSE Complex, which is an underground facility with limited access. Design and construction of the underground modifications will be performed by the NNSS M&O contractor through the M&O cost-plus contract. The project is intending to subcontract out a significant part of the work in Subproject 020 (with the exception of some structural type work), primarily utility installation. The intent is to have the subcontractor provide the labor rather than relying on resource sharing of local labor with the other projects, which can cause delays due to availability. Elimination of the fire extinguishing system and the risks that come with design/installation of such a system will also reduce direct costs and risk profile amounts.

**17-D-640 U1a Complex Enhancements Project (UCEP)  
Nevada National Security Sites (NNSS), Mercury, Nevada  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The FY 2027 Request for the U1a Complex Enhancements Project (UCEP) is \$154,142,000 for Total Estimated Cost (TEC) activities. The FY 2027 request will complete construction activities and begin startup, testing, and commissioning. The most recent Critical Decision (CD) for UCEP was the approval of Baseline Change Proposal (BCP) 01 for Subproject 17-D-640-020 on January 19, 2025, with a TPC of \$830,000,000 and CD-4, *Approve Start of Operations or Project Completion*, of the first quarter of FY 2030.

The TPC for the overall project is \$875,994,292 and the final cost for Subproject 17-D-640-010 was \$45,994,292.

The following work was successfully completed by the project in FY 2025. The installation of the utilities (power cables, chilled water lines, and ventilation) was completed in the Borehole. The project completed the installation of 3,880 feet of chilled water piping and the placement of the four-foot-thick concrete floors in the accelerator hall and the test area. In addition, the project transitioned to a new fire protection strategy.

Other Projects Costs (OPC) are funded out of the Enhanced Capabilities for Subcritical Experiments subprogram under Stockpile Research, Technology, and Engineering.

A Federal Project Director has been assigned to this project.

**Significant Changes:**

The elimination of the Fire Extinguishing System and the implementation of the new fire protection strategy resulted in cost avoidance of \$20,000,000. While the TPC has not been reduced, the total funding request has been reduced by this amount. As a result, the revised baseline is not going to be fully funded. The FY 2026 Budget Authority includes \$53,000K from Public Law 119–21.

## **Critical Milestone History**

### **17-D-640: Total Project**

Fiscal Quarter or Date

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2017            | 9/25/2014   | 8/13/2015                         | 1QFY2017    | 1QFY2019    | 2QFY2019                     | 3QFY2019    | N/A                     | 3QFY2022    |
| FY 2018            | 9/25/2014   | 8/13/2015                         | 3QFY2017    | 4QFY2019    | 2QFY2019                     | 4QFY2019    | N/A                     | 2QFY2023    |
| FY 2019            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 4QFY2019    | 2QFY2019                     | 4QFY2019    | N/A                     | 2QFY2023    |
| FY 2020            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 2QFY2020    | 4QFY2019                     | 2QFY2020    | N/A                     | 4QFY2025    |
| FY 2021            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 1QFY2021    | 3QFY2020                     | 1QFY2021    | N/A                     | 4QFY2025    |
| FY 2022            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 4QFY2021    | 2QFY2021                     | 4QFY2021    | N/A                     | 1QFY2026    |
| FY 2023            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 3QFY2022    | 3/11/2022                    | 3QFY2022    | N/A                     | 1QFY2027    |
| FY 2024            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 06/23/2022  | 3/11/2022                    | 06/23/2022  | N/A                     | 1QFY2027    |
| FY 2025            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 06/23/2022  | 3/11/2022                    | 06/23/2022  | N/A                     | 4QFY2028    |
| FY 2026            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 06/23/2022  | 3/11/2022                    | 06/23/2022  | N/A                     | 1QFY2030    |
| FY 2027            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 06/23/2022  | 3/11/2022                    | 06/23/2022  | N/A                     | 1QFY2030    |

### **17-D-640-010: Enhanced Capabilities for Subcritical Experiments (ECSE) Access and Life Safety Infrastructure**

Fiscal Quarter or Date

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>D&amp;D Complete</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------------------|-------------|
| FY 2017            | 9/25/2014   | 8/13/2015                         | 1QFY2017    | 3QFY2017    | 4QFY2017                     | 4QFY2017    | N/A                     | 2QFY2019    |
| FY 2018            | 9/25/2014   | 8/13/2015                         | 3QFY2017    | 2QFY2018    | 1QFY2018                     | 2QFY2018    | N/A                     | 3QFY2020    |
| FY 2019            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 2QFY2019    | 3QFY2018                     | 2QFY2019    | N/A                     | 2QFY2021    |
| FY 2020            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 2QFY2019    | 7/11/2018                    | 2QFY2019    | N/A                     | 4QFY2023    |
| FY 2021            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 03/27/2019  | 7/11/2018                    | 03/27/2019  | N/A                     | 4QFY2023    |
| FY 2022            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 03/27/2019  | 7/11/2018                    | 03/27/2019  | N/A                     | 3QFY2022    |
| FY 2023            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 03/27/2019  | 7/11/2018                    | 03/27/2019  | N/A                     | 4QFY2023    |
| FY 2024            | 9/25/2014   | 8/13/2015                         | 08/09/2017  | 03/27/2019  | 7/11/2018                    | 03/27/2019  | N/A                     | 06/30/2022  |

**17-D-640-020: ECSE Laboratory and Support Infrastructure**

Fiscal Quarter or Date

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|------------|------------|-----------------------|------------|--------------|----------|
| FY 2017     | 9/25/2014 | 8/13/2015                  | 1QFY2017   | 1QFY2019   | 2QFY2019              | 3QFY2019   | N/A          | 3QFY2022 |
| FY 2018     | 9/25/2014 | 8/13/2015                  | 3QFY2017   | 4QFY2019   | 2QFY2019              | 4QFY2019   | N/A          | 2QFY2023 |
| FY 2019     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 4QFY2019   | 2QFY2019              | 4QFY2019   | N/A          | 2QFY2023 |
| FY 2020     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 2QFY2020   | 4QFY2019              | 2QFY2020   | N/A          | 4QFY2025 |
| FY 2021     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 1QFY2021   | 3QFY2020              | 1QFY2021   | N/A          | 4QFY2025 |
| FY 2022     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 4QFY2021   | 2QFY2021              | 4QFY2021   | N/A          | 1QFY2026 |
| FY 2023     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 3QFY2022   | 3/11/2022             | 3QFY2022   | N/A          | 1QFY2027 |
| FY 2024     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 06/23/2022 | 3/11/2022             | 06/23/2022 | N/A          | 1QFY2027 |
| FY 2025     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 06/23/2022 | 3/11/2022             | 06/23/2022 | N/A          | 4QFY2028 |
| FY 2026     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 06/23/2022 | 3/11/2022             | 06/23/2022 | N/A          | 1QFY2030 |
| FY 2027     | 9/25/2014 | 8/13/2015                  | 08/09/2017 | 06/23/2022 | 3/11/2022             | 06/23/2022 | N/A          | 1QFY2030 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)**CD-1** – Approve Alternative Selection and Cost Range**CD-2** – Approve Performance Baseline**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)**CD-3A** – Approve Site Preparation**CD-3B** – Approve Site Preparation**CD-3** – Approve Start of Construction/Execution**D&D Complete** – Completion of D&D work**CD-4** – Approve Start of Operations or Project Closeout

Separate documentation will be submitted for combined CD-2/3 for each subproject

**17-D-640-020: ECSE Laboratory and Support Infrastructure**

Fiscal Quarter or Date

| Fiscal Year | Performance Baseline Validation | CD-3A    | CD-3B     |
|-------------|---------------------------------|----------|-----------|
| FY 2021     | 1QFY2021                        | 3QFY2020 | N/A       |
| FY 2022     | 4QFY2021                        | 3QFY2021 | N/A       |
| FY 2023     | 6/23/2022                       | 7/7/2021 | 8/30/2021 |

**CD-3A** – Site Preparation**CD-3B** – Site Preparation

**Project Cost History (\$K)****17-D-640: Total Project**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|---------|
| FY 2017     | 14,200      | 137,300           | 151,500    | 7,109           | N/A      | 7,109      | 158,609 |
| FY 2018     | 14,200      | 137,300           | 151,500    | 7,109           | N/A      | 7,109      | 158,609 |
| FY 2019     | 19,900      | 131,600           | 151,500    | 7,109           | N/A      | 7,109      | 158,609 |
| FY 2020     | 14,856      | 148,144           | 163,000    | 11,809          | N/A      | 11,809     | 174,809 |
| FY 2021     | 38,916      | 468,284           | 507,200    | 19,309          | N/A      | 19,309     | 526,509 |
| FY 2022     | 70,756      | 436,444           | 507,200    | 19,309          | N/A      | 19,309     | 526,509 |
| FY 2023     | 106,863     | 460,337           | 567,200    | 9,672           | N/A      | 9,672      | 576,872 |
| FY 2024     | 104,027     | 496,756           | 600,783    | 9,372           | N/A      | 9,372      | 610,155 |
| FY 2025     | 104,027     | 646,956           | 750,983    | 10,577          | N/A      | 10,577     | 761,560 |
| FY 2026     | 105,062     | 760,335           | 865,397    | 10,597          | N/A      | 10,597     | 875,994 |
| FY 2027     | 105,062     | 740,335           | 845,397    | 10,597          | N/A      | 10,597     | 855,994 |

**17-D-640-010: ECSE Access and Life Safety Infrastructure**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Except D&D | OPC, D&D | OPC, Total | TPC    |
|-------------|-------------|-------------------|------------|-----------------|----------|------------|--------|
| FY 2017     | 2,700       | 23,940            | 26,640     | 981             | N/A      | 981        | 27,621 |
| FY 2018     | 2,700       | 23,940            | 26,640     | 981             | N/A      | 981        | 27,621 |
| FY 2019     | 8,400       | 38,240            | 46,640     | 981             | N/A      | 981        | 47,621 |
| FY 2020     | 3,356       | 44,784            | 48,140     | 1,981           | N/A      | 1,981      | 50,121 |
| FY 2021     | 3,356       | 44,784            | 48,140     | 1,981           | N/A      | 1,981      | 50,121 |
| FY 2022     | 3,356       | 46,074            | 49,430     | 1,398           | N/A      | 1,398      | 50,828 |
| FY 2023     | 3,356       | 45,374            | 48,730     | 1,391           | N/A      | 1,391      | 50,121 |
| FY 2024     | 3,356       | 45,374            | 48,730     | 1,391           | N/A      | 1,391      | 50,121 |
| FY 2025     | 3,356       | 41,352            | 44,708     | 1,286           | N/A      | 1,286      | 45,994 |

## 17-D-640-020: ECSE Laboratory and Support Infrastructure

| Fiscal Year | TEC,<br>Design | TEC,<br>Construction | TEC,<br>Total | OPC,<br>Except<br>D&D | OPC,<br>D&D | OPC,<br>Total | TPC     |
|-------------|----------------|----------------------|---------------|-----------------------|-------------|---------------|---------|
| FY 2017     | 11,500         | 113,360              | 124,860       | 6,128                 | N/A         | 6,128         | 130,988 |
| FY 2018     | 11,500         | 113,360              | 124,860       | 6,128                 | N/A         | 6,128         | 130,988 |
| FY 2019     | 11,500         | 93,360               | 104,860       | 6,128                 | N/A         | 6,128         | 110,988 |
| FY 2020     | 11,500         | 103,360              | 114,860       | 9,828                 | N/A         | 9,828         | 124,688 |
| FY 2021     | 35,560         | 423,500              | 459,060       | 17,328                | N/A         | 17,328        | 476,388 |
| FY 2022     | 67,400         | 390,370              | 457,770       | 17,911                | N/A         | 17,911        | 475,681 |
| FY 2023     | 103,507        | 414,963              | 518,470       | 8,281                 | N/A         | 8,281         | 526,751 |
| FY 2024     | 100,671        | 451,382              | 552,053       | 7,981                 | N/A         | 7,981         | 560,034 |
| FY 2025     | 100,671        | 605,604              | 706,275       | 9,291                 | N/A         | 9,291         | 715,566 |
| FY 2026     | 101,706        | 718,983              | 820,689       | 9,311                 | N/A         | 9,311         | 830,000 |
| FY 2027     | 101,706        | 698,983              | 820,689       | 9,311                 | N/A         | 9,311         | 830,000 |

## 2. Project Scope and Justification

### Scope

U1a Complex Enhancements Project (UCEP) will perform mining and provide the supporting structures, systems, and components necessary to deploy the large Major Items of Equipment (MIE) diagnostic systems and experiments. The existing Principal Underground Laboratory for Subcritical Experimentation (PULSE, formerly U1a Complex) orthogonal U1a.100 and U1a.104 drifts will be used to minimize the need for new mining.

17-D-640-010 included the design, mining, fabrication, construction, installation, and commissioning of the underground areas and systems in PULSE to provide accessibility, a refuge station, adequate ventilation, and construction power for the ensuing subproject 17-D-640-020. This subproject was required to support any significant construction activity in the eastern portion of PULSE.

17-D-640-020 includes the design, mining, fabrication, construction, installation, and commissioning of the Enhanced Capabilities for Subcritical Experiments (ECSE) Area and systems to provide MIE diagnostic/detector alcove drifts and mechanical equipment drifts. Also included are safety basis and readiness activities. The project underground scope includes an experimental room with containment plugs for experiment execution, process control system, safety interlock system, diagnostic clean rooms and diagnostic infrastructure, and ancillary systems (overhead handling systems, power, cooling, ventilation, process water and oil, instrument air, spill mitigation, and shielding). This subproject includes a CD-3A and CD-3B for site preparation. The CD-3A scope consisted of site preparation underground and the drilling of a borehole to run utilities and communications from the surface to the new experiment area and was completed. The CD-3B scope consisted of site preparation above ground for the lay down yard/construction trailers and relocation of existing facility infrastructure and was completed.

### Justification

DOE Order 413.3B Critical Decision, *CD-0 Approve Mission Need*, was approved on September 25, 2014, for the “ECSE at the NNSS, PULSE.” On November 4, 2015, the intersection of the U1a.100 and U1a.104 Drifts within the PULSE facility at the NNSS was determined to be the only viable location for ECSE. The enhancements to PULSE included in this line item will provide the drifts and the supporting structures, systems,

and components necessary for the deployment of the MIEs to diagnose the subcritical hydrodynamic integrated weapons experiments using plutonium.

NNSA plans long-term investments supporting plutonium science at the NNSS. NNSS is the only site in the United States for experiments combining high explosives and plutonium, a core capability for NNSA's Stockpile Stewardship Program.

Funds appropriated under this data sheet may be used for contracted support services to the Federal Program Manager and the Federal Project Director to conduct independent assessments of the planning and execution of this project required by DOE O 413.3B and to conduct technical reviews of design and construction documents. All costs associated with the conduct of independent reviews, including travel for Federal staff of the DOE Office of Project Management, is funded by this project.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. As allowed by DOE O 413.3B, work will be phased to improve overall efficiency.

### **Key Performance Parameters (KPPs)**

The KPPs represent the minimum acceptable performance that the project must achieve.

| <b>Performance Measure</b>                                                                                                                                   | <b>Completion Criteria</b>                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 17-D-640-010: Ventilation and power sufficient to allow concurrent excavation for two headings east of the U1a.01 Drift                                      | Documented in UCEP Subproject 010 Ventilation Plan; UCEP Electrical Load Calculation; Temporary Power Plan                           |
| 17-D-640-010: An invert suitable for transport of Advanced Sources and Detectors (ASD) accelerator equipment between the U1h shaft station and U1a.104 Drift | Documented in Building Code Requirements for Structural Concrete; Invert Plan; Invert Sections; Cast-In-Place Concrete Specification |
| 17-D-640-010: Direct access from the U1a.01 Drift to the U1a.104 Drift for equipment and personnel                                                           | Documented in General Arrangement Plan                                                                                               |
| 17-D-640-010: Multiple egress pathways from the U1a.100 Drift and U1a.104 Drift to the U1a.01 Drift                                                          | Documented in General Arrangement Plan                                                                                               |
| 17-D-640-010: Operational Refuge Station east of the U1a.01 Drift to accommodate the number of individuals anticipated to normally work in that area         | Documented in NNSS Underground Facility Safety and Health Program Description; U1a.102D Drift Refuge Shelter Equipment               |
| 17-D-640-020: An invert suitable for installation of the ASD accelerator in the U1a.104 Drift                                                                | Documented in the revised Program Requirements Document and the revised Project Execution Plan                                       |
| 17-D-640-020: Utilities and mechanical systems sufficient to support operation and maintenance of the ASD accelerator in the U1a.104 Drift                   | Documented in the revised Program Requirements Document and the revised Project Execution Plan                                       |
| 17-D-640-020: A zero room structure and mechanical systems that meet requirements                                                                            | Documented in the revised Program Requirements Document and the revised Project Execution Plan                                       |

| Performance Measure                                                                                                                         | Completion Criteria                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| for conducting subcritical experiments in the U1a.100 Drift                                                                                 |                                                                                                |
| 17-D-640-020: Infrastructure that supports installation of a centralized control of operation system of the ASD accelerator and NDSE source | Documented in the revised Program Requirements Document and the revised Project Execution Plan |
| 17-D-640-020: Infrastructure that supports acquisition of experiment diagnostic data                                                        | Documented in the revised Program Requirements Document and the revised Project Execution Plan |

### 3. Financial Schedule

#### 17-D-640: Total Project (\$K)

|                                       | Budget<br>Authority<br>(Appropriations) | Obligations         | Costs          |
|---------------------------------------|-----------------------------------------|---------------------|----------------|
| <b>Total Estimated Cost<br/>(TEC)</b> |                                         |                     |                |
| Design                                |                                         |                     |                |
| Prior years                           | 105,062                                 | 105,062             | 105,062        |
| <b>Total, Design</b>                  | <b>105,062</b>                          | <b>105,062</b>      | <b>105,062</b> |
| Construction                          |                                         |                     |                |
| Prior years                           | 460,110 <sup>1</sup>                    | 460,110             | 310,336        |
| FY 2025                               | 73,083                                  | 73,083              | 137,158        |
| FY 2026                               | 53,000                                  | 53,000              | 113,602        |
| FY 2027                               | 154,142                                 | 154,142             | 135,239        |
| FY 2028                               | -                                       | -                   | 25,000         |
| FY 2029                               | -                                       | -                   | 15,000         |
| FY 2030                               | -                                       | -                   | 4,000          |
| <b>Total,<br/>Construction</b>        | <b>740,335</b>                          | <b>740,335</b>      | <b>740,335</b> |
| <b>Total Estimated<br/>Costs</b>      |                                         |                     |                |
| Prior years                           | 565,172                                 | 565,172             | 415,398        |
| FY 2025                               | 73,083                                  | 73,083              | 137,158        |
| FY 2026                               | 53,000 <sup>2</sup>                     | 53,000 <sup>3</sup> | 113,602        |
| FY 2027                               | 154,142                                 | 154,142             | 135,239        |
| FY 2028                               | -                                       | -                   | 25,000         |
| FY 2029                               | -                                       | -                   | 15,000         |

<sup>1</sup> FY2024 budget included an internal reprogramming of \$1.272 million of unearned fee.

<sup>2</sup> The FY 2026 Budget Authority includes \$53,000K from Public Law 119–21.

<sup>3</sup> The FY 2026 Obligations include \$53,000K from Public Law 119–21.



|                                      | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|--------------------------------------|--------------------------------------------------|--------------------|----------------|
| FY 2030                              | -                                                | -                  | 4,000          |
| <b>Total,<br/>TEC</b>                | <b>845,397</b>                                   | <b>845,397</b>     | <b>845,397</b> |
| <b>Other Project Costs<br/>(OPC)</b> |                                                  |                    |                |
| OPC, except<br>D&D                   |                                                  |                    |                |
| Prior<br>years                       | 6,114                                            | 6,114              | 6,114          |
| FY 2025                              | -                                                | -                  | -              |
| FY 2026                              | 3,878                                            | 3,878              | 500            |
| FY 2027                              | 605                                              | 605                | 1,000          |
| FY 2028                              | -                                                | -                  | 2,000          |
| FY 2029                              | -                                                | -                  | 943            |
| FY 2030                              | -                                                | -                  | 40             |
| <b>Total OPC</b>                     | <b>10,597</b>                                    | <b>10,597</b>      | <b>10,597</b>  |
| <b>Total Project Costs (TPC)</b>     |                                                  |                    |                |
| Prior<br>years                       | 571,286                                          | 571,286            | 421,512        |
| FY 2025                              | 73,083                                           | 73,083             | 137,158        |
| FY 2026                              | 56,878                                           | 56,878             | 114,102        |
| FY 2027                              | 154,747                                          | 154,747            | 136,239        |
| FY 2028                              | -                                                | -                  | 27,000         |
| FY 2029                              | -                                                | -                  | 15,943         |
| FY 2030                              | -                                                | -                  | 4,040          |
| <b>Grand Total</b>                   | <b>855,994</b>                                   | <b>855,994</b>     | <b>855,994</b> |

**17-D-640-010: ECSE Access and Life Safety Infrastructure (\$K)**

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| Design                            |                                                  |                    |               |
| Prior years                       | 3,356                                            | 3,356              | 3,356         |
| <b>Total, Design</b>              | <b>3,356</b>                                     | <b>3,356</b>       | <b>3,356</b>  |
| Construction                      |                                                  |                    |               |
| Prior years                       | 41,352                                           | 41,352             | 41,352        |
| <b>Total, Construction</b>        | <b>41,352</b>                                    | <b>41,352</b>      | <b>41,352</b> |
| Total Estimated Costs             |                                                  |                    |               |
| Prior years                       | 44,708                                           | 44,708             | 44,708        |
| <b>Total, TEC</b>                 | <b>44,708</b>                                    | <b>44,708</b>      | <b>44,708</b> |
| <b>Other Project Costs (OPC)</b>  |                                                  |                    |               |
| OPC, except D&D                   |                                                  |                    |               |
| Prior years                       | 1,286                                            | 1,286              | 1,286         |
| <b>Total OPC</b>                  | <b>1,286</b>                                     | <b>1,286</b>       | <b>1,286</b>  |
| <b>Total Project Costs (TPC)</b>  |                                                  |                    |               |
| Prior years                       | 45,994                                           | 45,994             | 45,994        |
| <b>Grand Total</b>                | <b>45,994</b>                                    | <b>45,994</b>      | <b>45,994</b> |

**17-D-640-020: ECSE Laboratory and Support Infrastructure (\$K)**

|                                   |             | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b>  | <b>Costs</b>   |
|-----------------------------------|-------------|----------------------------------------------|---------------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |             |                                              |                     |                |
| <b>Design</b>                     |             |                                              |                     |                |
|                                   | Prior years | 101,706                                      | 101,706             | 101,706        |
| <b>Total Design</b>               |             | <b>101,706</b>                               | <b>101,706</b>      | <b>101,706</b> |
| <b>Construction</b>               |             |                                              |                     |                |
|                                   | Prior years | 418,758                                      | 418,758             | 268,984        |
|                                   | FY 2025     | 73,083                                       | 73,083              | 137,158        |
|                                   | FY 2026     | 53,000                                       | 53,000              | 113,602        |
|                                   | FY 2027     | 154,142                                      | 154,142             | 135,239        |
|                                   | FY 2028     | -                                            | -                   | 25,000         |
|                                   | FY 2029     | -                                            | -                   | 15,000         |
|                                   | FY 2030     | -                                            | -                   | 4,000          |
| <b>Total Construction</b>         |             | <b>698,983</b>                               | <b>698,983</b>      | <b>698,983</b> |
| <b>TEC</b>                        |             |                                              |                     |                |
|                                   | Prior years | 520,464                                      | 520,464             | 370,690        |
|                                   | FY 2025     | 73,083                                       | 73,083              | 137,158        |
|                                   | FY 2026     | 53,000 <sup>1</sup>                          | 53,000 <sup>2</sup> | 113,602        |
|                                   | FY 2027     | 154,142                                      | 154,142             | 135,239        |
|                                   | FY 2028     | -                                            | -                   | 25,000         |
|                                   | FY 2029     | -                                            | -                   | 15,000         |
|                                   | FY 2030     | -                                            | -                   | 4,000          |
| <b>Total TEC</b>                  |             | <b>800,689</b>                               | <b>800,689</b>      | <b>800,689</b> |
| <b>Other Project Costs (OPC)</b>  |             |                                              |                     |                |
|                                   | Prior years | 4,828                                        | 4,828               | 4,828          |
|                                   | FY 2025     | -                                            | -                   | -              |
|                                   | FY 2026     | 3,878                                        | 3,878               | 500            |
|                                   | FY 2027     | 605                                          | 605                 | 1,000          |
|                                   | FY 2028     | -                                            | -                   | 2,000          |
|                                   | FY 2029     | -                                            | -                   | 943            |
|                                   | FY 2030     | -                                            | -                   | 40             |
| <b>Total, OPC</b>                 |             | <b>9,311</b>                                 | <b>9,311</b>        | <b>9,311</b>   |
| <b>Total Project Costs (TPC)</b>  |             |                                              |                     |                |
|                                   | Prior years | 525,292                                      | 525,292             | 375,518        |
|                                   | FY 2025     | 73,083                                       | 73,083              | 137,158        |
|                                   | FY 2026     | 56,878                                       | 56,878              | 114,102        |
|                                   | FY 2027     | 154,747                                      | 154,747             | 136,239        |
|                                   | FY 2028     | -                                            | -                   | 27,000         |

<sup>1</sup> The FY 2026 Budget Authority includes \$53,000K from Public Law 119–21.

<sup>2</sup> The FY 2026 Obligations includes \$53,000K from Public Law 119–21.

|                  | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|------------------|--------------------------------------|----------------|----------------|
| FY 2029          | -                                    | -              | 15,943         |
| FY 2030          | -                                    | -              | 4,040          |
| <b>Total TPC</b> | <b>810,000</b>                       | <b>810,000</b> | <b>810,000</b> |

#### 4. Details of Project Cost Estimate

##### 17-D-640: Total Project (\$K)

|                                    | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                               |                                   |
| <b>Design</b>                      |                              |                               |                                   |
| Design                             | 69,406                       | 69,406                        | 69,406                            |
| Project Management                 | 35,656                       | 35,656                        | 35,656                            |
| Contingency                        | -                            | -                             | -                                 |
| <b>Total Design</b>                | <b>105,062</b>               | <b>105,062</b>                | <b>105,062</b>                    |
| <b>Construction</b>                |                              |                               |                                   |
| Site Work                          | -                            | -                             | -                                 |
| Equipment                          | -                            | -                             | -                                 |
| Construction                       | 605,084                      | 625,084                       | 625,084                           |
| Construction Management            | 80,951                       | 80,951                        | 80,951                            |
| Contingency                        | 54,300                       | 54,300                        | 57,732                            |
| <b>Total Construction</b>          | <b>740,335</b>               | <b>760,335</b>                | <b>763,767</b>                    |
| <b>Total Estimated Cost (TEC)</b>  | <b>845,397</b>               | <b>865,397</b>                | <b>868,829</b>                    |
| <i>Contingency, TEC</i>            | <i>54,300</i>                | <i>54,300</i>                 | <i>57,732</i>                     |
| <b>Other Project Costs (OPC)</b>   |                              |                               |                                   |
| OPC except D&D                     |                              |                               |                                   |
| R&D                                | -                            | -                             | -                                 |
| Conceptual Planning                | 500                          | 500                           | 500                               |
| Conceptual Design                  | 1,009                        | 1,009                         | 1,009                             |
| Other OPC Costs                    | 9,088                        | 9,088                         | 9,088                             |
| Contingency                        | -                            | -                             | 695                               |
| <b>Total OPC</b>                   | <b>10,597</b>                | <b>10,597</b>                 | <b>11,292</b>                     |
| <i>Contingency, OPC</i>            | <i>-</i>                     | <i>-</i>                      | <i>695</i>                        |
| <b>Total Project Cost</b>          | <b>855,994</b>               | <b>875,994</b>                | <b>880,121</b>                    |
| <b>Total Contingency (TEC+OPC)</b> | <b>54,300</b>                | <b>54,300</b>                 | <b>58,427</b>                     |

**17-D-640-010: ECSE Access and Life Safety Infrastructure (\$K)**

|                                    |                         | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|-------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                         |                                       |                                        |                                            |
| <b>Design</b>                      |                         |                                       |                                        |                                            |
|                                    | Design                  | 2,852                                 | 2,852                                  | 2,852                                      |
|                                    | Project Management      | 504                                   | 504                                    | 504                                        |
|                                    | Contingency             | -                                     | -                                      | -                                          |
| <b>Total Design</b>                |                         | <b>3,356</b>                          | <b>3,356</b>                           | <b>3,356</b>                               |
| <b>Construction</b>                |                         |                                       |                                        |                                            |
|                                    | Site Work               | -                                     | -                                      | -                                          |
|                                    | Equipment               | -                                     | -                                      | -                                          |
|                                    | Construction            | 35,984                                | 35,984                                 | 35,984                                     |
|                                    | Construction Management | 5,368                                 | 5,368                                  | 5,368                                      |
|                                    | Contingency             | -                                     | -                                      | 3,432                                      |
| <b>Total Construction</b>          |                         | <b>41,352</b>                         | <b>41,352</b>                          | <b>44,784</b>                              |
| <b>Total Estimated Cost (TEC)</b>  |                         | <b>44,708</b>                         | <b>44,708</b>                          | <b>48,140</b>                              |
| <i>Contingency, TEC</i>            |                         | -                                     | -                                      | 3,432                                      |
| <b>Other Project Costs (OPC)</b>   |                         |                                       |                                        |                                            |
| OPC except D&D                     |                         |                                       |                                        |                                            |
|                                    | R&D                     | -                                     | -                                      | -                                          |
|                                    | Conceptual Planning     | 200                                   | 200                                    | 200                                        |
|                                    | Conceptual Design       | 281                                   | 281                                    | 281                                        |
|                                    | Other OPC Costs         | 805                                   | 805                                    | 805                                        |
|                                    | Contingency             | -                                     | -                                      | 695                                        |
| <b>Total OPC</b>                   |                         | <b>1,286</b>                          | <b>1,286</b>                           | <b>1,981</b>                               |
| <i>Contingency, OPC</i>            |                         | -                                     | -                                      | 695                                        |
| <b>Total Project Cost</b>          |                         | <b>45,994</b>                         | <b>45,994</b>                          | <b>50,121</b>                              |
| <b>Total Contingency (TEC+OPC)</b> |                         | <b>-</b>                              | <b>-</b>                               | <b>4,127</b>                               |

**17-D-640-020: ECSE Laboratory and Support Infrastructure (\$K)**

|                                    |                         | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|-------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                         |                                       |                                        |                                            |
| <b>Design</b>                      |                         |                                       |                                        |                                            |
|                                    | Design                  | 66,554                                | 66,554                                 | 66,554                                     |
|                                    | Project Management      | 35,152                                | 35,152                                 | 35,152                                     |
|                                    | Contingency             | -                                     | -                                      | -                                          |
| <b>Total Design</b>                |                         | <b>101,706</b>                        | <b>101,706</b>                         | <b>101,706</b>                             |
| <b>Construction</b>                |                         |                                       |                                        |                                            |
|                                    | Site Work               | -                                     | -                                      | -                                          |
|                                    | Equipment               | -                                     | -                                      | -                                          |
|                                    | Construction            | 569,100                               | 589,100                                | 589,100                                    |
|                                    | Construction Management | 75,583                                | 75,583                                 | 75,583                                     |
|                                    | Contingency             | 54,300                                | 54,300                                 | 54,300                                     |
| <b>Total Construction</b>          |                         | <b>698,983</b>                        | <b>718,983</b>                         | <b>718,983</b>                             |
| <b>Total Estimated Cost (TEC)</b>  |                         | <b>800,689</b>                        | <b>820,689</b>                         | <b>820,689</b>                             |
| <i>Contingency, TEC</i>            |                         | <i>54,300</i>                         | <i>54,300</i>                          | <i>54,300</i>                              |
| <b>Other Project Costs (OPC)</b>   |                         |                                       |                                        |                                            |
| OPC except D&D                     |                         |                                       |                                        |                                            |
|                                    | R&D                     | -                                     | -                                      | -                                          |
|                                    | Conceptual Planning     | 300                                   | 300                                    | 300                                        |
|                                    | Conceptual Design       | 728                                   | 728                                    | 728                                        |
|                                    | Other OPC Costs         | 8,283                                 | 8,283                                  | 8,283                                      |
|                                    | Contingency             | 0                                     | 0                                      | 0                                          |
| <b>Total OPC</b>                   |                         | <b>9,311</b>                          | <b>9,311</b>                           | <b>9,311</b>                               |
| <i>Contingency, OPC</i>            |                         | <i>-</i>                              | <i>-</i>                               | <i>-</i>                                   |
| <b>Total Project Cost</b>          |                         | <b>810,000</b>                        | <b>830,000</b>                         | <b>830,000</b>                             |
| <b>Total Contingency (TEC+OPC)</b> |                         | <b>54,300</b>                         | <b>54,300</b>                          | <b>54,300</b>                              |

## 5. Schedule of Appropriations Requests

| Request Year | Type | Prior Years | FY2025 | FY2026              | FY2027  | Outyears | Total   |
|--------------|------|-------------|--------|---------------------|---------|----------|---------|
| FY 2017      | TEC  | 151,500     | -      | -                   | -       | -        | 151,500 |
|              | OPC  | 7,109       | -      | -                   | -       | -        | 7,109   |
|              | TPC  | 158,609     | -      | -                   | -       | -        | 158,609 |
| FY 2018      | TEC  | 151,500     | -      | -                   | -       | -        | 151,500 |
|              | OPC  | 7,109       | -      | -                   | -       | -        | 7,109   |
|              | TPC  | 158,609     | -      | -                   | -       | -        | 158,609 |
| FY 2019      | TEC  | 151,500     | -      | -                   | -       | -        | 151,500 |
|              | OPC  | 7,109       | -      | -                   | -       | -        | 7,109   |
|              | TPC  | 158,609     | -      | -                   | -       | -        | 158,609 |
| FY 2020      | TEC  | 163,000     | -      | -                   | -       | -        | 163,000 |
|              | OPC  | 11,809      | -      | -                   | -       | -        | 11,809  |
|              | TPC  | 174,809     | -      | -                   | -       | -        | 174,809 |
| FY 2021      | TEC  | 507,200     | -      | -                   | -       | -        | 507,200 |
|              | OPC  | 19,309      | -      | -                   | -       | -        | 19,309  |
|              | TPC  | 526,509     | -      | -                   | -       | -        | 526,509 |
| FY 2022      | TEC  | 507,200     | -      | -                   | -       | -        | 507,200 |
|              | OPC  | 19,309      | -      | -                   | -       | -        | 19,309  |
|              | TPC  | 526,509     | -      | -                   | -       | -        | 526,509 |
| FY 2023      | TEC  | 567,200     | -      | -                   | -       | -        | 567,200 |
|              | OPC  | 6,719       | 2,953  | -                   | -       | -        | 9,672   |
|              | TPC  | 573,919     | 2,953  | -                   | -       | -        | 576,872 |
| FY 2024      | TEC  | 563,900     | 33,083 | -                   | -       | -        | 596,983 |
|              | OPC  | 6,719       | 3,153  | -                   | -       | -        | 9,872   |
|              | TPC  | 570,619     | 36,236 | -                   | -       | -        | 606,855 |
| FY 2025      | TEC  | 563,900     | 73,083 | 64,000              | 50,000  | -        | 750,983 |
|              | OPC  | 6,719       | -      | 3,858               | -       | -        | 10,577  |
|              | TPC  | 570,619     | 73,083 | 67,858              | 50,000  | -        | 761,560 |
| FY 2026      | TEC  | 565,172     | 73,083 | 150,000             | N/A     | 77,142   | 865,397 |
|              | OPC  | 6,114       | -      | 3,878               | N/A     | 605      | 10,597  |
|              | TPC  | 571,286     | 73,083 | 153,878             | N/A     | 77,747   | 875,994 |
| FY 2027      | TEC  | 565,172     | 73,083 | 53,000 <sup>1</sup> | 154,142 | -        | 845,397 |
|              | OPC  | 6,114       | -      | 3,878               | 605     | -        | 10,597  |
|              | TPC  | 571,286     | 73,083 | 56,878              | 154,747 | -        | 855,994 |

<sup>1</sup> The FY 2026 Appropriation Request includes \$53,000K from Public Law 119–21.

6. Related Operations and Maintenance Funding Requirements

|                                                    |           |
|----------------------------------------------------|-----------|
| Start of Operation or Beneficial Occupancy         | 1Q FY2030 |
| Expected Useful Life                               | 30        |
| Expected Future Start of D&D of this capital asset | 1Q FY2060 |

Related Funding Requirements  
(Budget Authority in Millions of Dollars)

|                            | Annual Costs (Base year is 2025) |                        | Life Cycle Costs TY     |                        |
|----------------------------|----------------------------------|------------------------|-------------------------|------------------------|
|                            | Previous Total Estimate          | Current Total Estimate | Previous Total Estimate | Current Total Estimate |
| Operations and Maintenance | 41                               | 41                     | 2,798                   | 2,798                  |

7. D&D Information

The new area being constructed in this project does not replace existing facilities.

8. Acquisition Approach

The project is being managed by the NNSS Management and Operating (M&O) contractor because of operations within the PULSE complex which is an underground facility with limited access. Design and construction of the underground modifications are being performed by the NNSS M&O contractor through CLIN 001 on the M&O cost reimbursable contract.



**Advanced Sources and Detectors (ASD) Major Item of Equipment (MIE)  
LANL Lead (SNL, LLNL, NNSS, NRL support)  
Project Data Sheet**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:** The Fiscal Year (FY) 2027 Request for the Advanced Sources and Detectors (ASD) Major Item of Equipment (MIE) Project is \$344,917,000. The FY 2027 Request will complete testing of the Injector, two accelerator modules, and Solid-State Pulsed Power units at the Integrated Test Stand (ITS); continue assembly of Accelerator cells and modules; continue fabrication of the remaining Solid State Pulsed Power units; and begin installation of Solid State Pulsed Power units at the Principal Underground Laboratory for Subcritical Experiments (PULSE, formerly U1a Complex). The latest Critical Decision (CD) approved was CD-2/3, *Approve Performance Baseline and Start of Construction*, with a Total Project Cost (TPC) of \$1,800,000,000 and a CD-4 date of May 2030. The cost of this project has increased to an estimated TPC of \$2,411,161,000 and the CD-4 is estimated for the fourth quarter of FY 2033.

A Federal Project Director (FPD) has been assigned to this project.

**Significant Changes:**

The project cost has increased to an estimated TPC of \$2,411,161,000 and the CD-4 has moved out to the fourth quarter of FY 2033. This is expected to be approved through a Baseline Change in the 3Q FY2026. The estimate has been revised to reflect the increased cost of radiographic system components primarily associated with the Solid State Pulsed Power which was underestimated; additional effort for component testing and installation due to missing activities associated with the integration of the accelerator subsystems and material availability; and a more robust risk posture which incorporated recommendations from the External Independent review.

**Critical Milestone History**

| Fiscal Quarter or Date |           |                            |          |            |                       |            |          |
|------------------------|-----------|----------------------------|----------|------------|-----------------------|------------|----------|
| Fiscal Year            | CD-0      | Conceptual Design Complete | CD-1     | CD-2       | Final Design Complete | CD-3       | CD-4     |
| FY 2020                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 2QFY2022   | 4QFY2021              | 2QFY2022   | 4QFY2025 |
| FY 2021                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 2QFY2022   | 4QFY2021              | 2QFY2022   | 4QFY2025 |
| FY 2022                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 2QFY2022   | 4QFY2021              | 2QFY2022   | 4QFY2025 |
| FY 2023                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 4QFY2022   | 3QFY2022              | 4QFY2022   | 3QFY2027 |
| FY 2024                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 11/30/2022 | 8/9/2022              | 11/30/2022 | 3QFY2030 |
| FY 2025                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 11/30/2022 | 8/9/2022              | 11/30/2022 | 3QFY2030 |
| FY 2026                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 11/30/2022 | 8/9/2022              | 11/30/2022 | 2QFY2033 |
| FY 2027                | 9/25/2014 | 6/7/2018                   | 2/6/2019 | 11/30/2022 | 8/9/2022              | 11/30/2022 | 4QFY2033 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-3A** – Approve Long Lead Procurements – Scintillator components

**CD-3B** – Approve Long Lead Procurements – Injector and Pulsed power components

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Fabrication

**CD-4** – Approve Start of Operations or Project Closeout

| Fiscal Quarter or Date |                                 |           |          |
|------------------------|---------------------------------|-----------|----------|
| Fiscal Year            | Performance Baseline Validation | CD-3A     | CD-3B    |
| FY 2020                | 4QFY2021                        | 3QFY2021  | N/A      |
| FY 2021                | 4QFY2021                        | 3QFY2021  | N/A      |
| FY 2022                | 4QFY2021                        | 3QFY2021  | 1QFY2022 |
| FY 2023                | 11/25/2022                      | 4/13/2021 | 1/3/2022 |

## Project Cost History (\$K)

| Fiscal Year | Total Cost |
|-------------|------------|
| FY 2020     | 791,600    |
| FY 2021     | 1,061,355  |
| FY 2022     | 939,655    |
| FY 2023     | 1,284,161  |
| FY 2024     | 1,800,000  |
| FY 2025     | 1,841,538  |
| FY 2026     | 2,228,363  |
| FY 2027     | 2,411,161  |

## 2. Project Scope and Justification

### Scope

The Enhanced Capabilities for Subcritical Experiments (ECSE) portfolio aims to construct a new underground laboratory in Nevada and to install large modern diagnostic systems necessary to evaluate plutonium implosion system experiments in support of the current and future stockpile. The ASD MIE Project is one of these diagnostic systems that involves installation of a linear induction accelerator into the PULSE. The ASD MIE Project will provide the capability to conduct weapons-scale, radiographically diagnosed subcritical experiments using special nuclear material (SNM). The radiographic data is required to refine the modern predictive physics models used to certify the present and future stockpile. Radiography (x-ray imaging of dense objects) is the principal tool for diagnosing dynamic weapons-scale experiments and is the key diagnostic for the National Hydrodynamic Test Program at both Los Alamos National Laboratory (LANL) and Lawrence Livermore National Laboratory (LLNL). Currently, the National Nuclear Security Administration (NNSA) relies on hydrodynamic tests at the Dual Axis Radiographic Hydrodynamic Test Facility (DARHT) at LANL and at LLNL's Contained Firing Facility using the Flash X-Ray machine. In these tests, surrogate materials replace SNM in the experimental assembly. The surrogate tests explore many significant aspects of primary implosion physics but cannot explore the unique behavior of plutonium. The ASD MIE Project, funded within the ECSE subprogram, addresses this need and complements other diagnostics already supporting the subcritical, scaled experiments program.

**Weapons Activities / Stockpile Research, Technology, and Engineering /  
Enhanced Capabilities for Subcritical Experiments Advanced Sources  
and Detectors (ASD) Major Item of Equipment**

**FY 2027 Congressional Justification**

The ASD Project is composed of an MIE (called Scorpius) for four-pulse, single-axis radiographic capability at weapons-relevant scales to be integrated with the U1a Complex Enhancements Project line item-funded infrastructure improvements, which will house the MIE. The ASD MIE Project is responsible for the technology maturation, design, fabrication and installation, and commissioning of Scorpius through CD-4. The CD-3A *Approve Long Lead Procurements – Scintillator* scope is for the procurement of the scintillator and imager with a total cost of \$35 million and a scheduled completion of 4Q FY 2028. The CD-3B *Approve Long Lead Procurements – Injector and Pulsed power components* scope was for components/materials to support the fabrication of the Injector and setup of the Integrated Test Stand with a total cost of \$141.6 million and was completed September 30, 2025.

**Justification**

The aggregate influences of aging, modern manufacturing techniques, modern materials, and evolving design philosophies are driving the stockpile toward the limits of the nuclear explosive testing database. In 2014, LANL and LLNL jointly identified a capability gap that challenges the ability to certify the stockpile in light of these changes, which involves the evaluation of plutonium response. In 2016, the JASON Defense Advisory Group identified the same gap in capability of the United States to carry out and diagnose such experiments. The ASD MIE Project, as part of ECSE, is designed to narrow this gap. Radiographic data from ECSE will help the validation of the W80-4 design and certification of the W87-1 Modification Program. ECSE delivery in the early 2030s supports these efforts. Funds appropriated under this data sheet may be used for contracted support services to the Federal Program Manager and the FPD to conduct independent assessments of the planning and execution of this project, per DOE O 413.3B, and to conduct technical reviews of design and construction documents. All costs associated with the conduct of independent reviews, to include travel for Department of Energy’s Office of Project Management Federal staff, are funded by this MIE.

**Key Performance Parameters (KPPs)**

The KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the KPPs will be a prerequisite for approval of CD-4, Project Completion. In summary, the MIE must be able to generate the x-ray energies and multi-pulse capability necessary to diagnose late-time dynamics in plutonium implosion experiments.

The KPPs established for CD-4 approval are:

- Four radiographic pulses
- Ability to vary the time between pulses (as measured center to center) in a  $\geq 1500$  ns window, at a pulse spacing  $\leq 500$  ns for 2 pulses
- Radiographic pulse lengths: between 20 and 80 ns with the ability to control the length (dose) of each pulse to within 5 ns
- Radiographic figure of merit:  $\geq 1.2$  line pairs per mm visible for 2 pulses with an overburden representing a nominal Object A density
- Radiographic figure of merit:  $\geq 0.8$  line pairs per mm visible for 2 pulses with an overburden representing a nominal Object C density

**3. Financial Schedule (\$K)**

|         | Budget<br>Authority | Obligations | Costs |
|---------|---------------------|-------------|-------|
| Funding |                     |             |       |

|                    |                  |                  |                  |
|--------------------|------------------|------------------|------------------|
| Prior Years        | 1,092,302        | 1,092,302        | 906,637          |
| FY 2025            | 276,956          | 276,956          | 250,714          |
| FY 2026            | 274,656          | 274,656          | 308,554          |
| FY 2027            | 344,917          | 344,917          | 406,910          |
| FY 2028            | 162,095          | 162,095          | 222,140          |
| FY 2029            | 121,877          | 121,877          | 124,418          |
| FY 2030            | 102,076          | 102,076          | 102,047          |
| FY 2031            | 36,282           | 36,282           | 33,972           |
| Outyears           | -                | -                | 55,769           |
| <b>Grand Total</b> | <b>2,411,161</b> | <b>2,411,161</b> | <b>2,411,161</b> |

#### 4. Details of Project Cost Estimate

##### Work Breakdown Structure Estimated Cost (\$K)

| <b>WBS #</b> | <b>WBS Title</b>                                                                | <b>Current Estimate</b> | <b>Previous Estimate</b> | <b>CD-2/3 Baseline</b> |
|--------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|------------------------|
| 1.01         | Project Management                                                              | 328,200                 | 285,609                  | 225,000                |
| 1.02         | Radiographic System                                                             | 1,357,969               | 1,303,516                | 1,086,200              |
| 1.03         | System Engineering and Requirements                                             | 62,200                  | 45,443                   | 19,000                 |
| 1.04         | ITS Facility Installation, Major Subsystem Installation, Integration, & Testing | 68,328                  | 87,428                   | 42,000                 |
| 1.05         | U1a Final Major Subsystem Installation, Integration, & Testing                  | 118,206                 | 146,206                  | 61,000                 |
| 1.06         | Final Commissioning at U1a                                                      | 21,710                  | 23,710                   | 12,900                 |
|              | Management Reserve/Contingency/Federal Support                                  | 454,548                 | 336,451                  | 353,900                |
|              | <b>Total</b>                                                                    | <b>2,411,161</b>        | <b>2,228,363</b>         | <b>1,800,000</b>       |

#### 5. Related Operations and Maintenance Funding Requirements

|                                                    |            |
|----------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy         | 4Q FY 2033 |
| Expected Useful Life                               | 30 years   |
| Expected Future Start of D&D of this capital asset | 4Q FY 2063 |

#### 6. Acquisition Approach

The four Management and Operations contractors at the Laboratories and sites (LANL, LLNL, Sandia National Laboratory (SNL), and Nevada National Security Sites (NNSS)) have formed a multi-site team to execute the ASD MIE Project. This management team structure enables the full engagement of LANL, LLNL, SNL and NNSS, benefiting NNSA to leverage unique capabilities of each laboratory. It also unifies the design to construction process, which is especially important, as the PULSE is an underground facility with limited access.

**Weapons Activities / Stockpile Research, Technology, and Engineering / Enhanced Capabilities for Subcritical Experiments Advanced Sources and Detectors (ASD) Major Item of Equipment** **FY 2027 Congressional Justification**

**26-D-513, Combined Radiation Environments for Survivability Testing (CREST) Complex**  
**Sandia National Laboratories, New Mexico**  
**Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The Fiscal Year (FY) 2027 Request for the Combined Radiation Environments for Survivability Testing (CREST) Complex is \$105,000,000 of Total Project Cost (TPC). \$100,000,000 of this budget authority is Total Estimated Cost (TEC) for preliminary design on the nuclear facility, accelerator and office and light laboratory, and preliminary and final design efforts on the reactor. \$5,000,000 of this budget authority is Other Project Cost (OPC) funding for Safety Basis and Environmental, Safety, and Health activities, and continued preparation of preliminary and final design procurements.

The most recent DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, approval is Critical Decision (CD)-1, *Approve Alternate Selection and Cost Range*, which was approved on October 15, 2025 with a cost range of \$1,970,000,000 to \$3,870,000,000 and a CD-4, *Start of Operations or Project Completion*, schedule range of FY 2037 to FY 2041.

The approved alternate selection is a new facility with the capability to use Annular Core Research Reactor's (ACRR) existing fuel or new main core and Fuel-Ringed External Cavity (FREC) fuel, along with Gamma capabilities. The chosen site location is Technical Area 5 (TA-V) at Sandia National Laboratories (SNL), Albuquerque, New Mexico, for the newly constructed facility with the following traits:

- Pursue the reuse of existing fuel elements and new fuel elements for neutron radiography capability and combine neutron, mechanical shock and prompt gamma.
- Include the facility needed to house the accelerator but allow for the capability to add the accelerator later.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B and will be phased to improve overall execution efficiency. The conceptual design was completed slightly ahead of schedule and under budget, and was executed in multiple packages, as follows: (1) the Nuclear Facility and the Central Utility Building (CUB) and Central Alarm Station (CAS); (2) the Reactor; (3) the Accelerator; and (4) the Office/Light Laboratory (OLL). Those packages will form the basis for dividing the scope into subprojects following CD-1 approval.

Funds appropriated under this data sheet may be used for contracted support services to the Federal Program Manager and the Federal Project Director (FPD) to provide federal oversight support, to conduct independent assessments of the planning and execution of this project required by DOE O 413.3B, and to conduct technical reviews of design and construction documents.

The project is not a new start in FY 2027. The FPD was appointed in October 2025.

**Significant Changes**

While CD-1 was approved with a top end of the cost range of \$3,870,000,000, the Office of Research, Development, Test, and Evaluation will fund the project at \$2,800,000,000. This value is based on the project team's top end of the cost range at conceptual design. The difference in the approved range and the funded amount is due to risk management of "unknown unknown" risks that could cause the project to incur a higher

risk realization than what is reasonably included in the project's risk register. The project scope includes the novel concept of coupling several nuclear research reactors with an accelerator and there is the potential for technical issues to arise that the project team may not have considered during the conceptual design, which relates to an overall design maturity of only 30 percent. The design performance baseline will be established in alignment with the project's point estimate of \$2,286,931,000; however, National Nuclear Security Administration (NNSA) will continue to identify opportunities for value engineering, such as following commercial construction practices to the maximum extent possible to reduce the cost of the OLL. The funding between the point estimate and top of the range may be allocated in the outyears. This will avoid reserving funds in the FYNSP above the reasonable amount that has been captured in the risk register because it will take away from other critical NNSA mission activities.

The project schedule for CD-1 approval revised the critical decision milestones due to higher fidelity of the design. The initial site preparation and long lead procurement milestone will coincide with the completion of the preliminary designs for the Nuclear Facility and OLL. As the preliminary design is executed, additional packages will be considered to ensure efficient execution of the project. The planned completion of final design and CD-2/3 approval were accelerated by one year. However, the risk informed construction timeline has increased, and CD-4 is planned three years later. The dates in the table below are based on the funded amount of \$2,800,000,000 and not the top of the CD-1 range.

### **Critical Milestone History<sup>1</sup>**

#### **Overall Project (26-D-513)**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| FY 2026            | 8/22/2019   | 2/3/2025                          | 10/15/2025  | 2Q FY 2031  | 4Q FY 2030                   | 2Q FY 2031  | 4Q FY 2035  |
| FY 2027            | 8/22/2019   | 2/3/2025                          | 10/15/2025  | 1Q FY 2030  | 3Q FY 2029                   | 1Q FY 2030  | 4Q FY 2038  |

#### **Nuclear Facility and CUB/CAS Subproject (26-D-513-01)**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| FY 2027            | 8/22/2019   | 2/3/2025                          | 10/15/2025  | 1Q FY 2030  | 3Q FY 2029                   | 1Q FY 2030  | 4Q FY 2036  |

#### **Reactor Subproject (26-D-513-02)**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| FY 2027            | 8/22/2019   | 2/3/2025                          | 10/15/2025  | 4Q FY 2029  | 3Q FY 2029                   | 4Q FY 2029  | 3Q FY 2035  |

<sup>1</sup> The CD-4 date in the overall project table is a risk informed date that includes time related to the cost uncertainty between the project point estimate (\$2.3B) and the project top of the range (\$2.8B).

**Accelerator Subproject (26-D-513-03)**

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | CD-4       |
|-------------|-----------|----------------------------|------------|------------|-----------------------|------------|------------|
| FY 2027     | 8/22/2019 | 2/3/2025                   | 10/15/2025 | 1Q FY 2030 | 4Q FY 2029            | 1Q FY 2030 | 4Q FY 2035 |

**Office/Light Laboratory (OLL) Subproject (26-D-513-04)**

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | CD-4       |
|-------------|-----------|----------------------------|------------|------------|-----------------------|------------|------------|
| FY 2027     | 8/22/2019 | 2/3/2025                   | 10/15/2025 | 1Q FY 2029 | 4Q FY 2028            | 1Q FY 2029 | 2Q FY 2030 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** - Actual date the conceptual design was completed

**CD-1** - Approve Design Scope and Project Cost and Schedule Ranges

**CD-2** - Approve Project Performance Baseline

**Final Design Complete** - Estimated date the project design will be completed

**CD-3** - Approve Start of Construction

**CD-4** - Approve Start of Operations or Project Closeout

| Fiscal Year | CD-3A      | CD-3B     |
|-------------|------------|-----------|
| FY 2026     | 1Q FY 2030 | N/A       |
| FY 2027     | 3Q FY 2027 | 1Q FY2028 |

**CD-3A** – Approve Long-Lead Procurement

**CD-3B** – Approve Site Preparation

**Project Cost History (\$K)****Overall Project (26-D-513)**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Total | TPC       |
|-------------|-------------|-------------------|------------|------------|-----------|
| FY 2026     | 620,000     | 1,275,000         | 1,895,000  | 231,000    | 2,126,000 |
| FY 2027     | 380,746     | 1,984,506         | 2,365,252  | 434,748    | 2,800,000 |

**Nuclear Facility and CUB/CAS Subproject (26-D-513-01)**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Total | TPC       |
|-------------|-------------|-------------------|------------|------------|-----------|
| FY 2027     | 192,171     | 1,474,683         | 1,666,854  | 326,391    | 1,993,245 |

**Reactor Subproject (26-D-513-02)**

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|------------|---------|
| FY 2027     | 83,527      | 153,116           | 236,643    | 48,120     | 284,763 |

**Accelerator Subproject (26-D-513-03)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|-------------------|------------|
| FY 2027            | 86,535             | 212,633                  | 299,168           | 46,500            | 345,668    |

**Office/Light Laboratory (OLL) Subproject (26-D-513-04)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|-------------------|------------|
| FY 2027            | 18,513             | 144,074                  | 162,587           | 13,737            | 176,324    |

**2. Project Scope and Justification****Scope**

The scope of the project is being executed in multiple subprojects, as follows: (1) the Nuclear Facility and CUB/CAS; (2) the Reactor; (3) the Accelerator; (4) the Office/Light-Laboratory. The Modular Office Complex (MOC), if necessary, will be part of the Nuclear Facility and CUB/CAS subproject.

1. The Nuclear Facility and CUB/CAS (26-D-513-01): The CREST Nuclear Facility is a new permanent Hazard Category (HC)-2 facility to provide a combined neutron, gamma, and mechanical shock environment capability for research and development (R&D), design, and qualification. It consists of an approximately 80,000 constructible square foot, four-story building (two stories underground, two stories above ground) located within the TA-V Limited Area (LA) and further confined with the boundaries of a Perimeter Intrusion Detection and Assessment System (PIDAS) for heightened security posture. The facility will include six “hot cells” in the lowest level of the facility. These, and the equipment they contain, support the operation of the reactors/fuel assemblies, neutron radiography, accelerator operations, and handling of radioactive and explosive materials. The PIDAS will be designed with the CREST Nuclear Facility and CUB/CAS in collaboration with SNL-NM security personnel.

The CREST Nuclear facility is supported by a utility and security building, the CUB/CAS, that is a non-nuclear, standalone, permanent building near the nuclear Facility within the TA-V LA, providing the Nuclear Facility with necessary utility and security support identified below:

- a. The utility services for the CREST Nuclear Facility (i.e., electrical, water, communications, alarms, security, operations monitoring, fire suppression loop, and emergency response) notably for the reactor systems, Reactor Movement System (RMS), accelerator and accelerator movement system, and ancillary systems.
- b. Central alarm station and security system head-end equipment supporting all the critical intrusion detection, assessment, and communications within the Protected Area and CREST Nuclear Facility when the Protected Area Boundary is active.

The MOC provides temporary offices for the CREST Project, to collocate the CREST Project Team, NNSA, and General Contractor staff during preliminary and final design, construction, and start-up of the CREST Project. The MOC includes a permanent parking lot that will be used long-term for the OLL as the OLL is located within the TA-V LA where space and access are limited for personal vehicles.



2. The Reactor (26-D-513-02): The Reactor Systems include the reactor/fuel assemblies referred to as the Reactor-Actuated Neutron/Gamma Environment Radiation Systems (RANGERS), as well as all supporting ancillary systems to RANGERS. The CREST Reactor Systems will replace (and add to) the existing ACRR capabilities, and provides gamma, neutron, mechanical shock environments, and neutron radiography. The scope of CREST includes the reuse of the ACRR fuel, but a feasibility study is ongoing to evaluate the possibility of producing new fuel as part of the project. The RANGERS consists of the below four fuel assemblies:
  - a. ACRR-II (Annular Core Research Reactor-II): the replacement to the ACRR, the ACRR-II is a research reactor that creates the desired neutron/gamma radiation environment for CREST. The ACRR-II will be suspended from and operated from the RMS, which allows the ACRR-II to be brought into a location which closely couples it to either of the two (2) subcritical assemblies, namely the Fuel-Ringed External Cavity for Large Experiments (FRECLE) and Reactor-Accelerator-Shock Cavity for Large Experiments (RASCLE). ACRR-II utilizes unique uranium dioxide beryllium oxide (UO<sub>2</sub>-BeO) fuel. ACRR-II also maintains the 9-in dry central irradiation cavity that ACRR currently has.
  - b. FRECLE (Fuel-Ringed External Cavity for Large Experiments): a subcritical assembly designed with a large diameter (24 inches) dry irradiation tube allowing objects under test to be lowered from above the reactor pool to the active fuel region of the assembly core. The FRECLE, when closely coupled to the ACRR-II, utilizes the neutrons streaming from the ACRR-II. FRECLE uses Training, Research, Isotopes, General Atomics (TRIGA) uranium zirconium hydride (UZrH) fuel.
  - c. RASCLE (Reactor-Accelerator-Shock Cavity for Large Experiments): a subcritical nuclear-fueled assembly with a large diameter (20 inches) dry irradiation tube allowing objects under test to be lowered from above the reactor pool to the active fuel region of the assembly core. RASCLE, when closely coupled to the ACRR-II, utilizes the neutrons streaming from the ACRR-II. The RASCLE will also have an interface between its irradiation cavity and a gamma-ray-producing high energy electron accelerator transmission line. RASCLE uses TRIGA UZrH fuel.
  - d. MUNSTR (Multi-Use Neutron Science and Technology Reactor): a research reactor that provides a nominal 9-inch dry central irradiation cavity, in-core/ex-core irradiation locations, ex-core neutron thermalization chamber(s) with multiple neutron beam ports capable of delivering neutron beams to irradiation locations external to the reactor pool for neutron radiography or thermal neutron experimentation. MUNSTR uses TRIGA UZrH fuel.
3. The Accelerator (26-D-513-03): The Accelerator provides a high energy, high current electron beam suitable for prompt-gamma radiation effects testing. Housed on the lowest level of the CREST Nuclear Facility in the accelerator bay, at the same elevation as the RANGERS cores, the accelerator will sit upon an accelerator movement cart for positioning with up to (3) three RANGERS beam ports and maintenance bays. It should be noted that the AoA Approval stated that the Nuclear Facility shall be able to house the accelerator but allow for the capability to add the accelerator at a later date. The conceptual design accommodates the ability to add the accelerator at a future date, however, the current project execution plan is to include the accelerator as part of the current scope to be installed into the Nuclear Facility from its inception.

4. Office/Light Laboratory (26-D-513-04): The Office and Light Laboratory Building (OLL) is a non-nuclear, standalone, permanent, administrative building near the CREST Nuclear Facility within the TA-V LA. The OLL is designed to house TA-V staff and experimenters and provide simulation and laboratory environments to replicate operations within the CREST Nuclear Facility. The OLL simulator provides critical training capabilities, which are key to two requirements stated in the AoA: 1) minimizing downtime during transition to CREST, and 2) enabling increased operational throughput.

### **Justification**

The Nuclear Modernization Program is dependent on reactor-based radiation environments for hostile environment survivability qualification. Every weapon system in the stockpile has been qualified at the legacy ACRR, and this qualification capability will be required for the foreseeable modernization future. Existing operations at the 63-year-old facility housing ACRR do not provide sufficient capacity to meet mission needs. Deficiencies in the existing capability risk failure of the capability, and these deficiencies pose significant risk to the missions and programs of Defense Programs. Maintenance downtime is increasing, and this extended downtime appears likely to continue, limiting operational capacity at the ACRR and other test facilities. The facility demand is expected to increase significantly as the NNSA Stockpile Modernization Programs proceed. In addition, legacy radiation environmental test capability (ACRR and other test facilities) can test for the effects of individual neutron, gamma, and blast radiation environments but cannot produce the combined environments that are needed to ensure we are responsive to future hostile threats. Qualification with modeling alone is insufficient. Due to the unique design of the ACRR reactor capability, other reactors within the government and universities do not provide sufficient capabilities, and other commercial capabilities are nonexistent. The advanced capability needs to be in place soonest to ensure the Nuclear Security Enterprise is able to meet expected hostile environment survivability testing requirements for future stockpile systems.

### **Preliminary Key Performance Parameters (KPPs)**

The preliminary threshold KPPs, represent the minimum acceptable performance that the project must achieve. Achievement of the preliminary threshold KPPs will be a prerequisite for approval of CD-4, *Project Completion*. The preliminary Objective KPPs represent the desired project performance. The initial KPPs were developed as part of the Program Requirements Document and are not shown here due to their classification.

The KPPs were developed to ensure the retention of the current ACRR capability, including the capacity to meet annual operations demand and provide a surge capacity and limiting the time between the shutdown of existing operations and the start-up of new operations to not exceed 1-year. The KPPs are only preliminary and will be refined, including the development of project completion criteria, along with the Preliminary and Final Design on the path to CD-2/3.

**3. Financial Schedule (\$K)**  
**Overall Project (26-D-513)**

|                                      | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|--------------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Estimated Cost (TEC)</b>    |                                              |                    |                  |
| <b>Design</b>                        |                                              |                    |                  |
| FY 2026                              | 47,748                                       | 47,748             | 40,804           |
| FY 2027                              | 92,000                                       | 92,000             | 96,697           |
| FY 2028                              | 108,934                                      | 108,934            | 108,991          |
| FY 2029                              | 57,968                                       | 57,968             | 56,304           |
| FY 2030                              | -                                            | -                  | 3,854            |
| FY 2031                              | -                                            | -                  | -                |
| Undistributed                        | 74,096                                       | 74,096             | 74,096           |
| <b>Total Design</b>                  | <b>380,746</b>                               | <b>380,746</b>     | <b>380,746</b>   |
| <b>Construction</b>                  |                                              |                    |                  |
| FY 2027                              | 8,000                                        | 8,000              | 7,337            |
| FY 2028                              | 62,566                                       | 62,566             | 56,108           |
| FY 2029                              | 134,436                                      | 134,436            | 106,374          |
| FY 2030                              | 220,995                                      | 220,995            | 158,696          |
| FY 2031                              | 278,951                                      | 278,951            | 266,319          |
| Outyears                             | 1,279,558                                    | 1,279,558          | 1,389,672        |
| <b>Total Construction</b>            | <b>1,984,506</b>                             | <b>1,984,506</b>   | <b>1,984,506</b> |
| <b>TEC</b>                           |                                              |                    |                  |
| FY 2026                              | 47,748                                       | 47,748             | 40,804           |
| FY 2027                              | 100,000                                      | 100,000            | 104,034          |
| FY 2028                              | 171,500                                      | 171,500            | 165,099          |
| FY 2029                              | 192,404                                      | 192,404            | 162,678          |
| FY 2030                              | 220,995                                      | 220,995            | 162,550          |
| FY 2031                              | 278,951                                      | 278,951            | 266,319          |
| Outyears                             | 1,353,654                                    | 1,353,654          | 1,463,768        |
| <b>Total TEC</b>                     | <b>2,365,252</b>                             | <b>2,365,252</b>   | <b>2,365,252</b> |
| <b>Other Project Costs<br/>(OPC)</b> |                                              |                    |                  |
| Prior Years                          | 67,054                                       | 67,054             | 52,711           |
| FY 2025                              | 31,500                                       | 31,500             | 35,001           |
| FY 2026                              | 4,500                                        | 4,500              | 3,336            |
| FY 2027                              | 5,000                                        | 5,000              | 7,820            |
| FY 2028                              | 4,500                                        | 4,500              | 9,127            |
| FY 2029                              | 18,168                                       | 18,168             | 9,779            |
| FY 2030                              | 26,891                                       | 26,891             | 26,031           |
| FY 2031                              | 23,226                                       | 23,226             | 30,425           |

|                                  | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|----------------------------------|--------------------------------------|------------------|------------------|
| Outyears                         | 253,909                              | 253,909          | 260,518          |
| <b>Total, OPC</b>                | <b>434,748</b>                       | <b>434,748</b>   | <b>434,748</b>   |
| <b>Total Project Costs (TPC)</b> |                                      |                  |                  |
| Prior Years                      | 67,054                               | 67,054           | 52,711           |
| FY 2025                          | 31,500                               | 31,500           | 35,001           |
| FY 2026                          | 52,248                               | 52,248           | 44,140           |
| FY 2027                          | 105,000                              | 105,000          | 111,854          |
| FY 2028                          | 176,000                              | 176,000          | 174,226          |
| FY 2029                          | 210,572                              | 210,572          | 172,457          |
| FY 2030                          | 247,886                              | 247,886          | 188,581          |
| FY 2031                          | 302,177                              | 302,177          | 296,744          |
| Outyears                         | 1,607,563                            | 1,607,563        | 1,724,286        |
| <b>Total TPC</b>                 | <b>2,800,000</b>                     | <b>2,800,000</b> | <b>2,800,000</b> |

**Nuclear Facility and CUB/CAS Subproject (26-D-513-01)**

|                                   | Budget<br>Authority<br>(Appropriations) | Obligations      | Costs            |
|-----------------------------------|-----------------------------------------|------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                         |                  |                  |
| <b>Design</b>                     |                                         |                  |                  |
| FY 2026                           | 23,000                                  | 23,000           | 17,469           |
| FY 2027                           | 45,000                                  | 45,000           | 49,569           |
| FY 2028                           | 61,500                                  | 61,500           | 61,211           |
| FY 2029                           | 25,273                                  | 25,273           | 26,524           |
| FY 2030                           | -                                       | -                | -                |
| FY 2031                           | -                                       | -                | -                |
| Outyears                          | 37,398                                  | 37,398           | 37,398           |
| <b>Total Design</b>               | <b>192,171</b>                          | <b>192,171</b>   | <b>192,171</b>   |
| <b>Construction</b>               |                                         |                  |                  |
| FY 2027                           | 7,500                                   | 7,500            | 6,907            |
| FY 2028                           | 13,566                                  | 13,566           | 12,713           |
| FY 2029                           | 39,400                                  | 39,400           | 28,081           |
| FY 2030                           | 115,000                                 | 115,000          | 75,808           |
| FY 2031                           | 163,951                                 | 163,951          | 145,684          |
| Outyears                          | 1,135,266                               | 1,135,266        | 1,205,490        |
| <b>Total Construction</b>         | <b>1,474,683</b>                        | <b>1,474,683</b> | <b>1,474,683</b> |
| <b>TEC</b>                        |                                         |                  |                  |
| FY 2026                           | 23,000                                  | 23,000           | 17,469           |

|                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|------------------|--------------------------------------------------|--------------------|------------------|
| FY 2027          | 52,500                                           | 52,500             | 56,476           |
| FY 2028          | 75,066                                           | 75,066             | 73,924           |
| FY 2029          | 64,673                                           | 64,673             | 54,605           |
| FY 2030          | 115,000                                          | 115,000            | 75,808           |
| FY 2031          | 163,951                                          | 163,951            | 145,684          |
| Outyears         | 1,172,664                                        | 1,172,664          | 1,242,888        |
| <b>Total TEC</b> | <b>1,666,854</b>                                 | <b>1,666,854</b>   | <b>1,666,854</b> |

| <b>Other Project Costs (OPC)</b> |                  |                  |                  |
|----------------------------------|------------------|------------------|------------------|
| Prior Years                      | 25,000           | 25,000           | 21,633           |
| FY 2025                          | 15,000           | 15,000           | 14,364           |
| FY 2026                          | 2,500            | 2,500            | 1,512            |
| FY 2027                          | 1,500            | 1,500            | 4,365            |
| FY 2028                          | 3,500            | 3,500            | 4,482            |
| FY 2029                          | 8,000            | 8,000            | 3,754            |
| FY 2030                          | 18,000           | 18,000           | 19,376           |
| FY 2031                          | 22,000           | 22,000           | 23,136           |
| Outyears                         | 230,891          | 230,891          | 233,769          |
| <b>Total, OPC</b>                | <b>326,391</b>   | <b>326,391</b>   | <b>326,391</b>   |
| <b>Total Project Costs (TPC)</b> |                  |                  |                  |
| Prior Years                      | 25,000           | 25,000           | 21,633           |
| FY 2025                          | 15,000           | 15,000           | 14,364           |
| FY 2026                          | 25,500           | 25,500           | 18,980           |
| FY 2027                          | 54,000           | 54,000           | 60,840           |
| FY 2028                          | 78,566           | 78,566           | 78,406           |
| FY 2029                          | 72,673           | 72,673           | 58,358           |
| FY 2030                          | 133,000          | 133,000          | 95,185           |
| FY 2031                          | 185,951          | 185,951          | 168,819          |
| Outyears                         | 1,403,555        | 1,403,555        | 1,476,660        |
| <b>Total TPC</b>                 | <b>1,993,245</b> | <b>1,993,245</b> | <b>1,993,245</b> |

**Reactor Subproject (26-D-513-02)**

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b> |
|-----------------------------------|--------------------------------------------------|--------------------|--------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |              |
| <b>Design</b>                     |                                                  |                    |              |
| FY 2026                           | 21,248                                           | 21,248             | 20,836       |
| FY 2027                           | 26,000                                           | 26,000             | 25,865       |
| FY 2028                           | 16,524                                           | 16,524             | 16,726       |

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|----------------------------------|--------------------------------------------------|--------------------|----------------|
| FY 2029                          | 3,500                                            | 3,500              | 3,845          |
| FY 2030                          | -                                                | -                  | -              |
| FY 2031                          | -                                                | -                  | -              |
| Outyears                         | 16,255                                           | 16,255             | 16,255         |
| <b>Total Design</b>              | <b>83,527</b>                                    | <b>83,527</b>      | <b>83,527</b>  |
| <b>Construction</b>              |                                                  |                    |                |
| FY 2027                          | -                                                | -                  | -              |
| FY 2028                          | 4,000                                            | 4,000              | 3,817          |
| FY 2029                          | 23,000                                           | 23,000             | 14,656         |
| FY 2030                          | 75,000                                           | 75,000             | 50,146         |
| FY 2031                          | 15,000                                           | 15,000             | 23,438         |
| Outyears                         | 36,116                                           | 36,116             | 61,059         |
| <b>Total Construction</b>        | <b>153,116</b>                                   | <b>153,116</b>     | <b>153,116</b> |
| <b>TEC</b>                       |                                                  |                    |                |
| FY 2026                          | 21,248                                           | 21,248             | 20,836         |
| FY 2027                          | 26,000                                           | 26,000             | 25,865         |
| FY 2028                          | 20,524                                           | 20,524             | 20,543         |
| FY 2029                          | 26,500                                           | 26,500             | 18,501         |
| FY 2030                          | 75,000                                           | 75,000             | 50,146         |
| FY 2031                          | 15,000                                           | 15,000             | 23,438         |
| Outyears                         | 52,371                                           | 52,371             | 77,314         |
| <b>Total TEC</b>                 | <b>236,643</b>                                   | <b>236,643</b>     | <b>236,643</b> |
| <b>Other Project Costs (OPC)</b> |                                                  |                    |                |
| Prior Years                      | 17,500                                           | 17,500             | 15,540         |
| FY 2025                          | 10,000                                           | 10,000             | 10,319         |
| FY 2026                          | 2,000                                            | 2,000              | 1,629          |
| FY 2027                          | 1,500                                            | 1,500              | 1,885          |
| FY 2028                          | 500                                              | 500                | 1,014          |
| FY 2029                          | 4,168                                            | 4,168              | 1,145          |
| FY 2030                          | 3,891                                            | 3,891              | 3,754          |
| FY 2031                          | -                                                | -                  | 1,416          |
| Outyears                         | 8,561                                            | 8,561              | 11,418         |
| <b>Total, OPC</b>                | <b>48,120</b>                                    | <b>48,120</b>      | <b>48,120</b>  |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                |
| Prior Years                      | 17,500                                           | 17,500             | 15,540         |
| FY 2025                          | 10,000                                           | 10,000             | 10,319         |
| FY 2026                          | 23,248                                           | 23,248             | 22,465         |
| FY 2027                          | 27,500                                           | 27,500             | 27,750         |
| FY 2028                          | 21,024                                           | 21,024             | 21,557         |
| FY 2029                          | 30,668                                           | 30,668             | 19,646         |

|                  |                |                |                |
|------------------|----------------|----------------|----------------|
| FY 2030          | 78,891         | 78,891         | 53,900         |
| FY 2031          | 15,000         | 15,000         | 24,854         |
| Outyears         | 60,932         | 60,932         | 88,732         |
| <b>Total TPC</b> | <b>284,763</b> | <b>284,763</b> | <b>284,763</b> |

#### Accelerator Subproject (26-D-513-03)

|                                      |                | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|--------------------------------------|----------------|--------------------------------------------------|--------------------|----------------|
| <b>Total Estimated Cost (TEC)</b>    |                |                                                  |                    |                |
| <b>Design</b>                        |                |                                                  |                    |                |
|                                      | FY 2026        | 3,500                                            | 3,500              | 2,499          |
|                                      | FY 2027        | 14,000                                           | 14,000             | 14,852         |
|                                      | FY 2028        | 23,000                                           | 23,000             | 22,555         |
|                                      | FY 2029        | 29,195                                           | 29,195             | 25,935         |
|                                      | FY 2030        | -                                                | -                  | 3,854          |
|                                      | FY 2031        | -                                                | -                  | -              |
|                                      | Outyears       | 16,840                                           | 16,840             | 16,840         |
| <b>Total Design</b>                  |                | <b>86,535</b>                                    | <b>86,535</b>      | <b>86,535</b>  |
| <b>Construction</b>                  |                |                                                  |                    |                |
|                                      | FY 2027        | -                                                | -                  | -              |
|                                      | FY 2028        | -                                                | -                  | -              |
|                                      | FY 2029        | 1,500                                            | 1,500              | 699            |
|                                      | FY 2030        | 30,995                                           | 30,995             | 19,652         |
|                                      | FY 2031        | 100,000                                          | 100,000            | 97,197         |
|                                      | Outyears       | 80,138                                           | 80,138             | 95,085         |
| <b>Total Construction</b>            |                | <b>212,633</b>                                   | <b>212,633</b>     | <b>212,633</b> |
| <b>TEC</b>                           |                |                                                  |                    |                |
|                                      | FY 2026        | 3,500                                            | 3,500              | 2,499          |
|                                      | FY 2027        | 14,000                                           | 14,000             | 14,852         |
|                                      | FY 2028        | 23,000                                           | 23,000             | 22,555         |
|                                      | FY 2029        | 30,695                                           | 30,695             | 26,634         |
|                                      | FY 2030        | 30,995                                           | 30,995             | 23,506         |
|                                      | FY 2031        | 100,000                                          | 100,000            | 97,197         |
|                                      | Outyears       | 96,978                                           | 96,978             | 111,925        |
| <b>Total TEC</b>                     |                | <b>299,168</b>                                   | <b>299,168</b>     | <b>299,168</b> |
| <b>Other Project Costs<br/>(OPC)</b> |                |                                                  |                    |                |
|                                      | Prior<br>Years | 20,000                                           | 20,000             | 13,713         |
|                                      | FY 2025        | 5,000                                            | 5,000              | 9,106          |
|                                      | FY 2026        | -                                                | -                  | 195            |

|                                      | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|--------------------------------------|--------------------------------------------------|--------------------|----------------|
| FY 2027                              | 1,000                                            | 1,000              | 1,082          |
| FY 2028                              | 500                                              | 500                | 1,055          |
| FY 2029                              | 1,990                                            | 1,990              | 968            |
| FY 2030                              | 5,000                                            | 5,000              | 1,850          |
| FY 2031                              | 1,226                                            | 1,226              | 5,873          |
| Outyears                             | 11,784                                           | 11,784             | 12,658         |
| <b>Total, OPC</b>                    | <b>46,500</b>                                    | <b>46,500</b>      | <b>46,500</b>  |
| <b>Total Project Costs<br/>(TPC)</b> |                                                  |                    |                |
| Prior<br>Years                       | 20,000                                           | 20,000             | 13,713         |
| FY 2025                              | 5,000                                            | 5,000              | 9,106          |
| FY 2026                              | 3,500                                            | 3,500              | 2,694          |
| FY 2027                              | 15,000                                           | 15,000             | 15,934         |
| FY 2028                              | 23,500                                           | 23,500             | 23,610         |
| FY 2029                              | 32,685                                           | 32,685             | 27,602         |
| FY 2030                              | 35,995                                           | 35,995             | 25,356         |
| FY 2031                              | 101,226                                          | 101,226            | 103,070        |
| Outyears                             | 108,762                                          | 108,762            | 124,583        |
| <b>Total TPC</b>                     | <b>345,668</b>                                   | <b>345,668</b>     | <b>345,668</b> |

**Office/Light Laboratory (OLL) Subproject (26-D-513-04)**

|                                   | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|--------------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                                  |                    |               |
| <b>Design</b>                     |                                                  |                    |               |
| FY 2026                           | -                                                | -                  | -             |
| FY 2027                           | 7,000                                            | 7,000              | 6,411         |
| FY 2028                           | 7,910                                            | 7,910              | 8,499         |
| FY 2029                           | -                                                | -                  | -             |
| FY 2030                           | -                                                | -                  | -             |
| FY 2031                           | -                                                | -                  | -             |
| Outyears                          | 3,603                                            | 3,603              | 3,603         |
| <b>Total Design</b>               | <b>18,513</b>                                    | <b>18,513</b>      | <b>18,513</b> |
| <b>Construction</b>               |                                                  |                    |               |
| FY 2027                           | 500                                              | 500                | 430           |
| FY 2028                           | 45,000                                           | 45,000             | 39,578        |



|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|----------------------------------|--------------------------------------------------|--------------------|----------------|
| FY 2029                          | 70,536                                           | 70,536             | 62,938         |
| FY 2030                          | -                                                | -                  | 13,090         |
| FY 2031                          | -                                                | -                  | -              |
| Outyears                         | 28,038                                           | 28,038             | 28,038         |
| <b>Total Construction</b>        | <b>144,074</b>                                   | <b>144,074</b>     | <b>144,074</b> |
| <b>TEC</b>                       |                                                  |                    |                |
| FY 2026                          | -                                                | -                  | -              |
| FY 2027                          | 7,500                                            | 7,500              | 6,841          |
| FY 2028                          | 52,910                                           | 52,910             | 48,077         |
| FY 2029                          | 70,536                                           | 70,536             | 62,938         |
| FY 2030                          | -                                                | -                  | 13,090         |
| FY 2031                          | -                                                | -                  | -              |
| Outyears                         | 31,641                                           | 31,641             | 31,641         |
| <b>Total TEC</b>                 | <b>162,587</b>                                   | <b>162,587</b>     | <b>162,587</b> |
| <b>Other Project Costs (OPC)</b> |                                                  |                    |                |
| Prior Years                      | 4,554                                            | 4,554              | 1,825          |
| FY 2025                          | 1,500                                            | 1,500              | 1,212          |
| FY 2026                          | -                                                | -                  | -              |
| FY 2027                          | 1,000                                            | 1,000              | 488            |
| FY 2028                          | -                                                | -                  | 2,576          |
| FY 2029                          | 4,010                                            | 4,010              | 3,912          |
| FY 2030                          | -                                                | -                  | 1,051          |
| FY 2031                          | -                                                | -                  | -              |
| Outyears                         | 2,673                                            | 2,673              | 2,673          |
| <b>Total, OPC</b>                | <b>13,737</b>                                    | <b>13,737</b>      | <b>13,737</b>  |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                |
| Prior Years                      | 4,554                                            | 4,554              | 1,825          |
| FY 2025                          | 1,500                                            | 1,500              | 1,212          |
| FY 2026                          | -                                                | -                  | -              |
| FY 2027                          | 8,500                                            | 8,500              | 7,329          |
| FY 2028                          | 52,910                                           | 52,910             | 50,653         |
| FY 2029                          | 74,546                                           | 74,546             | 66,850         |
| FY 2030                          | -                                                | -                  | 14,141         |
| FY 2031                          | -                                                | -                  | -              |
| Outyears                         | 34,314                                           | 34,314             | 34,314         |
| <b>Total TPC</b>                 | <b>176,324</b>                                   | <b>176,324</b>     | <b>176,324</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 275,227                               | 400,000                                | N/A                                        |
|                                    | Federal Support              | 4,329                                 | 5,000                                  | N/A                                        |
|                                    | Contingency                  | 31,423                                | 215,000                                | N/A                                        |
|                                    | Undistributed Budget         | 69,768                                | N/A                                    | N/A                                        |
| <b>Total Design</b>                |                              | <b>380,746</b>                        | <b>620,000</b>                         | <b>N/A</b>                                 |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | 33,633                                | 30,000                                 | N/A                                        |
|                                    | LLP Equipment                | 164,871                               | 130,000                                | N/A                                        |
|                                    | Construction/Fab/Install     | 754,299                               | 660,000                                | N/A                                        |
|                                    | MOC Construction             | 13,766                                | N/A                                    | N/A                                        |
|                                    | Fuel                         | 132,716                               | 20,000                                 | N/A                                        |
|                                    | Federal Support              | 22,565                                | 15,000                                 | N/A                                        |
|                                    | Contingency                  | 499,016                               | 430,000                                | N/A                                        |
|                                    | Undistributed Budget         | 363,639                               | N/A                                    | N/A                                        |
| <b>Total Construction</b>          |                              | <b>1,984,506</b>                      | <b>1,285,000</b>                       | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>2,365,252</b>                      | <b>1,905,000</b>                       | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                              | <i>530,439</i>                        | <i>645,000</i>                         | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | 87,711                                | 90,965                                 | N/A                                        |
|                                    | ESHQ                         | 112,918                               | 20,000                                 | N/A                                        |
|                                    | Transition To Ops            | 123,248                               | 70,000                                 | N/A                                        |
|                                    | Federal Support              | 4,943                                 | 4,000                                  | N/A                                        |
|                                    | Contingency                  | 26,264                                | 36,035                                 | N/A                                        |
|                                    | Undistributed Budget         | 79,663                                | N/A                                    | N/A                                        |
| <b>Total OPC</b>                   |                              | <b>434,748</b>                        | <b>221,000</b>                         | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                              | <i>26,264</i>                         | <i>36,035</i>                          | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                              | <b>2,800,000</b>                      | <b>2,126,000</b>                       | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>556,703</b>                        | <b>681,035</b>                         | <b>N/A</b>                                 |

## Nuclear Facility and CUB/CAS Subproject

|                                    |                              | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                              |                               |                                   |
| <b>Design</b>                      |                              |                              |                               |                                   |
|                                    | Design                       | 138,585                      | N/A                           | N/A                               |
|                                    | Federal Support              | 2,185                        | N/A                           | N/A                               |
|                                    | Contingency                  | 16,187                       | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 35,213                       | N/A                           | N/A                               |
| <b>Total Design</b>                |                              | <b>192,171</b>               | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Construction</b>                |                              |                              |                               |                                   |
|                                    | Site Preparation             | 33,633                       | N/A                           | N/A                               |
|                                    | LLP Equipment                | 143,714                      | N/A                           | N/A                               |
|                                    | Construction/Fab/Install     | 453,218                      | N/A                           | N/A                               |
|                                    | MOC Construction             | 13,766                       | N/A                           | N/A                               |
|                                    | Fuel                         | 132,716                      | N/A                           | N/A                               |
|                                    | Federal Support              | 16,768                       | N/A                           | N/A                               |
|                                    | Contingency                  | 410,648                      | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 270,219                      | N/A                           | N/A                               |
| <b>Total Construction</b>          |                              | <b>1,474,683</b>             | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>1,666,853</b>             | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, TEC</i>            |                              | <i>426,835</i>               | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>   |                              |                              |                               |                                   |
|                                    | Conceptual Planning & Design | 35,997                       | N/A                           | N/A                               |
|                                    | ESHQ                         | 81,557                       | N/A                           | N/A                               |
|                                    | Transition To Ops            | 123,248                      | N/A                           | N/A                               |
|                                    | Federal Support              | 3,711                        | N/A                           | N/A                               |
|                                    | Contingency                  | 22,070                       | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 59,808                       | N/A                           | N/A                               |
| <b>Total OPC</b>                   |                              | <b>326,391</b>               | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                              | <i>22,070</i>                | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                              | <b>1,993,245</b>             | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>448,905</b>               | <b>N/A</b>                    | <b>N/A</b>                        |

## Reactor Subproject

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 62,663                                | N/A                                    | N/A                                        |
|                                    | Federal Support              | 950                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | 4,609                                 | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 15,305                                | N/A                                    | N/A                                        |
| <b>Total Design</b>                |                              | <b>83,527</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | -                                     | N/A                                    | N/A                                        |
|                                    | LLP Equipment                | 9,083                                 | N/A                                    | N/A                                        |
|                                    | Construction/Fab/Install     | 88,853                                | N/A                                    | N/A                                        |
|                                    | MOC Construction             | -                                     | N/A                                    | N/A                                        |
|                                    | Fuel                         | -                                     | N/A                                    | N/A                                        |
|                                    | Federal Support              | 1,741                                 | N/A                                    | N/A                                        |
|                                    | Contingency                  | 25,381                                | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 28,057                                | N/A                                    | N/A                                        |
| <b>Total Construction</b>          |                              | <b>153,116</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>236,643</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                              | <i>29,990</i>                         | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | 25,859                                | N/A                                    | N/A                                        |
|                                    | ESHQ                         | 11,641                                | N/A                                    | N/A                                        |
|                                    | Transition To Ops            | -                                     | N/A                                    | N/A                                        |
|                                    | Federal Support              | 547                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | 1,256                                 | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 8,817                                 | N/A                                    | N/A                                        |
| <b>Total OPC</b>                   |                              | <b>48,120</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                              | <i>1,256</i>                          | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                              | <b>284,763</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>31,246</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |

## Accelerator Subproject

|                                    |                              | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                                       |                                        |                                            |
| <b>Design</b>                      |                              |                                       |                                        |                                            |
|                                    | Design                       | 60,275                                | N/A                                    | N/A                                        |
|                                    | Federal Support              | 984                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | 9,420                                 | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 15,857                                | N/A                                    | N/A                                        |
| <b>Total Design</b>                |                              | <b>86,535</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Construction</b>                |                              |                                       |                                        |                                            |
|                                    | Site Preparation             | -                                     | N/A                                    | N/A                                        |
|                                    | LLP Equipment                | 11,956                                | N/A                                    | N/A                                        |
|                                    | Construction/Fab/Install     | 106,738                               | N/A                                    | N/A                                        |
|                                    | MOC Construction             | -                                     | N/A                                    | N/A                                        |
|                                    | Fuel                         | -                                     | N/A                                    | N/A                                        |
|                                    | Federal Support              | 2,418                                 | N/A                                    | N/A                                        |
|                                    | Contingency                  | 52,559                                | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 38,963                                | N/A                                    | N/A                                        |
| <b>Total Construction</b>          |                              | <b>212,633</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>299,168</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                              | <i>61,978</i>                         | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                              |                                       |                                        |                                            |
|                                    | Conceptual Planning & Design | 22,819                                | N/A                                    | N/A                                        |
|                                    | ESHQ                         | 11,964                                | N/A                                    | N/A                                        |
|                                    | Transition To Ops            | -                                     | N/A                                    | N/A                                        |
|                                    | Federal Support              | 529                                   | N/A                                    | N/A                                        |
|                                    | Contingency                  | 2,668                                 | N/A                                    | N/A                                        |
|                                    | Undistributed Budget         | 8,521                                 | N/A                                    | N/A                                        |
| <b>Total OPC</b>                   |                              | <b>46,500</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                              | <i>2,668</i>                          | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                              | <b>345,668</b>                        | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>64,646</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |

## Office/Light Laboratory (OLL) Subproject

|                                    |                              | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|------------------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                              |                              |                               |                                   |
| <b>Design</b>                      |                              |                              |                               |                                   |
|                                    | Design                       | 13,704                       | N/A                           | N/A                               |
|                                    | Federal Support              | 211                          | N/A                           | N/A                               |
|                                    | Contingency                  | 1,207                        | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 3,392                        | N/A                           | N/A                               |
| <b>Total Design</b>                |                              | <b>18,513</b>                | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Construction</b>                |                              |                              |                               |                                   |
|                                    | Site Preparation             | -                            | N/A                           | N/A                               |
|                                    | LLP Equipment                | 117                          | N/A                           | N/A                               |
|                                    | Construction/Fab/Install     | 105,490                      | N/A                           | N/A                               |
|                                    | MOC Construction             | -                            | N/A                           | N/A                               |
|                                    | Fuel                         | -                            | N/A                           | N/A                               |
|                                    | Federal Support              | 1,638                        | N/A                           | N/A                               |
|                                    | Contingency                  | 10,428                       | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 26,400                       | N/A                           | N/A                               |
| <b>Total Construction</b>          |                              | <b>144,074</b>               | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                              | <b>162,588</b>               | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, TEC</i>            |                              | <i>11,635</i>                | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>   |                              |                              |                               |                                   |
|                                    | Conceptual Planning & Design | 3,037                        | N/A                           | N/A                               |
|                                    | ESHQ                         | 7,756                        | N/A                           | N/A                               |
|                                    | Transition To Ops            | -                            | N/A                           | N/A                               |
|                                    | Federal Support              | 156                          | N/A                           | N/A                               |
|                                    | Contingency                  | 270                          | N/A                           | N/A                               |
|                                    | Undistributed Budget         | 2,517                        | N/A                           | N/A                               |
| <b>Total OPC</b>                   |                              | <b>13,737</b>                | <b>N/A</b>                    | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                              | <i>270</i>                   | <i>N/A</i>                    | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                              | <b>176,324</b>               | <b>N/A</b>                    | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                              | <b>11,905</b>                | <b>N/A</b>                    | <b>N/A</b>                        |

## 5. Schedule of Appropriations Requests

| Request Year | Type | Prior Years | FY2025 | FY2026 | FY2027  | FY2028  | FY2029  | FY2030  | FY2031  | Outyears  | Total     |
|--------------|------|-------------|--------|--------|---------|---------|---------|---------|---------|-----------|-----------|
| FY 2026      | TEC  | -           | -      | 48,748 | N/A     | N/A     | N/A     | N/A     | N/A     | 1,856,252 | 1,905,000 |
|              | OPC  | 69,054      | 31,500 | 3,500  | N/A     | N/A     | N/A     | N/A     | N/A     | 116,946   | 221,000   |
|              | TPC  | 69,054      | 31,500 | 52,248 | N/A     | N/A     | N/A     | N/A     | N/A     | 1,973,198 | 2,126,000 |
| FY 2027      | TEC  | -           | -      | 47,748 | 100,000 | 171,500 | 192,404 | 220,995 | 278,951 | 1,353,654 | 2,365,252 |
|              | OPC  | 67,054      | 31,500 | 4,500  | 5,000   | 4,500   | 18,168  | 26,891  | 23,226  | 253,909   | 434,748   |
|              | TPC  | 67,054      | 31,500 | 52,248 | 105,000 | 176,000 | 210,572 | 247,886 | 302,177 | 1,607,563 | 2,800,000 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 4Q FY 2038 |
| Expected Useful Life (number of years)                              | 50         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 4Q FY 2088 |

Related Funding Requirements  
(Budget Authority in “Then Year” Millions of Dollars)

| Funding Requirements                    | Annual Costs      |                  | Life Cycle Costs  |                  |
|-----------------------------------------|-------------------|------------------|-------------------|------------------|
| Estimate Totals                         | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate |
| Operations and Maintenance <sup>1</sup> | 60                | 60               | 13,800-\$16,900   | 13,800-\$16,900  |

## 7. D&D Information

D&D costs are not included in the TPC.

|                                                                                                         | Square Feet |
|---------------------------------------------------------------------------------------------------------|-------------|
| New area being constructed by this project                                                              | 150,000     |
| Area of D&D in this project at SNL                                                                      | NA          |
| Area at SNL to be transferred, sold, and/or D&D outside the project, including area previously “banked” | 150,000     |
| Area of D&D in this project at other sites                                                              | NA          |

<sup>1</sup> The current estimates are from the AOA and may be updated based on the CD-1 approval.

## 8. Acquisition Approach

The CREST Acquisition Strategy is to execute through the Management and Operating (M&O) contractor at SNL, acting as a Prime Contractor and includes efficient methods of execution. One method is to use a separate contract line item number (CLIN) included in the M&O contract, which will separate the capital asset design and construction work from the regular operations of the laboratory. This separate CLIN allows DOE/NNSA to establish a separate profit/fee to incentivize early completion and under budget execution of the work. Another method is to use umbrella agreements that the M&O has access to that will allow for efficient procurement of the design, and potentially construction, subcontracts. These agreements include pre-established terms and conditions under which task orders can efficiently be placed, as well as contracting vehicles with multiple A/E firms capable of delivering the design of the Nuclear Facility and CUB/CAS and the OLL. Additionally, the execution of the OLL scope will be tailored using NNSA Supplemental Directive 413.3-7, *Project Management for Non-Nuclear, Non-Complex Capital Asset Acquisition*.

The use of Early Contractor Involvement (ECI) and/or Construction Manager at Risk (CMAR) during the design phase will be explored, which is intended to improve the constructability of the design and reduce design document ambiguity. During preliminary and final design, a competitively selected subcontractor may become part of the Integrated Project Team and perform design reviews with a particular focus on constructability. Through continuous engagement during design evolution, the ECI/CMAR subcontractor develops an execution plan for construction and develops and continues to update its construction cost estimate. When the design is sufficiently advanced, the ECI/CMAR may provide a Fixed Firm Price offer for construction.



**26-D-514, National Ignition Facility Enhanced Fusion Yield Capability (NIF EYC) Project**  
**Lawrence Livermore National Laboratory, California**  
**Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The Fiscal Year (FY) 2027 Request for the National Ignition Facility (NIF) Enhanced Fusion Yield Capability (EYC) Project is \$84,000,000 of Total Project Cost (TPC) funds. The most recent Department of Energy (DOE) Order (O) 413.3B, *Program & Project Management For The Acquisition Of Capital Assets*, Critical Decision (CD) is CD-0, *Approve Mission Need*, which was approved on September 30, 2024, with a cost range of \$470,000,000 to \$1,000,000,000 and a CD-4 range of Quarter (Q)1 FY 2031 – Q4 FY 2035. CD-1, *Approve Alternate Selection and Cost Range*, was approved on March 27, 2026. Funding within the project's line-item is requested at the TPC level. The requested Total Estimated Cost (TEC) funds will support design and initiation of long lead procurement. The funding profile for the project supports a \$700,000,000 TPC instead of the top end of the CD-0 range.

This project began Other Project Cost (OPC) activities in FY 2025 with funding provided by the Inertial Confinement Fusion program, but in FY 2026, the OPC funding became part of the line-item request. Due to the non-nuclear and non-complex nature of this project, the project will seek to tailor DOE O 413.3B where able, in accordance with the National Nuclear Security Administration (NNSA) SD-413.3-7, *Project Management For Non-Nuclear, Non-Complex Capital Asset Acquisition*, which may significantly decrease the duration between CDs compared to projects executed under DOE O 413.3B. The Critical Milestone History table conservatively estimates CD timelines based on the level of effort required for each CD, but the project expects to achieve milestones faster than usual.

On December 12, 2025, a Federal Project Director (FPD) was designated for the project.

**Significant Changes**

The Conceptual Design was completed in July 2025, an Independent Cost Review (ICR) was completed in August 2025, and an Independent Project Review (IPR) was completed in September 2025. The design estimate was reduced by \$7,500,000 and this was shifted to allow for more long lead procurement.

**Critical Milestone History**

| <b>Fiscal Year</b> | <b>CD-0</b> | <b>Conceptual Design Complete</b> | <b>CD-1</b> | <b>CD-2</b> | <b>Final Design Complete</b> | <b>CD-3</b> | <b>CD-4</b> |
|--------------------|-------------|-----------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| FY 2026            | 9/30/2024   | Q4 FY 2025                        | Q1 FY 2026  | Q2 FY 2028  | Q1 FY 2028                   | Q2 FY 2028  | Q2 FY 2033  |
| FY 2027            | 9/30/2024   | 7/21/2025                         | 3/27/2026   | Q2 FY 2028  | Q1 FY 2028                   | Q2 FY 2028  | Q2 FY 2033  |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** - Actual date the conceptual design was completed

**CD-1** - Approve Design Scope and Project Cost and Schedule Ranges

**CD-2** - Approve Project Performance Baseline

**Final Design Complete** - Estimated date the project design will be completed

**CD-3** - Approve Start of Construction

**CD-4** - Approve Start of Operations or Project Closeout

| <b>Fiscal Year</b> | <b>CD-3A</b> |
|--------------------|--------------|
| FY 2026            | Q2 FY 2026   |
| FY 2027            | Q4 FY 2026   |

## **CD-3A – Approve Long Lead Procurement**

### **Project Cost History (\$K)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|-------------------|------------|
| FY 2026            | 30,000             | 635,000                  | 665,000           | 35,000            | 700,00     |
| FY 2027            | 22,500             | 642,500                  | 665,000           | 35,000            | 700,00     |

## **2. Project Scope and Justification**

### **Scope**

The EYC mission seeks to benefit from the demonstrated NIF ignition platform by upgrading the NIF laser from a nominal laser energy of 2.2 megajoules (MJ) to 2.6 MJ.

The EYC Project would consist of three primary activities:

1. **Laser glass:** Insertion of surplus amplifier glass into existing amplifier glass bays in the laser chain. Each bundle (8 beams) currently passes through 15 amplifier slabs; the EYC project will add two additional slabs to each beamline.
2. **Optics upgrade:** To support the higher laser fluences, the optics components would need to be replaced with higher quality alternatives or undergo certain conditioning techniques to ensure their optimal performance under the increased laser fluence. Optical components that meet the project requirements can be procured from an existing vendor base to support this upgrade, but these are long-lead items that must be ordered in the early phase of the EYC project.
3. **Facility modification:** The NIF must be modified to safely support the fusion yields anticipated from experiments at higher laser energy. In practice this means upgrading the facility safety basis to 120MJ (the maximum credible yield calculated for an experiment when the EYC project is complete); this would be done through minor adjustments (replacing doors, sealing gaps, replacing some aluminum components with material less prone to activation) and increased administrative controls (additional stay-out areas and recharacterization of some areas to require radiation-cleared workers).

### **Justification**

The EYC project at the NIF would upgrade the laser output from a nominal energy of 2.2 MJ to 2.6 MJ, enabling fusion yields of approximately 30-40 MJ. This enhancement is crucial for achieving high-energy-density (HED) conditions, which have not been accessible since the cessation of underground nuclear testing. NIF is the only facility in the world to achieve a fusion burn chain-reaction ignition in the laboratory, and the increased laser energy will significantly advance the NNSA's ability to generate the conditions necessary to address pressing stockpile questions.

Many of the largest uncertainties in nuclear weapon science exist within the HED regime, a state of matter previously only achievable through underground testing. The fusion ignition experiments at NIF serve as a

unique tool for reaching these conditions. The enhanced fusion yields produced by the EYC will enable the NNSA to reduce gaps and uncertainties surrounding complex HED phenomena critical to nuclear weapon design, certification, and assessment. Key areas of study at NIF include:

- Fusion Physics
- Survivability: Neutrons
- Survivability: X-Rays
- Boost Physics
- Nuclear Reactions of Unstable Nuclei: Fission and Radiochemistry
- Material Properties: Opacity & Radiation Transport
- Material Properties: Equation of State (EOS)
- Hydrodynamic Mixing

The upgrade will not only enhance the Science-Based Stockpile Stewardship Program by expanding the study of dynamic physical processes and material properties under conditions similar to those in nuclear weapons, but it will also provide experimental data that improves physics modeling and design processes.

The EYC project aligns with the NNSA's strategic goals of maintaining a safe, secure, and effective nuclear deterrent, addressing the risks associated with future high-yield facilities, and supporting the modernization of nuclear security infrastructure. This initiative will also contribute to workforce development by providing advanced experimental capabilities and training opportunities for future stockpile scientists.

Details regarding the specific applications of NIF to these areas are outlined in the classified NIF EYC Mission Need Statement.

#### **Preliminary Key Performance Parameters (KPPs)**

The preliminary Key Performance Parameters for the EYC project are derived from the mission needs considering the current configuration of existing facilities, assessments of current facility conditions and effectiveness, and current and future Lawrence Livermore National Laboratory (LLNL) missions. The following table lists the program requirements for the EYC project.

| # | Key Performance Parameter Description                                                                                                                                                                                                                                                 | Threshold Value                                                                                                                                                              |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | The solution must provide sufficient laser energy and power to enable increased fusion yields in support of activities for the current and future stockpile, fusion physics and scaling to high-yield, threat mitigation, and other nuclear weapons-related research and development. | 2.6 MJ & 450 Terawatts (TW)                                                                                                                                                  |
| 2 | The solution must provide optics readiness to support operations at increased laser energy.                                                                                                                                                                                           | The facility will implement the necessary optical mitigation methods, new optical components, and new optical capabilities to support recurring 2.6 MJ & 450 TW laser shots. |

|   |                                                                                                                     |                                                             |
|---|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 3 | The solution must provide the necessary personnel radiation protection measures to support increased fusion yields. | Enable single shot operations up to 60 MJ of neutron yield. |
|---|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|

### 3. Financial Schedule (\$K)<sup>1</sup>

|                                   | Budget<br>Authority<br>(Appropriations) | Obligations    | Costs          |
|-----------------------------------|-----------------------------------------|----------------|----------------|
| <b>Total Estimated Cost (TEC)</b> |                                         |                |                |
| <b>Design</b>                     |                                         |                |                |
| FY 2026                           | 22,500                                  | 22,500         | 5,000          |
| FY 2027                           | -                                       | -              | 17,500         |
| <b>Total Design</b>               | <b>22,500</b>                           | <b>22,500</b>  | <b>22,500</b>  |
| <b>Construction</b>               |                                         |                |                |
| FY 2026                           | 2,000                                   | 2,000          | 1,000          |
| FY 2027                           | 84,000                                  | 84,000         | 70,000         |
| FY 2028                           | 148,480                                 | 148,480        | 155,000        |
| FY 2029                           | 115,000                                 | 115,000        | 120,000        |
| FY 2030                           | 52,000                                  | 52,000         | 50,000         |
| FY 2031                           | 41,000                                  | 41,000         | 42,500         |
| Outyears                          | 200,020                                 | 200,020        | 204,000        |
| <b>Total Construction</b>         | <b>642,500</b>                          | <b>642,500</b> | <b>642,500</b> |
| <b>TEC</b>                        |                                         |                |                |
| FY 2026                           | 24,500                                  | 24,500         | 6,000          |
| FY 2027                           | 84,000                                  | 84,000         | 87,500         |
| FY 2028                           | 148,480                                 | 148,480        | 155,000        |
| FY 2029                           | 115,000                                 | 115,000        | 120,000        |
| FY 2030                           | 52,000                                  | 52,000         | 50,000         |
| FY 2031                           | 41,000                                  | 41,000         | 42,500         |
| Outyears                          | 200,020                                 | 200,020        | 204,000        |
| <b>Total TEC</b>                  | <b>665,000</b>                          | <b>665,000</b> | <b>665,000</b> |
| <b>Other Project Costs (OPC)</b>  |                                         |                |                |
| Prior Years                       | 500                                     | 500            | 500            |
| FY 2025                           | 500                                     | 500            | 500            |
| FY 2026                           | 1,500                                   | 1,500          | 1,500          |
| FY 2027                           | -                                       | -              | -              |
| FY 2028                           | -                                       | -              | -              |
| FY 2029                           | -                                       | -              | -              |

<sup>1</sup> The project has not yet been approved for CD-2 and therefore has not been baselined. Outyear funding amounts may be revised in future budget requests as NNSA baselines the project in accordance with DOE Order 413.3B.

|                                  | <b>Budget<br/>Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>   |
|----------------------------------|--------------------------------------------------|--------------------|----------------|
| FY 2030                          | -                                                | -                  | -              |
| FY 2031                          | 14,000                                           | 14,000             | 12,000         |
| Outyears                         | 18,500                                           | 18,500             | 20,500         |
| <b>Total, OPC</b>                | <b>35,000</b>                                    | <b>35,000</b>      | <b>35,000</b>  |
| <b>Total Project Costs (TPC)</b> |                                                  |                    |                |
| Prior Years                      | 500                                              | 500                | 500            |
| FY 2025                          | 500                                              | 500                | 500            |
| FY 2026                          | 26,000                                           | 26,000             | 7,500          |
| FY 2027                          | 84,000                                           | 84,000             | 87,500         |
| FY 2028                          | 148,480                                          | 148,480            | 155,000        |
| FY 2029                          | 115,000                                          | 115,000            | 120,000        |
| FY 2030                          | 52,000                                           | 52,000             | 50,000         |
| FY 2031                          | 55,000                                           | 55,000             | 54,500         |
| Outyears                         | 218,520                                          | 218,520            | 224,500        |
| <b>Total TPC</b>                 | <b>700,000</b>                                   | <b>700,000</b>     | <b>700,000</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                    |                   | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|------------------------------------|-------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                   |                              |                               |                                   |
| <b>Design</b>                      |                   |                              |                               |                                   |
|                                    | Design            | 10,000                       | 22,000                        | N/A                               |
|                                    | Federal Support   | 2,500                        | 2,500                         | N/A                               |
|                                    | Contingency       | 10,000                       | 5,500                         | N/A                               |
| <b>Total Design</b>                |                   | <b>22,500</b>                | <b>30,000</b>                 | <b>N/A</b>                        |
| <b>Construction</b>                |                   |                              |                               |                                   |
|                                    | Site Preparation  | 15,000                       | 15,000                        | N/A                               |
|                                    | Long Lead         |                              |                               |                                   |
|                                    | Procurement       | 107,500                      | 100,000                       | N/A                               |
|                                    | Equipment         | 375,000                      | 375,000                       | N/A                               |
|                                    | Construction      | 26,000                       | 26,000                        | N/A                               |
|                                    | Federal Support   | 16,100                       | 16,100                        | N/A                               |
|                                    | Contingency       | 102,900                      | 102,900                       | N/A                               |
| <b>Total Construction</b>          |                   | <b>642,500</b>               | <b>635,000</b>                | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>  |                   | <b>665,000</b>               | <b>665,000</b>                | <b>N/A</b>                        |
| <i>Contingency, TEC</i>            |                   | <i>112,900</i>               | <i>108,400</i>                | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>   |                   |                              |                               |                                   |
| OPC except D&D                     |                   |                              |                               |                                   |
|                                    | Business Case     |                              |                               |                                   |
|                                    | Analysis          | 500                          | 500                           | N/A                               |
|                                    | Conceptual Design | 1,000                        | 1,000                         | N/A                               |
|                                    | CD-1 Preparation  | 1,000                        | 500                           | N/A                               |
|                                    | Federal Support   | 3,500                        | 4,000                         | N/A                               |
|                                    | Start-up & TTO    | 20,000                       | 20,000                        | N/A                               |
|                                    | Project Closeout  | 2,000                        | 2,000                         | N/A                               |
|                                    | Contingency       | 7,000                        | 7,000                         | N/A                               |
| <b>Total OPC</b>                   |                   | <b>35,000</b>                | <b>35,000</b>                 | <b>N/A</b>                        |
| <i>Contingency, OPC</i>            |                   | <i>7,000</i>                 | <i>7,000</i>                  | <i>N/A</i>                        |
| <b>Total Project Cost</b>          |                   | <b>700,000</b>               | <b>700,000</b>                | <b>N/A</b>                        |
| <b>Total Contingency (TEC+OPC)</b> |                   | <b>119,900</b>               | <b>115,400</b>                | <b>N/A</b>                        |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears | Total   |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| FY 2026      | TEC  | -           | -       | 24,500  | N/A     | N/A     | N/A     | N/A     | N/A     | 640,500  | 665,000 |
|              | OPC  | 500         | 500     | 1,500   | N/A     | N/A     | N/A     | N/A     | N/A     | 32,500   | 35,000  |
|              | TPC  | 500         | 500     | 26,000  | N/A     | N/A     | N/A     | N/A     | N/A     | 673,000  | 700,000 |
| FY 2027      | TEC  | -           | -       | 24,500  | 84,000  | 148,480 | 115,000 | 52,000  | 41,000  | 200,020  | 665,000 |
|              | OPC  | 500         | 500     | 1,500   | -       | -       | -       | -       | 14,000  | 18,500   | 35,000  |
|              | TPC  | 500         | 500     | 26,000  | 84,000  | 148,480 | 115,000 | 52,000  | 55,000  | 218,520  | 700,000 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | Q2 FY 2033 |
| Expected Useful Life (number of years)                              | 20         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | Q2 FY 2053 |

The increased laser energy at NIF does not allow for a higher number of shots executed per year, meaning overall operational costs are expected to remain unchanged from current NIF operations costs.

## 7. D&D Information

Deactivation and Decommissioning (D&D) is not included in the scope of the EYC project.

## 8. Acquisition Approach

The conceptual design was led by the LLNL Management and Operating contractor who will form a management and technical team structure to perform design, production, integration, and commissioning activities. The Acquisition Strategy is being finalized for the acquisition of the design and construction of the facility as part of the CD-1 approval package. NNSA is budgeting to \$700,000,000 rather than the top end of the CD-1 range and will work to minimize use of Management Reserve and Contingency to meet this amount through diligent cost and schedule management and leveraging tailored and efficient management solutions where able.

## **Infrastructure and Operations**

### **Overview**

The Infrastructure and Operations program maintains, operates, and modernizes the National Nuclear Security Administration (NNSA) infrastructure in a safe, secure, and cost-effective manner to support all NNSA programs. Infrastructure and Operations efforts provide a comprehensive approach to modernizing NNSA infrastructure while maximizing return on investment, enabling program results, and reducing enterprise risk. The program also plans, prioritizes, and constructs mission-enabling facilities and infrastructure.

### **Operations of Facilities**

The Operations of Facilities program provides the funding required to operate NNSA facilities in a safe and secure manner. Operations of Facilities is fundamental to achieving NNSA's plutonium, uranium, tritium, lithium, high explosives, and other mission objectives. This program includes essential support such as water and electrical utilities; safety systems; and lease agreements.

### **Safety and Environmental Operations**

The Safety and Environmental Operations program provides funding to support the Department's Nuclear Criticality Safety Program (NCSP) subprogram, Nuclear Safety Research and Development (NSR&D) subprogram, Packaging subprogram, Nuclear Materials Integration (NMI) subprogram, and Environmental Operations (EO) subprogram.

### **Maintenance and Repair of Facilities**

The Maintenance and Repair of Facilities program (Maintenance) provides direct-funded maintenance activities across the NNSA enterprise for the recurring day-to-day work required to sustain and preserve NNSA facilities in a condition suitable for their designated purpose. These efforts include predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems.

### **Recapitalization**

The Recapitalization program is key to modernizing NNSA's infrastructure. Recapitalization funds projects to modernize numerous obsolete support and safety systems across the enterprise; revitalize facilities that are beyond the end of their design life; and improve the reliability, efficiency, and capability of core infrastructure to meet mission requirements. The Recapitalization program modernizes NNSA infrastructure by prioritizing investments including the acquisition of new facilities or discrete projects to improve the condition and extend the life of structures, capabilities, and systems. Recapitalization investments help achieve operational efficiencies and reduce safety, security, and program risk. Recapitalization also funds deactivation and disposal of excess infrastructure, including stabilization and risk reduction activities at high-risk excess facilities, resulting in surveillance and maintenance cost avoidance and reduced risk to workers, the public, environment, and programs.

### **Line-Item Construction**

Infrastructure and Operations line-item construction projects are critical to revitalizing mission-enabling infrastructure. These projects will replace obsolete, unreliable facilities and infrastructure to reduce safety and program risk while improving responsiveness, capacity, and capabilities. NNSA uses a prioritization methodology for mission enabling line-item construction that evaluates investments on closing mission gaps, reducing infrastructure risk and safety risk, and reducing deferred maintenance.



Infrastructure Modernization Initiative (IMI)

NNSA utilizes BUILDER, a system developed by the U.S. Army Corps of Engineers and recognized by the National Academy of Sciences as a best-in-class practice for infrastructure management. The BUILDER system uses comprehensive inventory, lifecycle, cost, and assessment data and risk-informed standards and policies to recommend repairs and replacements at the most opportune time, thus improving NNSA’s ability to pinpoint and prioritize investments. Using BUILDER-based calculations provides an accurate and transparent understanding of NNSA’s infrastructure. NNSA’s calculated Replacement Plant Value (RPV) for FY 2025 is \$192.1 billion, of which \$4.8 billion is excess facilities.

As a result of our data-driven and risk-informed infrastructure tools, NNSA has transitioned from a financially driven (e.g., DM) to a risk-driven plan for improving infrastructure. While many of our projects will inherently reduce DM, DM reduction is not the primary metric driving project selection. The increase in DM, RPV, and DM/RPV from FY 2024 to FY 2025 is in part the result of the Savannah River Site (SRS) transition from the DOE Office of Environmental Management (EM) to NNSA ownership. The overall physical condition of NNSA’s infrastructure did not decline. (Table 1)

| Table 1<br>NNSA Deferred Maintenance (DM) as a Percentage of<br>Replacement Plant Value (RPV) of Active Facilities |          |          |
|--------------------------------------------------------------------------------------------------------------------|----------|----------|
| Metric                                                                                                             | FY 2024  | FY 2025  |
| DM                                                                                                                 | \$9.0B   | \$12.6B  |
| RPV                                                                                                                | \$142.8B | \$187.3B |
| DM/RPV Ratio                                                                                                       | 6.30%    | 6.71%    |

In response to Government Accountability Office (GAO) recommendations, the following information is provided to improve transparency in the budget. Table 2 below lists total DM for Active and Excess facilities at NNSA sites, including a breakdown of that DM at different stages of facilities’ design lives.

| Table 2<br>NNSA Deferred Maintenance (DM) and Replacement Plant Value (RPV) as of FY 2025 (\$K) |            |                      |             |            |
|-------------------------------------------------------------------------------------------------|------------|----------------------|-------------|------------|
| Facility Group                                                                                  | DM (\$K)   | % of Total<br>DM (%) | RPV (\$K)   | DM/RPV (%) |
| All Active Facilities                                                                           | 12,567,060 | 99%                  | 187,291,777 | 7%         |
| Active Facilities 40+ Years Old                                                                 | 9,194,802  | 723%                 | 108,472,255 | 8%         |
| Active Facilities 30-39 Years Old                                                               | 2,250,498  | 18%                  | 32,052,414  | 7%         |
| Active Facilities 0-29 Years Old                                                                | 1,121,760  | 9%                   | 46,767,108  | 2%         |
| All Excess Facilities                                                                           | 91,160     | 1%                   | 4,823,717   | 2%         |
| All Facilities                                                                                  | 12,658,220 | 100%                 | 192,115,494 | 7%         |

Excess facilities are associated with approximately \$91 million or 0.72 percent of total DM. Approximately 90 percent of NNSA’s DM is associated with facilities that are approaching or surpassed their 40-year design life. As part of a prudent investment strategy, NNSA will intentionally not perform some of the maintenance and repair on facilities with near-term replacement strategies or those that are or soon will become excess. NNSA is prioritizing its investments based on reducing mission risk, and it will take time and sustained investment in new construction to replace aged facilities and reverse operational risks from this legacy infrastructure.

NNSA annually screens excess facilities to identify the highest risks to mission, workers, the public, and the environment to support risk-informed decision making. Table 3 lists the highest-risk facilities.

**Table 3**  
**NNSA's Highest-Risk Excess Facilities**

| <b>Site</b> | <b>Owner</b> | <b>Facility</b>                                                    | <b>Year Built</b> | <b>Excess Year</b> |
|-------------|--------------|--------------------------------------------------------------------|-------------------|--------------------|
| Y-12        | NNSA         | Alpha 5, Building 9201-05 <sup>1</sup>                             | 1944              | 2009               |
| Y-12        | NNSA         | Beta 4, Building 9204-04 <sup>1</sup>                              | 1945              | 2014               |
| Y-12        | SC           | Beta 1, Fusion Energy-Eng Tech, Building 9204-01 <sup>1</sup>      | 1944              | 2015               |
| Y-12        | NNSA         | Production, Building 9206 <sup>1</sup>                             | 1944              | 2014               |
| Y-12        | NE           | Beta 3, Isotope Separations, Building 9204-03 <sup>2</sup>         | 1945              | 2013               |
| LLNL        | NNSA         | Legacy Slab from Bldg 412 <sup>1,3</sup>                           | 1952              | 2022               |
| LLNL        | EM           | Livermore Pool-Type Reactor, Building 280 <sup>1,3</sup>           | 1956              | 2007               |
| LLNL        | NNSA         | Rotating Target Neutron Source Facility, Building 292 <sup>1</sup> | 1979              | 2017               |
| LLNL        | NNSA         | Explosives & High Pressure Testing Facility 343 <sup>1</sup>       | 1960              | 2015               |
| LANL        | NNSA         | Ion Beam Facility, Building TA-3-0016 <sup>1,3</sup>               | 1953              | 1999               |

<sup>1</sup> Requires DOE Environmental Management (EM) to disposition.

<sup>2</sup> Beta 3, Isotope Separations, Building 9204-03 cannot be disposed (designated historical).

<sup>3</sup> Facilities for which disposition is currently funded and are in the process of being demolished.

**Infrastructure and Operations**  
**(\$K)<sup>1</sup>**

|                                                            | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |            |
|------------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|---------------------------------------|------------|
|                                                            |                    |                    |                 |                    | (\$)                                  | (%)        |
| Operations of Facilities                                   | 1,378,725          | 1,615,605          |                 | 1,752,310          | 136,705                               | 8%         |
| <i>Nuclear Criticality Safety Program</i>                  | 31,141             | 34,789             |                 | 34,779             | (10)                                  | -          |
| <i>Nuclear Safety Research and Development</i>             | 3,159              | 3,153              |                 | 3,090              | (63)                                  | -2%        |
| <i>Packaging</i>                                           | 23,259             | 32,690             |                 | 33,518             | 828                                   | 3%         |
| <i>Environmental Operations</i>                            | 72,450             | 98,872             |                 | 117,809            | 18,937                                | 19%        |
| <i>Nuclear Materials Integration</i>                       | 24,961             | 24,856             |                 | 28,706             | 3,850                                 | 15%        |
| Total, Safety and Environmental Operations                 | 154,970            | 194,360            | -               | 217,902            | 23,542                                | 12%        |
| Maintenance and Repair of Facilities                       | 919,600            | 830,500            | 400,000         | 1,384,323          | 553,823                               | 67%        |
| Recapitalization                                           | 741,671            | 707,628            | 140,000         | 1,203,127          | 495,499                               | 70%        |
| Total, Operating                                           | 3,194,966          | 3,348,093          | 540,000         | 4,557,662          | 1,209,569                             | 36%        |
| 27-D-512 Plutonium Engineering Support Building, LANL      | -                  | -                  |                 | 88,700             | 88,700                                | N/A        |
| 25-D-511 PULSE New Access, NNSS                            | 5,000              | -                  |                 | 50,000             | 50,000                                | N/A        |
| 25-D-510 Plutonium Mission Safety & Quality Building, LANL | 48,500             | -                  |                 | -                  | -                                     | -          |
| 24-D-510 Analytic Gas Laboratory, PX                       | 36,000             | -                  |                 | -                  | -                                     | -          |
| 23-D-517 Electrical Power Capacity Upgrade, LANL           | 70,000             | -                  | 60,000          | 65,000             | 65,000                                | N/A        |
| Total, Mission Enabling Construction                       | 159,500            | -                  | 60,000          | 203,700            | 203,700                               | N/A        |
| <b>Total, Infrastructure and Operations</b>                | <b>3,354,466</b>   | <b>3,348,093</b>   | <b>600,000</b>  | <b>4,761,362</b>   | <b>1,413,269</b>                      | <b>42%</b> |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 billion in funding to DOE/NNSA. From this funding, DOE/NNSA has allocated \$400,000,000 to Maintenance and Repair of Facilities and \$140,000,000 to Recapitalization.

**Infrastructure and Operations  
Outyear Funding (\$K)**

|                                                      | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Operations of Facilities                             | 1,801,759                  | 1,830,118                  | 1,873,028                  | 1,944,436                  |
| <i>Nuclear Criticality Safety Program</i>            | 35,267                     | 37,530                     | 37,257                     | 37,529                     |
| <i>Nuclear Safety Research and Development</i>       | 3,090                      | 2,476                      | 2,528                      | 2,581                      |
| <i>Packaging</i>                                     | 33,561                     | 33,480                     | 34,997                     | 35,732                     |
| <i>Environmental Operations</i>                      | 118,723                    | 119,669                    | 121,691                    | 124,632                    |
| <i>Nuclear Materials Integration</i>                 | 30,599                     | 32,510                     | 33,705                     | 34,308                     |
| Total, Safety and Environmental Operations           | 221,240                    | 225,665                    | 230,178                    | 234,782                    |
| Maintenance and Repair of Facilities                 | 1,426,009                  | 1,466,250                  | 1,477,252                  | 1,511,514                  |
| Recapitalization                                     | 1,250,590                  | 1,324,098                  | 1,257,871                  | 1,215,709                  |
| Total, Operating                                     | 4,699,598                  | 4,846,131                  | 4,838,329                  | 4,906,441                  |
| 31-D-XXX Protective Forces Support Facility, LANL    | -                          | -                          | -                          | 98,700                     |
| 31-D-XXX 138 kV Back Loop Replacement, NNSS          | -                          | -                          | -                          | 98,700                     |
| 30-D-XXX TA-46 Protective Force Facility, LANL       | -                          | -                          | 98,700                     | -                          |
| 30-D-XXX Plutonium Program Accounting Building, LANL | -                          | -                          | 98,700                     | -                          |
| 29-D-XXX Plutonium Production Building, LANL         | -                          | 98,700                     | -                          | -                          |
| 25-D-511 PULSE New Access, NNSS                      | 140,000                    | 90,000                     | 20,000                     | -                          |
| 23-D-517 Electrical Power Capacity Upgrade, LANL     | 62,674                     | 52,430                     | -                          | -                          |
| Total, Mission Enabling Construction                 | 202,674                    | 241,130                    | 217,400                    | 197,400                    |
| <b>Total, Infrastructure and Operations</b>          | <b>4,902,272</b>           | <b>5,087,261</b>           | <b>5,055,729</b>           | <b>5,103,841</b>           |

## Infrastructure and Operations Operations of Facilities

### Overview

The Operations of Facilities program provides the funding required to operate NNSA facilities in a safe manner. Operations of Facilities is fundamental to achieving NNSA’s plutonium, uranium, tritium, lithium, high explosives, and other mission objectives. It includes essential support such as water and electrical utilities, safety systems, lease agreements for facilities and land, emergency response services, and other critical systems. This program also provides resources for environment, safety, health, and quality (ESH&Q) costs associated with ensuring compliance with Federal, state, and local environmental, worker safety, and health regulations as well as applicable DOE Orders and Directives.

The Operations of Facilities program also funds facility waste management activities, including treatment, storage, and waste disposition of both hazardous and newly generated radiological wastes. It provides for the daily operations and staffing to ensure facilities, systems, and capabilities are available to meet mission requirements.

FY 2025-FY 2031 site allocations for the Operations of Facilities program are provided in Table 4 below.

**Table 4**  
**National Nuclear Security Administration**  
**Operations of Facilities Allocations by Site**  
**(\$K)**

| Site                                   | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 3031<br>Request |
|----------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Kansas City National Security Campus   | 113,100            | 136,000            | 150,000            | 155,000            | 160,000            | 165,000            | 175,000            |
| Lawrence Livermore National Laboratory | 111,000            | 130,000            | 140,000            | 145,000            | 147,000            | 152,000            | 158,000            |
| Los Alamos National Laboratory         | 455,000            | 580,000            | 615,000            | 625,000            | 635,000            | 645,000            | 670,000            |
| Nevada National Security Site          | 119,500            | 135,000            | 152,000            | 156,000            | 158,000            | 161,000            | 166,000            |
| Pantex Plant                           | 99,700             | 107,000            | 109,000            | 113,000            | 115,000            | 118,000            | 121,000            |
| Sandia National Laboratories           | 120,000            | 135,000            | 145,000            | 149,000            | 151,000            | 156,000            | 160,000            |
| Savannah River Site                    | 105,000            | 210,000            | 217,000            | 223,000            | 227,000            | 233,000            | 241,000            |
| Savannah River National Laboratory     | 34,000             | -                  | -                  |                    |                    |                    |                    |
| Y-12 National Security Complex         | 131,000            | 145,000            | 155,000            | 159,000            | 162,000            | 167,000            | 177,000            |
| Enterprise Acquisitions <sup>1</sup>   | 57,210             | 37,605             | 69,310             | 76,759             | 75,118             | 76,028             | 76,436             |

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<sup>1</sup> The Operations of Facilities allocation under “Enterprise Acquisitions” includes funding to quickly respond to emergent unforeseeable issues. Funding is distributed to the sites during execution, which is consistent with industry best practices.

|                               |                  |                  |                  |                  |                  |                  |                  |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| SAFER <sup>1</sup>            | 23,240           | -                | -                |                  |                  |                  |                  |
| SWEIS <sup>2</sup>            | 5,225            | -                | -                |                  |                  |                  |                  |
| Waste Management <sup>2</sup> | 4,750            | -                | -                |                  |                  |                  |                  |
| <b>TOTAL</b>                  | <b>1,378,725</b> | <b>1,615,605</b> | <b>1,752,310</b> | <b>1,801,759</b> | <b>1,830,118</b> | <b>1,873,028</b> | <b>1,944,436</b> |

**Highlights of the FY 2027 Budget Request**

The FY2027 budget request enables the program to keep pace with increased programmatic mission tempo across the nuclear security enterprise.

**Explanation of Change for Operations of Facilities (+\$136.705 million)**

The increase includes additional support for the expanded Kansas City National Security Campus (KCNSC) as well as microelectronics, waste management, and non-nuclear component mission growth. At Lawrence Livermore National Laboratory (LLNL), increases support mission growth in high explosives, test & experiments, Radioactive and Hazardous Waste Management (RHWM) division operations, and pit production capacity at Superblock. At Nevada National Security Site (NNSS), increases will support Device Assembly Facility (DAF) staffing, the already-expanded operational footprint at PULSE, High Explosives Facility (HEF) mission utilization, and Area 11 new facility operations associated with Enhanced Capabilities for Subcritical Experiments. Funding at Sandia National Laboratories (SNL) will allow staffing and supply increases needed for mission growth supporting Microelectronics, Accelerators, Primary Standards Lab (PSL), Mechanical Test and Evaluation Facility (METF), and Tonopah Test Range (TTR). At Y-12 National Security Complex (Y-12), increases support waste activities and enriched uranium mission growth.

<sup>1</sup> SAFER, SWEIS & Nuclear Waste Management scope & funding transitioned to Safety and Environmental Operations in FY 2026.

## **Infrastructure and Operations Safety and Environmental Operations**

### **Overview**

The Safety and Environmental Operations (SEOps) program includes a suite of activities that crosscut the various missions within NNSA. These include direct funded activities such as the Department's Nuclear Criticality Safety Program (NCSP) and Nuclear Safety Research and Development subprograms, the Nuclear Packaging subprogram, the Environmental Operations (EO) subprogram, and the Nuclear Materials Integration subprogram (NMI). These activities form building blocks used by the line organizations to implement their missions.

The Long-Term Stewardship (LTS) activities within the EO subprogram address residual contamination remaining at NNSA mission sites after cleanup projects are completed and long-term remedy operations are established. It ensures safe cleanup levels are maintained by operating and maintaining remediation systems, performing surveillance and maintenance of engineered controls, and monitoring contaminant levels in the soil and groundwater while ensuring compliance with environmental regulations.

SEOps maintains Enterprise data and information management tools such as Safety, Analytics, Forecasting, Evaluation, and Reporting (SAFER) and the Nuclear Materials Management and Safeguard System (NMMSS) to assess and mitigate risk throughout the enterprise.

NA-ESH leads NNSA's planning, preparation and disposition of material excess to NNSA mission needs including chemical, radioactive, and mixed waste from throughout the Enterprise. In accordance with Executive Orders 14299 and 14301 related to reinvigoration of the U.S. nuclear industrial base as well as promoting development of nuclear energy options, NA-ESH's goal is to effectively manage risks by identifying and exploiting economies of scale, implementing process improvements, and developing contingent pathways for processing and/or disposition. NA-ESH pursues this goal through continuous dynamic assessment of NNSA operations to expose and address performance bottlenecks that impede mission success, expanding waste management and minimization initiatives, and constructive engagement and integration of private sector capabilities whenever applicable. NA-ESH accomplishes these objectives by collaborating with field sites and on-site personnel to ensure effective solutions that support NNSA mission success are implemented in a timely manner.

SEOps oversees NNSA's National Environmental Policy Act (NEPA) Program, which completes environmental impact analyses required by NEPA to better inform NNSA decision-makers of the potential environmental and economic impacts of proposed NNSA projects through Site Wide Environmental Impact Statements (SWEIS), environmental assessments, and other environmental impact statements. In addition, SEOps funds the New Mexico Environment Department and other Agreement-in-Principle/grant type activities to fully support both New Mexico sites (Los Alamos National Laboratory and Sandia National Laboratories-New Mexico), as well as sites in California and Texas.

**Table 5**  
**(\$K)**

|                                       | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|---------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <b>SEOps</b>                          |                            |                            |                            |                            |                            |                            |                            |
| Nuclear Criticality Safety Program    | 31,141                     | 34,789                     | 34,779                     | 35,267                     | 37,530                     | 37,257                     | 37,529                     |
| Nuclear Safety R&D                    | 3,159                      | 3,153                      | 3,090                      | 3,090                      | 2,476                      | 2,528                      | 2,580                      |
| Packaging                             | 23,259                     | 32,690                     | 33,518                     | 33,561                     | 33,480                     | 34,997                     | 35,732                     |
| Environmental Operations <sup>1</sup> | 72,450                     | 98,872                     | 117,809                    | 118,723                    | 119,669                    | 121,691                    | 124,633                    |
| Nuclear Materials Integration         | 24,961                     | 24,856                     | 28,706                     | 30,599                     | 32,510                     | 33,705                     | 34,308                     |
| <b>SEOps Total</b>                    | <b>154,970</b>             | <b>194,360</b>             | <b>217,902</b>             | <b>221,240</b>             | <b>225,665</b>             | <b>230,178</b>             | <b>234,782</b>             |

### **Highlights of the FY 2027 Budget Request**

Provides funding for the Safety and Environmental Operations (SEOps) program to facilitate nuclear safety across NNSA and to execute the Long-Term Stewardship Program; Nuclear Material Management and Safeguards System (United States Accountability System for Nuclear Materials); National Environmental Policy Act (NEPA) analyses; and infrastructure resilience, energy security, and waste management initiatives to enable facility space availability and support pit production schedules.

### **Explanation of Change for Safety and Environmental Operations (+\$23.542 million)**

#### **Nuclear Criticality Safety Program**

No significant change.

#### **Nuclear Safety Research and Development**

No significant change.

#### **Packaging**

The increase funds the procurement of additional DPP-1 containers.

#### **Environmental Operations**

The increase funds the new regulatory compliance requirements for investigation and corrective measure studies of newly discovered contamination of the Ogallala aquifer at Pantex, addresses new requirements to mitigate contamination plume movement in the perched aquifer at Pantex, and implements new soil vapor intrusion requirements at LLNL's main site.

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<sup>1</sup> Starting in FY 2026, the EO subprogram consists of activities conducted under the Long-Term Stewardship (LTS) subprogram, along with Nuclear Waste Management, SAFER, and SWEIS efforts previously funded in Operations of Facilities. EO funding also includes program support activities and support for corporate assessments.



**Nuclear Materials Integration**

The increase supports the near-term critical needs to address Storage Space shortage at multiple critical facilities which are at the risk of delaying plutonium pit production and causing a cascade of delays throughout the Complex.

## **Infrastructure and Operations Maintenance and Repair of Facilities**

### **Overview**

The Maintenance and Repair of Facilities program provides direct-funded maintenance activities across the NNSA enterprise, including DOE owned federal Field Office space, for the recurring day-to-day work required to sustain and preserve facilities and equipment in a condition suitable for their designated purpose. These efforts include predictive, preventive, and corrective maintenance activities to maintain facilities, property, assets, systems, roads, and vital safety systems. This program also funds maintenance of excess facilities (including high-risk excess facilities) necessary to minimize the risk posed by those facilities prior to disposition.

Maintenance and Repair of Facilities is prioritized within an enterprise risk management framework based on mission needs; probability of failure of a system or a component; and risk determination regarding safety, security, and environmental requirements. Investments focus on those structures, systems, and components that are considered essential to the national security mission. FY 2025-FY 2031 site allocations are provided in Table 6 below.

This program also funds the Roof Asset Management Program (RAMP) and the Cooling and Heating Asset Management Program (CHAMP). RAMP provides a dedicated approach to managing roofing assets through a single prioritized list of roofing needs across the nuclear security enterprise. The successful RAMP methodology has been expanded to other common components/systems under the Asset Management Program (AMP). Other systems will be analyzed as possible AMPs to achieve additional efficiencies.

**Table 6**  
**National Nuclear Security Administration**  
**Direct Funded Maintenance & Repair of Facilities Allocations by Site**  
**(\$K)**

| <b>Site</b>                                     | <b>FY 2025<br/>Enacted</b> | <b>WFTCA<br/>Funding</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-------------------------------------------------|----------------------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Kansas City<br>National Security<br>Campus      | 44,800                     | 40,000                   | 5,000                      | 55,000                     | 70,000                     | 75,000                     | 85,000                     | 95,000                     |
| Lawrence<br>Livermore<br>National<br>Laboratory | 51,090                     | 40,000                   | 50,180                     | 100,000                    | 115,000                    | 125,000                    | 135,000                    | 140,000                    |
| Los Alamos<br>National<br>Laboratory            | 212,000                    | 55,000                   | 235,473                    | 305,000                    | 305,000                    | 315,000                    | 330,000                    | 345,000                    |
| Nevada National<br>Security Site                | 103,388                    | 50,000                   | 110,435                    | 165,000                    | 180,000                    | 195,000                    | 195,000                    | 200,000                    |
| Pantex Plant                                    | 140,000                    | 65,000                   | 120,000                    | 190,000                    | 185,000                    | 190,000                    | 190,000                    | 195,000                    |
| Sandia National<br>Laboratories                 | 33,000                     | 40,000                   | 5,000                      | 50,000                     | 50,000                     | 50,000                     | 52,000                     | 52,000                     |
| Savannah River<br>Site                          | 47,000                     | 40,000                   | 32,000                     | 80,000                     | 90,000                     | 95,000                     | 105,000                    | 110,000                    |
| Savannah River<br>National<br>Laboratory        | 8,000                      | -                        | -                          | -                          | -                          | -                          | -                          | -                          |
| Y-12 National<br>Security Complex               | 180,811                    | 70,000                   | 159,240                    | 250,000                    | 210,000                    | 215,000                    | 230,000                    | 235,000                    |
| Enterprise<br>Acquisitions <sup>1</sup>         | 99,511                     | -                        | 113,172                    | 189,323                    | 221,009                    | 206,250                    | 155,252                    | 139,514                    |
| <b>TOTAL</b>                                    | <b>919,600</b>             | <b>400,000</b>           | <b>830,500</b>             | <b>1,384,323</b>           | <b>1,426,009</b>           | <b>1,466,250</b>           | <b>1,477,252</b>           | <b>1,511,514</b>           |

<sup>1</sup> The Maintenance and Repair of Facilities allocation under “Enterprise Acquisitions” includes funding for Asset Management Programs, which achieve economies of scale and maintenance standardization for critical building systems that are common across the enterprise (e.g., roofs, HVAC) and to quickly respond to emergent unforeseeable issues. Funding is distributed to the sites during execution, which is consistent with industry’s best practices.

## **Highlights of the FY 2027 Budget Request**

The FY 2027 budget request supports all key NNSA missions, including stockpile stewardship, nonproliferation, and global security. Key capabilities within NNSA's 6,000 + real property assets, with 60 percent rated in poor condition, will be addressed. The funding positions the maintenance program to perform preventive, predictive and corrective maintenance, as well as perform risk reduction work. It also supports the sites' ability to address emergent events and sustain ongoing risk reduction efforts without compromising schedules.

### **Explanation of Change for Maintenance and Repair of Facilities (+\$553.823 million)**

The delta reflects only discretionary funding. NNSA will obligate \$400 million of mandatory funding for Maintenance and Repair of Facilities by the end of FY 2026.

The increase reflects the increased tempo at NNSA's sites to meet mission requirements. LANL's plutonium facilities will require additional maintenance as the site ramps up its pit production capacity. LANL's facilities that perform specialized tests and experiments also required additional maintenance to support stockpile modernization schedules. The increase also supports a significant facility revitalization of LLNL's National Ignition Facility (NIF). LLNL will perform replacement of safety significant systems in Superblock ensuring worker safety and uninterrupted mission work. NNSS will address deferred maintenance at the Principal Underground Laboratory for Subcritical Experimentation (PULSE), as well as provide additional support to the Device Assembly Facility (DAF) to allow operations to perform work without interruption. PX will address many high-risk projects, including phase III of the domestic water system project, which was restarted in FY 2026. PX will also perform replacement of critical HVAC systems to ensure humidity levels are at appropriate levels in the Bays and Cells that stage the NNSA stockpile. Consistent issues with drainage at the PX site will be addressed through a special maintenance project that will reduce the risk of flooding. Increased funding at SRS will address the replacement of sprinkler heads through multiple facilities that satisfy National Fire Protection Association (NFPA) requirements. SRS will perform numerous maintenance activities to ensure the Site can operate at the required tempo as Tritium and plutonium activities ramp up. Y-12's increased funding will fund projects focused on the mission enabling infrastructure that have seen increases in emergent events over the prior years. Several maintenance projects will reduce the risk to facilities supporting the Depleted and Enriched Uranium capabilities and limit the impacts to operations.

## Infrastructure and Operations Recapitalization

### Overview

The Recapitalization program, a key to modernizing NNSA infrastructure, prioritizes investments to improve the condition and extend the design life of the structures, capabilities, and/or systems which contribute to the reliability, productivity, and efficiency of NNSA's infrastructure, reducing overall operating costs and delivering expanded production capacity. It also reduces safety, environmental, and program risk associated with facilities and systems that are often well beyond their design life.

The Recapitalization program includes costs for minor construction projects, real property purchases, like for like replacements projects, general contract support for construction project management, and Other Project Costs (OPC) for mission enabling infrastructure line-item construction projects. Recapitalization also funds deactivation and disposal of excess infrastructure, including stabilization and risk reduction activities at high-risk excess facilities, resulting in surveillance and maintenance cost avoidance and reduced risk to workers, the public, environment, and programs.

Table 7 shows the plans for Recapitalization projects to be executed with FY 2027 funding based on the status of enterprise infrastructure as of March 2026. This plan may need to be updated before the FY 2027 execution year to respond to emerging infrastructure conditions and requirements.

**Table 7**  
**National Nuclear Security Administration**  
**Recapitalization**  
**Planned FY 2027 Recapitalization Projects - As of March, 2026**

| Site                                                  | Project Name                                                                                                                          | FY 2027 Allocation (\$K) |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| KC                                                    | Bldg 23 North Surveillance Production Activities Expansion Buildout [Execution] (Minor Construction)                                  | 26,359                   |
|                                                       | Bldg 23 North Development Capabilities Conversion [Design] (Minor Construction)                                                       | 2,631                    |
|                                                       | Bldg 23 North Non-Destructive Testing & Environmental Lab Buildout [Design] (Minor Construction)                                      | 1,547                    |
|                                                       | Bldg 23 North Additive Manufacturing Expansion Buildout [Execution] (Minor Construction)                                              | 27,760                   |
|                                                       | Bldg 23 North Chemical Storage Buildout [Execution] (Minor Construction)                                                              | 3,758                    |
| <b>Subtotal, Kansas City National Security Campus</b> |                                                                                                                                       | <b>62,055</b>            |
| LLNL                                                  | Bldg 154 Nuclear Forensics Analytical Labs Conversion (Minor Construction)                                                            | 2,350                    |
|                                                       | CW01 Site 200 Cathodic Protection System Upgrade (Minor Construction)                                                                 | 9,925                    |
|                                                       | New Network Intelligence Research Office Facility (STAR) (Minor Construction)                                                         | 33,700                   |
|                                                       | New Site 300 Energetic Materials Manufacturing Science Facility (EMMSF) [Design] (Minor Construction)                                 | 2,125                    |
|                                                       | New Site 300 Energetic Materials Development Enclave Campus (EMDEC) Office Bldg and Site Development [Execution] (Minor Construction) | 29,700                   |

|                                                         |                                                                                                                          |                |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------|
|                                                         | Site 300 Bldg 843 Corp Yard Upgrade (Minor Construction)                                                                 | 5,980          |
|                                                         | Bldg 170 SE Wing Upgrade (Minor Construction)                                                                            | 16,675         |
|                                                         | New Site 300 Stockpile Modernization & Production Office (Minor Construction)                                            | 33,400         |
|                                                         | Bldg 182 O Program Disposition                                                                                           | 1,061          |
| <b>Subtotal, Lawrence Livermore National Laboratory</b> |                                                                                                                          | <b>134,916</b> |
| LANL                                                    | New TA-22 Secure Detonator Support and Storage Facility (STAR) (Minor Construction)                                      | 27,659         |
|                                                         | TA-09-0021 HVAC Upgrade (Minor Construction)                                                                             | 15,200         |
|                                                         | TA-55 Fire Suppression Water Line Installation for Security within the PIDAS (Minor Construction)                        | 13,800         |
|                                                         | New TA-36 HE Storage Magazine Multiplex (Minor Construction)                                                             | 9,700          |
|                                                         | CMR Deinventory Scope in Wings 1, 2, and 4                                                                               | 4,000          |
|                                                         | PHERMEX Firing Point Blast Mat and Debris Deinventory                                                                    | 4,100          |
| <b>Subtotal, Los Alamos National Laboratory</b>         |                                                                                                                          | <b>74,459</b>  |
| NNSS                                                    | 138kV Power Transmission System to Valley Substation Upgrade (Minor Construction)                                        | 26,800         |
|                                                         | New Mercury Materials Packaging and Surveillance Building 23-474 (Minor Construction)                                    | 33,300         |
|                                                         | PULSE Lightning Protection Upgrades (Minor Construction)                                                                 | 5,700          |
|                                                         | Area 23 Mercury Solar PV & Storage Installation (Minor Construction)                                                     | 20,200         |
|                                                         | Mission Corridor Water System Upgrades (Minor Construction)                                                              | 21,000         |
|                                                         | 6 Buildings in Areas 3, 6, and 15 Disposition                                                                            | 4,300          |
| <b>Subtotal, Nevada National Security Site</b>          |                                                                                                                          | <b>111,300</b> |
| PX                                                      | Bay & Cell FDS & Lead-In Improvements Portfolio                                                                          | 17,959         |
|                                                         | Bay & Cell RAMS Replacement Portfolio                                                                                    | 12,949         |
|                                                         | New Zone 12 South HPFL Tank & Pump House [Design & LLE] (Minor Construction)                                             | 5,000          |
|                                                         | New Zone 4 Material Receipt & Staging Support Facility (Minor Construction)                                              | 11,800         |
|                                                         | South Main Substation Switchgear; Capacitor Bank; & Controller Upgrade - 200 Circuit [Design & LLE] (Minor Construction) | 6,500          |
|                                                         | Zone 12 Sectional Switch Upgrades (Minor Construction)                                                                   | 7,600          |
|                                                         | 10 Bldgs in Area 11 Prep for Disposition (HESE D&D)                                                                      | 13,200         |
| <b>Subtotal, Pantex Plant</b>                           |                                                                                                                          | <b>75,008</b>  |
| SNL                                                     | New CA Complex Central Utility Bldg (CUB) [Execution] (Minor Construction)                                               | 22,100         |
|                                                         | New CA Materials Science and Diagnostics Lab Facility (MSDL) STAR (Minor Construction)                                   | 29,100         |
|                                                         | Bldg 858N Generator Installation (Minor Construction)                                                                    | 8,000          |
|                                                         | Bldg 983 (Z Machine) HVAC Upgrade (Minor Construction)                                                                   | 18,000         |
|                                                         | CA Potable Water South Branch Distribution System Upgrade (Minor Construction)                                           | 11,750         |
|                                                         | Bldg 899A Central Utility Building (CUB) Chilled Water Upgrade [Design] (Minor Construction)                             | 1,850          |
|                                                         | Bldg 827 PSL Mechanical Calibration Lab Addition [Execution] (Minor Construction)                                        | 22,575         |
| <b>Subtotal, Sandia National Laboratories</b>           |                                                                                                                          | <b>113,375</b> |

|                                                 |                                                                                                                                |                  |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------|
| SRS                                             | New Plutonium Operations Support Facility (POP) (Minor Construction)                                                           | 4,700            |
|                                                 | New Analytical Receipt & Inspection Center (ARIC) [Design] (Minor Construction)                                                | 1,300            |
|                                                 | New Radiological Response (RAP) Operations Center (Minor Construction)                                                         | 31,202           |
| <b>Subtotal, Savannah River Site</b>            |                                                                                                                                | <b>37,202</b>    |
| Y-12                                            | New Protected Area Maintenance Facility 1 [Design] (Minor Construction)                                                        | 3,000            |
|                                                 | New West End Production Change House [Execution] (Minor Construction)                                                          | 29,000           |
|                                                 | Bldg 9204-02E North Potable & Bldg 9215 South Fire & Potable Water Lateral East Section Upgrades [Design] (Minor Construction) | 2,600            |
|                                                 | East End Electrical Distribution Upgrade [Design] (Minor Construction)                                                         | 3,000            |
|                                                 | South Ridge Electrical Distribution Upgrade (Minor Construction)                                                               | 26,100           |
|                                                 | Bldg 9998 Supply Fan H2-1 Replacement - UESC                                                                                   | 12,020           |
|                                                 | Building 9401-03 Steam Plant Disposition                                                                                       | 46,384           |
|                                                 | Building 9201-05 (Alpha 5) Structural Modifications Design                                                                     | 5,200            |
| <b>Subtotal, Y-12 National Security Complex</b> |                                                                                                                                | <b>127,304</b>   |
|                                                 | Planning, Assessments, Infrastructure Management Tools, and Purchases                                                          | 464,180          |
|                                                 | Construction Other Project Costs (OPC)                                                                                         | 3,328            |
| <b>Grand Total, Recapitalization</b>            |                                                                                                                                | <b>1,203,127</b> |

### Highlights of the FY 2027 Budget Request

The FY 2027 Budget Request supports executing modernization of NNSA infrastructure via mission enabling projects including minor construction of new facilities, upgrades that add capacity/capabilities to existing infrastructure, recapitalization of aged infrastructure across the NNSA complex, and disposition of excess facilities. It also maintains progress on the multiphase acquisition of the Kansas City Non-Nuclear Expansion Transformation (KC NExT), including acquisition of Phase 4 which will deliver additional manufacturing capacity as well as occupancy and outfitting of the Phase 3 supporting facilities.

### Explanation of Change for Recapitalization (+\$495.499 million)

- The delta reflects only discretionary funding. NNSA will obligate \$140 million of mandatory funding for Recapitalization in FY 2026.
- The increase provides significant funding to maintain progress on multiple phases of the KC NExT acquisition. FY 2027 funding will fund outfitting execution for the first manufacturing building and adjacent support facilities, execution of a purchase and sales agreement for the second manufacturing phase, and design of the second classified office building. The concurrent execution of multiple phases enables NNSA to maintain a steady pace in the delivery of significant capacity expansion at Kansas City to support the growing non-nuclear capability mission demands.
- The FY 2027 increase for the Recapitalization Program will enable the program to increase the delivery of modernization through the planning and execution of additional modernization projects across the NNSA complex. This funding level will enable the initiation of more than two dozen new infrastructure projects and fully fund the construction phase for designs initiated in a previous fiscal year. Key projects include the delivery of additional capacity at Kansas City in building 23, several new footprint projects such as the LLNL-New Site 300 Energetic Materials Development Enclave Campus (EMDEC) Office Bldg 839A and Site Development, NNSS- New Mercury Materials Packaging and Surveillance Building 23-474 at the Mercury Campus, and the completion execution of the West End Change House at Y-12, the New LLNL Site 300 Stockpile Modernization & Production Office, both the New TA-36 HE Storage and New Magazine Multiplex at LANL and funding to initiate the design of the SRS New Analytical Receipt & Inspection Center (ARIC). Furthermore, the program will also support Global

Security missions with the construction of the New Radiological Response (RAP) Operations Center at SRS and the New Network Intelligence Research Office Facility (STAR) at LLNL. Finally, this request includes sustained investments to continue addressing critical deficiencies in life safety and utilities systems across NNSA sites through ongoing PX Bay & Cell FDS, HPFL Lead-in, and RAMS replacements, as well as critical utility upgrades to electrical, water, and HVAC systems to support increased mission demands and enhance operational efficiency.

- The funding request includes increased funding for facility dispositions including the demolition of the >64,000 gsf Steam Plant facility at Y-12.



## Infrastructure and Operations Construction

### Overview

The Construction program plays a critical role in revitalizing the nuclear security enterprise. Investments from this program will improve the responsiveness and capabilities of infrastructure across the Complex. The program designs and delivers mission-enabling projects that support national security objectives. Table 8 shows the breakout of funding by line-item.

**Table 8**

| <b>Project</b>                                              | <b>FY<br/>2025<br/>Enacted</b> | <b>FY<br/>2026<br/>Enacted</b> | <b>WFTCA<br/>Funding</b> | <b>FY<br/>2027<br/>Request</b> | <b>FY<br/>2028<br/>Request</b> | <b>FY<br/>2029<br/>Request</b> | <b>FY<br/>2030<br/>Request</b> | <b>FY<br/>2031<br/>Request</b> |
|-------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 31-D-XXX Protective Forces Support Facility, LANL           | -                              | -                              | -                        | -                              | -                              | -                              | -                              | 98,700                         |
| 31-D-XXX 138 kV Back Loop Replacement, NNSS                 | -                              | -                              | -                        | -                              | -                              | -                              | -                              | 98,700                         |
| 30-D-XXX Plutonium Program Accounting Building, LANL        | -                              | -                              | -                        | -                              | -                              | -                              | 98,700                         | -                              |
| 30-D-XXX TA-46 Protective Force Facility, LANL              | -                              | -                              | -                        | -                              | -                              | -                              | 98,700                         | -                              |
| 29-D-XXX Plutonium Production Building, LANL                | -                              | -                              | -                        | -                              | -                              | 98,700                         | -                              | -                              |
| 27-D-512 Plutonium Engineering Support Building; LANL       | -                              | -                              | -                        | 88,700                         | -                              | -                              | -                              | -                              |
| 25-D-511, PULSE New Access, NNSS                            | 5,000                          | -                              | -                        | 50,000                         | 140,000                        | 90,000                         | 20,000                         | -                              |
| 25-D-510, Plutonium Mission Safety & Quality Building, LANL | 48,500                         | -                              | -                        | -                              | -                              | -                              | -                              | -                              |
| 24-D-510, Analytic Gas Laboratory, PX                       | 36,000                         | -                              | -                        | -                              | -                              | -                              | -                              | -                              |
| 23-D-517, Electrical Power Capacity Upgrade, LANL           | 70,000                         | -                              | 60,000                   | 65,000                         | 62,674                         | 52,430                         | -                              | -                              |
| <b>Total, Mission Enabling Construction</b>                 | <b>159,500</b>                 | <b>-</b>                       | <b>60,000</b>            | <b>203,700</b>                 | <b>202,674</b>                 | <b>241,130</b>                 | <b>217,400</b>                 | <b>197,400</b>                 |

### Highlights of the FY 2027 Budget Request

FY 2027 funding will fully fund the design and construction activities for the Plutonium Engineering Support Building project at LANL. The project will provide an approximately 45,324 square foot (SF) new office facility located in Technical Area 48 of the Pajarito Corridor. The facility will provide approximately 323 workstations and conference rooms to support Quality Control Engineering, System Engineering, Maintenance Engineering, Plutonium Pit Engineering, and Production Engineering.

FY 2027 funding will begin design for the PULSE New Access project (formerly U1a Complex) at NNSS. The project will provide reliable underground access for larger experimental vessels as well as the additional staff

required to operate multiple testbeds at the PULSE facility in support of the nuclear security enterprise's maintenance and certification programs of the NNSA Stockpile Stewardship Program. An approximately 1,000 foot deep, 24-foot diameter shaft and a tunnel connecting this shaft to the existing underground complex will be constructed. A new hoist, additional utilities, and ventilation & muck loading systems are also being provided by this project.

FY 2027 funding will continue to support construction for the Electrical Power Capacity Upgrade project at LANL. The project will increase the LANL electrical transmission system capacity and the LANL distribution system capacity and redundancy. Current transmission/distribution capacity is insufficient to provide redundant and reliable power supply essential to all future programmatic missions at LANL.

**Explanation of Change for Mission Enabling Construction (+\$203.700 million)**

- The delta reflects only discretionary funding. NNSA will obligate \$60 million of mandatory funding for the Electrical Power Capacity Upgrade project in FY 2026.
- Increase fully funds the Plutonium Engineering Support Building project at LANL, starts design for the PULSE New Access project (formerly U1a Complex) at NNSS, and continues construction for the Electrical Power Capacity Upgrade project at LANL.

**27-D-512, Plutonium Engineering Support Building  
Los Alamos National Laboratory (LANL), Los Alamos, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The FY 2027 Request for the Plutonium Engineering Support Building project is \$88,700,000 of Total Estimated Cost (TEC) funding. The project is being executed using a build-to-budget acquisition strategy with a Total Project Cost (TPC) cap of \$89,900,000. The preliminary Start of Operations forecast is 2Q FY 2030. The FY 2027 request fully funds all design and construction activities required for this project.

The Plutonium Engineering Support Building project will support Quality Control Engineering, System Engineering, Maintenance Engineering, Plutonium Pit Engineering, and Production Engineering at Los Alamos National Laboratory (LANL).

Other Project Costs are funded out of the Recapitalization program in Infrastructure and Operations.

**Significant Changes**

This project is a new start in FY 2027.

On June 21, 2019, NNSA launched a pilot to streamline the execution of low complexity construction projects using an “Enhanced Minor Construction – Commercial (EMC2).” The pilot implements the FY 2018 National Defense Authorization Act mandate to streamline non-nuclear construction projects less than \$100 million (M).

On July 3, 2025, the DOE Project Management Risk Committee endorsed exempting the Plutonium Engineering Support Building from DOE Order 413.3B requirements, except for the Project Assessment and Reporting System (PARS) reporting requirement, which will be tailored to the project.

On August 29, 2025, the Acting NNSA Administrator approved an Order 413.3B exemption for this project, except for tailored PARS reporting.

The Plutonium Engineering Support Building project received Mission Need Statement & Program Requirements Document (MNS/PRD) approval on June 25, 2025. The PRD requires the maximum number of classified and unclassified workstations achievable within the budgeted TPC, with the goal of at least 300 workstations.

On January 30, 2026, a 30% design maturity conceptual design was completed. This conceptual design depicts a two-story version of the 25-D-510, Plutonium Mission Safety & Quality Building. The conceptual design’s Overall Level 1 and Level 2 Furniture, Fixtures, and Equipment (FF&E) Plans show that 323 workstations will be provided.

The acquisition approach will be a firm fixed price Design-Build contract.

An NNSA Los Alamos Field Office Federal Project Manager (FPM) has been assigned to this project instead of a Federal Project Director (FPD).

### **Critical Milestone History**

| <b>Fiscal Year</b> | <b>MNS/PRD</b> | <b>Conceptual Design Complete</b> | <b>Performance Baseline</b> | <b>Final Design Complete</b> | <b>Construction Mobilization</b> | <b>D&amp;D Complete</b> | <b>Start of Operations</b> |
|--------------------|----------------|-----------------------------------|-----------------------------|------------------------------|----------------------------------|-------------------------|----------------------------|
| FY 2027            | 6/25/2025      | 1/30/2026                         | 3Q FY 2027                  | 1Q FY 2028                   | 4Q FY 2027                       | N/A                     | 2Q FY 2030                 |

**MNS/PRD** – Approve Mission Need Statement and Program Requirements Document for a construction project with a conceptual scope and cost range.

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable).

**Performance Baseline** – Cost, schedule, and scope commitment.

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d).

**Construction Mobilization** – First arrival of contractor personnel, equipment, supplies, and/or temporary facilities at the jobsite.

**D&D Complete** – Completion of D&D work.

**Start of Operations** – Achievement of project completion and readiness to use the system, facility, or capability.

### **Project Cost History (\$K)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC Total</b> | <b>OPC, Except D&amp;D</b> | <b>OPC D&amp;D</b> | <b>OPC Total,</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|------------------|----------------------------|--------------------|-------------------|------------|
| FY 2027            | 5,235              | 83,465                   | 88,700           | 1,200                      | -                  | 1,200             | 89,900     |

## **2. Project Scope and Justification**

### **Scope**

The Plutonium Engineering Support Building project is a facility design and construction project. The project will provide a 45,324 square foot (SF) new office facility located in Technical Area (TA) 48 of the Pajarito Corridor. The facility will provide 323 workstations and conference rooms to support Quality Control Engineering, System Engineering, Maintenance Engineering, Plutonium Pit Engineering, and Production Engineering.

### **Justification**

Additional workstations are required for employees needing routine access to TA-46, TA-48, TA-50, TA-55, and TA-63. The missions supported by the additional employees include: Plutonium Modernization (including pit production), Plutonium Surveillance and Science, Plutonium Disposition, Pu-238 Programs, Material Recycle & Recovery, Americium Oxide Production, and other operational and logistical activities at LANL. The existing facilities in and around the TA-55 complex cannot accommodate the additional staff.

The project is being conducted in accordance with the project management concepts within DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, appendix C, paragraphs 1A-K, but is exempt from the Order. The EMC<sup>2</sup> approach uses minor construction project management processes, industry standard terminology for subcontractor terms and conditions, commercial quality controls, and streamlines Environmental, Safety, and Health while still meeting 10 Code of Federal Regulations Part 851 requirements for Worker Safety and Health Program.

**Key Performance Parameters (KPPs)**

The Threshold KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of project completion. The Objective KPPs represent the desired project performance.

These KPPs will be finalized when the Performance Baseline is approved.

| <b>Performance Measure</b>      | <b>Threshold KPP</b>                                                                                                  | <b>Objective KPP</b>         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------|
| Classified Workstation Capacity | A classified workstation to unclassified workstation ratio of 80:20                                                   | 100% classified workstations |
| Conference Room Capacity        | Conference rooms capable of conducting classified / unclassified Video Teleconferences at 20 net square feet/occupant | Same as Threshold            |

**3. Financial Schedule (\$K)**

|                                   | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>  |
|-----------------------------------|----------------------------------------------|--------------------|---------------|
| <b>Total Estimated Cost (TEC)</b> |                                              |                    |               |
| <b>Design</b>                     |                                              |                    |               |
| FY 2027                           | 5,235                                        | 5,235              | 3,490         |
| FY 2028                           | -                                            | -                  | 1,745         |
| <b>Total Design</b>               | <b>5,235</b>                                 | <b>5,235</b>       | <b>5,235</b>  |
| <b>Construction</b>               |                                              |                    |               |
| FY 2027                           | 83,465                                       | 83,465             | 2,800         |
| FY 2028                           | -                                            | -                  | 33,865        |
| FY 2029                           | -                                            | -                  | 38,300        |
| FY 2030                           | -                                            | -                  | 8,500         |
| <b>Total Construction</b>         | <b>83,465</b>                                | <b>83,465</b>      | <b>83,465</b> |
| <b>TEC</b>                        |                                              |                    |               |
| FY 2027                           | 88,700                                       | 88,700             | 6,290         |
| FY 2028                           | -                                            | -                  | 35,610        |
| FY 2029                           | -                                            | -                  | 38,300        |
| FY 2030                           | -                                            | -                  | 8,500         |
| <b>Total TEC</b>                  | <b>88,700</b>                                | <b>88,700</b>      | <b>88,700</b> |
| <b>Other Project Costs (OPC)</b>  |                                              |                    |               |
| FY 2025                           | 400                                          | 400                | -             |
| FY 2026                           | 800                                          | 800                | 1,200         |
| FY 2027                           | -                                            | -                  | -             |
| FY 2028                           | -                                            | -                  | -             |

|                                  |               |               |               |
|----------------------------------|---------------|---------------|---------------|
| FY 2029                          | -             | -             | -             |
| FY 2030                          | -             | -             | -             |
| <b>Total, OPC</b>                | <b>1,200</b>  | <b>1,200</b>  | <b>1,200</b>  |
| <b>Total Project Costs (TPC)</b> |               |               |               |
| FY 2025                          | 400           | 400           | -             |
| FY 2026                          | 800           | 800           | 1,200         |
| FY 2027                          | 88,700        | 88,700        | 6,290         |
| FY 2028                          | -             | -             | 35,610        |
| FY 2029                          | -             | -             | 38,300        |
| FY 2030                          | -             | -             | 8,500         |
| <b>Total TPC</b>                 | <b>89,900</b> | <b>89,900</b> | <b>89,900</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                    |                         | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Previous<br/>Validated<br/>Baseline</b> |
|------------------------------------|-------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
| <b>Total Estimated Cost (TEC)</b>  |                         |                                       |                                        |                                            |
| <b>Design</b>                      |                         |                                       |                                        |                                            |
|                                    | Design                  | 4,735                                 | N/A                                    | N/A                                        |
|                                    | Contingency             | 500                                   | N/A                                    | N/A                                        |
| <b>Total Design</b>                |                         | <b>5,235</b>                          | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Construction</b>                |                         |                                       |                                        |                                            |
|                                    | Site Work               | 5,000                                 | N/A                                    | N/A                                        |
|                                    | Equipment               | 2,600                                 | N/A                                    | N/A                                        |
|                                    | Construction            | 59,300                                | N/A                                    | N/A                                        |
|                                    | Oversight & Management  | 8,700                                 | N/A                                    | N/A                                        |
|                                    | Contingency             | 7,865                                 | N/A                                    | N/A                                        |
| <b>Total Construction</b>          |                         | <b>83,465</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Estimated Cost (TEC)</b>  |                         | <b>88,700</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, TEC</i>            |                         | <i>8,365</i>                          | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Other Project Costs (OPC)</b>   |                         |                                       |                                        |                                            |
| OPC except D&D                     |                         |                                       |                                        |                                            |
|                                    | Conceptual Design       | 785                                   | N/A                                    | N/A                                        |
|                                    | Project Execution Plans | 215                                   |                                        |                                            |
|                                    | Contingency             | 200                                   | N/A                                    | N/A                                        |
| <b>Total OPC</b>                   |                         | <b>1,200</b>                          | <b>N/A</b>                             | <b>N/A</b>                                 |
| <i>Contingency, OPC</i>            |                         | <i>200</i>                            | <i>N/A</i>                             | <i>N/A</i>                                 |
| <b>Total Project Cost</b>          |                         | <b>89,900</b>                         | <b>N/A</b>                             | <b>N/A</b>                                 |
| <b>Total Contingency (TEC+OPC)</b> |                         | <b>8,565</b>                          | <b>N/A</b>                             | <b>N/A</b>                                 |

## 5. Schedule of Appropriations Requests (\$K)

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total  |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------|--------|
| FY 2027      | TEC  | -           | -       | -       | 88,700  | -       | -       | -       | -       | -         | 88,700 |
|              | OPC  | -           | 400     | 800     | -       | -       | -       | -       | -       | -         | 1,200  |
|              | TPC  | -           | 400     | 800     | 88,700  | -       | -       | -       | -       | -         | 89,900 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 2Q FY 2030 |
| Expected Useful Life (number of years)                              | 40         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 2Q FY 2070 |

### Related Funding Requirements (\$M)

| Funding Requirements       | Annual Costs      |                  | Life Cycle Costs  |                  |
|----------------------------|-------------------|------------------|-------------------|------------------|
| Estimate Totals            | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate |
| Operations and Maintenance | N/A               | 1.25             | N/A               | 50               |

## 7. D&D Information

The new area being constructed in this project is 45,324 square feet. The new facility being constructed by this project is not replacing existing facilities. LANL will D&D an offsetting amount of space in accordance with their current facility plan.

## 8. Acquisition Approach

The Plutonium Engineering Support Building project acquisition strategy is a firm fixed price Design-Build contract managed by the LANL Management & Operating contractor.

**25-D-511, PULSE New Access Project  
Nevada National Security Sites (NNSS), Mercury, Nevada  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The FY 2027 request for the Principal Underground Laboratory for Subcritical Experimentation (PULSE) New Access Project (PNAP) is \$50,000,000 and will be used for the design scope. The most recent Critical Decision (CD) for PNAP was the approval of CD-0, *Approve Mission Need*, on April 26, 2023, with a preliminary cost estimate range of \$85,000,000 to \$303,000,000 and a CD-4, *Approve Start of Operations or Project Completion*, range of September 2028 to September 2034. The current working estimate is \$339,049,000 and the project completion date is 3Q FY 2033. The project will provide reliable underground access for larger experimental vessels and staff to operate multiple testbeds at the PULSE facility.

Funds appropriated to this project may be used for contracted support services to the Federal Program Manager and the Federal Project Director to conduct independent assessments of the planning and execution of this project required by Department of Energy (DOE) Order (O) 413.3B and to conduct technical reviews of design and construction documents. All costs associated with the conduct of Independent Cost Reviews/Independent Cost Estimates (ICRs/ICEs), to include Federal staff travel, are funded by this project.

The project is being conducted in accordance with the project management requirements in DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. As allowed by DOE O 413.3B, work will be phased to improve overall efficiency.

This project is funded as a TEC line-item in the budget. Other Project Costs (OPCs) are funded out of the Recapitalization Program under Infrastructure and Operations.

A Federal Project Director has been assigned to this project.

**Significant Changes**

The lifecycle cost was updated to include escalation costs of 2.48% per year.

The project team completed an updated estimate and schedule based on the results of the Conceptual Design which was provided to an Independent Cost Review (ICR) and an Independent Project Review (IPR) in December 2025. These activities are part of the requirements to proceed to CD-1. The estimate and schedule represent an increase in the preliminary cost estimate range and CD-4 range from CD-0. The project team's estimate and schedule will be reconciled against the results of the ICR and IPR and will be presented to the Project Management Executive by the Federal Project Director as part of the CD-1 approval package.

The project received no funding in FY 2026 and has pushed the project out one year in execution.



## Critical Milestone History

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1     | CD-2     | Final Design Complete | CD-3     | D&D Complete | CD-4     |
|-------------|-----------|----------------------------|----------|----------|-----------------------|----------|--------------|----------|
| FY 2025     | 4/26/2023 | 4QFY2024                   | 1QFY2025 | 1QFY2027 | 3QFY2026              | 1QFY2027 | N/A          | 4QFY2034 |
| FY 2026     | 4/26/2023 | 4QFY2025                   | 2QFY2026 | 1QFY2028 | 3QFY2027              | 1QFY2028 | N/A          | 3QFY2032 |
| FY 2027     | 4/26/2023 | 8/21/2025                  | 2QFY2027 | 1QFY2029 | 3QFY2028              | 1QFY2029 | N/A          | 3QFY2033 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range/  
**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable).

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Construction

**D&D Complete** – Completion of D&D work

**CD-4** – Approve Start of Operations or Project Complete

| Fiscal Year | CD-3A    | CD-3B    |
|-------------|----------|----------|
| FY 2026     | 1QFY2027 | N/A      |
| FY 2027     | 1QFY2028 | 2QFY2028 |

**CD-3A** – Approve Site Preparation

**CD-3B** – Approve Long Lead Procurement

## Project Cost History (\$K)

| Fiscal Year | TEC, Design | TEC, Construction | TEC Total | OPC, Except D&D | OPC, D&D | OPC Total, | TPC     |
|-------------|-------------|-------------------|-----------|-----------------|----------|------------|---------|
| FY 2025     | 53,000      | 242,000           | 295,000   | 15,244          | N/A      | 15,244     | 310,244 |
| FY 2026     | 53,000      | 250,000           | 303,000   | 34,049          | N/A      | 34,049     | 337,049 |
| FY 2027     | 55,000      | 250,000           | 305,000   | 34,049          | N/A      | 34,049     | 339,049 |

## **2. Project Scope and Justification**

### Scope

PNAP will provide reliable underground access for larger experimental vessels as well as the additional staff required to operate multiple testbeds at the PULSE facility in support of the NNSA Defense Programs' Stockpile Stewardship Program (SSP). The project must provide a means for reliable underground ingress and egress to support the continuing mission of the PULSE facility, including personnel and current and future Enhanced Capabilities for Subcritical Experiments (ECSE) experimental equipment. The PNAP process consists of the conceptual, followed by the preliminary, and then final design of an approximately 24-ft diameter by approximately 1000 ft- deep vertical shaft to improve the handling, safety and reliability of hoist operations as compared to current conveyance between the surface and the underground. Specifically, during design and construction, the PNAP project scope includes mobilization, demobilization, design, shaft collar/sub-collar, hoist and headframe, shaft excavation, shaft liner, muck pocket and loading system, shaft and station utilities, hoist enclosure, connection drift at the base of the shaft, utility trenches, ventilation system, and contingency for future utility infrastructure/needs. When complete PNAP operation will support ingress and

### **Infrastructure and Operations /**

**25-D-511, PULSE New Access Project, NNS**

**FY 2027 Congressional Justification**

egress of staff, large equipment, muck removal, and movement of experiments and equipment on occasion into and out of the PULSE underground using the PNAP shaft. The project is planning for site preparation and long-lead procurements (CD-3X's) prior to CD-2/3 to meet schedule requirements.

**Justification**

The PULSE facility, formerly referred to as the U1a Complex, is located in the NNS Mission Corridor. It is a premiere NNSA nuclear HC-2 underground experimental facility providing critical experimental capabilities and data to the nation’s nuclear security enterprise. The PULSE facility supports the SSP and is the only location where relevant quantities of plutonium can be combined with high explosives to perform subcritical experiments (SCEs).

PULSE is challenged with an increased number of SCEs, which will continue to increase with significant NNSA investment to include a new surface building complex, upgraded utilities and the underground infrastructure enabling ECSE for the next 30+ years. ECSE investments include the U1a Complex Enhancements Project (UCEP), Advanced Sources and Detectors (ASD) project (Scorpius machine), and Neutron Diagnosed Subcritical Experiments (NDSE) installations (consisting of the Z-pinch Experimental Underground System [ZEUS] and ZEUS Testbed Facilities Improvement Project) which are outfitting the PULSE facility. These mission investments drive new underground requirements, including extensive expansion of the underground drift network, accommodation of larger six-foot experimental vessels, substantial increase in numbers of underground personnel, and construction and commissioning of two new experimental testbeds, including a vastly more powerful, larger radiographic machine (Scorpius) and a dense plasma focus machine (ZEUS).

The two main shafts that support PULSE operations, U1a shaft and U1h shaft, are each equipped with hoisting capabilities for personnel, equipment, and materials. Two shafts/hoists are required for PULSE operations for safety and effectiveness. These underground access capabilities present significant risk to the NNSA’s ability to fully operate the PULSE in support of planned increased and enhanced experimental requirements. Both the U1a and U1h shafts/hoists are degrading more rapidly than previously planned due to heavy usage with current downtimes for maintenance and repair at 20 percent and increasing. The expected future experimental operations schedule will be even more difficult to maintain with the existing PULSE access capabilities, increasing risk of significant mission delays. A new underground access capability is imperative for the PULSE facility to meet NNSA mission requirements over the next 30+ years.

**Key Performance Parameters (KPPs)**

These preliminary KPPs represent the minimum acceptable performance that the project must achieve and support the current cost and schedule estimates:

| Key Performance Parameter | Description                        | Threshold                                                                                                                                                                        |
|---------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KPP-1                     | Reliable ingress/egress capability | New components shall have a minimum service life of 30 years & ability to support a shift change of no less than 100 workers to exit and/or enter within a 30-minute time window |

|       |                                                                                                                       |                                                                                                                                                                                                                                  |
|-------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KPP-2 | Underground ingress and egress of current and future experimental vessels and transportation cart/execution stand     | Meet the design basis for UCEP/ASD relative to enabling ingress and egress of a 6' vessel with transportation cart/execution stand or other equipment of 8 feet wide x 8 feet deep x 10 feet high and a live load of 36,000 lbs. |
| KPP-3 | Support experimental package transport to and from the underground by integrating DOE Safety-in-Design in the project | Meet the Documented Safety Analysis requirements to enable transport of experimental packages to and from the underground                                                                                                        |

### 3. Financial Schedule (\$K)

|                           | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|---------------------------|--------------------------------------|----------------|----------------|
| <b>Design</b>             |                                      |                |                |
| FY 2025                   | 5,000                                | 5,000          | -              |
| FY 2026                   | -                                    | -              | -              |
| FY 2027                   | 50,000                               | 50,000         | 13,250         |
| FY 2028                   | -                                    | -              | 28,500         |
| FY 2029                   | -                                    | -              | 13,250         |
| <b>Total Design</b>       | <b>55,000</b>                        | <b>55,000</b>  | <b>55,000</b>  |
| <b>Construction</b>       |                                      |                |                |
| FY 2027                   | -                                    | -              | -              |
| FY 2028                   | 140,000                              | 140,000        | 30,000         |
| FY 2029                   | 90,000                               | 90,000         | 99,996         |
| FY 2030                   | 20,000                               | 20,000         | 67,008         |
| FY 2031                   | -                                    | -              | 34,996         |
| Out Years                 | -                                    | -              | 18,000         |
| <b>Total Construction</b> | <b>250,000</b>                       | <b>250,000</b> | <b>250,000</b> |
| <b>TEC</b>                |                                      |                |                |
| FY 2025                   | 5,000                                | 5,000          | -              |
| FY 2026                   | -                                    | -              | -              |
| FY 2027                   | 50,000                               | 50,000         | 13,250         |
| FY 2028                   | 140,000                              | 140,000        | 58,500         |
| FY 2029                   | 90,000                               | 90,000         | 113,246        |
| FY 2030                   | 20,000                               | 20,000         | 67,008         |
| FY 2031                   | -                                    | -              | 34,996         |
| Out Years                 | -                                    | -              | 18,000         |
| <b>Total TEC</b>          | <b>305,000</b>                       | <b>305,000</b> | <b>305,000</b> |

|                                  | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
|----------------------------------|--------------------------------------|----------------|----------------|
| <b>Other Project Costs (OPC)</b> |                                      |                |                |
| Prior Years                      | 13,618                               | 11,893         | 4,442          |
| FY 2025                          | 3,312                                | 5,037          | 8,466          |
| FY 2026                          | 2,119                                | 2,119          | 6,141          |
| FY 2027                          | -                                    | -              | -              |
| FY 2028                          | -                                    | -              | -              |
| FY 2029                          | -                                    | -              | -              |
| FY 2030                          | -                                    | -              | -              |
| FY 2031                          | 10,000                               | 10,000         | 7,500          |
| Outyears                         | 5,000                                | 5,000          | 7,500          |
| <b>Total, OPC</b>                | <b>34,049</b>                        | <b>34,049</b>  | <b>34,049</b>  |
| <b>Total Project Costs (TPC)</b> |                                      |                |                |
| Prior Years                      | 13,618                               | 11,893         | 4,442          |
| FY 2025                          | 8,312                                | 10,037         | 8,466          |
| FY 2026                          | 2,119                                | 2,119          | 6,141          |
| FY 2027                          | 50,000                               | 50,000         | 13,250         |
| FY 2028                          | 140,000                              | 140,000        | 58,500         |
| FY 2029                          | 90,000                               | 90,000         | 113,246        |
| FY 2030                          | 20,000                               | 20,000         | 67,008         |
| FY 2031                          | 10,000                               | 10,000         | 42,496         |
| Out Years                        | 5,000                                | 5,000          | 25,500         |
| <b>Total TPC</b>                 | <b>339,049</b>                       | <b>339,049</b> | <b>339,049</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                     |                       | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate | Previous<br>Validated<br>Baseline |
|---------------------|-----------------------|------------------------------|-------------------------------|-----------------------------------|
| <b>Design</b>       |                       |                              |                               |                                   |
|                     | Design                | 47,000                       | 45,000                        | NA                                |
|                     | Federal Design Review |                              |                               |                                   |
|                     | Support               | 1,000                        | 1,000                         | NA                                |
|                     | Contingency           | 7,000                        | 7,000                         | NA                                |
| <b>Total Design</b> |                       | <b>55,000</b>                | <b>53,000</b>                 | <b>NA</b>                         |
| <b>Construction</b> |                       |                              |                               |                                   |
|                     | Site Work             | 20,000                       | 20,000                        | NA                                |
|                     | Equipment             | 50,000                       | 50,000                        | NA                                |

|                                    |                |                |           |
|------------------------------------|----------------|----------------|-----------|
| Construction                       | 134,000        | 134,000        | NA        |
| Federal Support                    | 11,000         | 11,000         | NA        |
| Contingency                        | 35,000         | 35,000         | NA        |
| <b>Total Construction</b>          | <b>250,000</b> | <b>250,000</b> | <b>NA</b> |
| <b>Total Estimated Cost (TEC)</b>  | <b>305,000</b> | <b>303,000</b> | <b>NA</b> |
| <i>Contingency, TEC</i>            | <i>42,000</i>  | <i>42,000</i>  | <i>NA</i> |
| <b>Other Project Costs (OPC)</b>   |                |                |           |
| OPC except D&D                     |                |                |           |
| Analysis of Alternatives           | 416            | 416            | NA        |
| Conceptual Design                  | 11,344         | 11,344         | NA        |
| CD-1 Documents/Fed Support         | 5,861          | 5,861          | NA        |
| Start-up                           | 15,000         | 15,000         | NA        |
| Contingency                        | 1,428          | 1,428          | NA        |
| <b>Total OPC</b>                   | <b>34,049</b>  | <b>34,049</b>  | <b>NA</b> |
| <i>Contingency, OPC</i>            | <i>1,428</i>   | <i>1,428</i>   | <i>NA</i> |
| <b>Total Project Cost</b>          | <b>339,049</b> | <b>337,049</b> | <b>NA</b> |
| <b>Total Contingency (TEC+OPC)</b> | <b>43,428</b>  | <b>43,428</b>  | <b>NA</b> |

## 5. Schedule of Appropriations Requests

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total   |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
| FY 2025      | TEC  | -           | 25,000  | 90,000  | 90,000  | 90,000  | -       | -       | -       | N/A       | 295,000 |
|              | OPC  | 12,040      | 150     | 150     | 150     | 150     | 2,604   | -       | -       | N/A       | 15,244  |
|              | TPC  | 12,040      | 25,150  | 90,150  | 90,150  | 90,150  | 2,604   | -       | -       | N/A       | 310,244 |
| FY 2026      | TEC  | -           | 5,000   | 48,000  | N/A     | N/A     | N/A     | N/A     | N/A     | 250,000   | 303,000 |
|              | OPC  | 13,618      | 3,312   | 2,119   | N/A     | N/A     | N/A     | N/A     | N/A     | 15,000    | 34,049  |
|              | TPC  | 13,618      | 8,312   | 50,119  | N/A     | N/A     | N/A     | N/A     | N/A     | 265,000   | 337,049 |
| FY 2027      | TEC  | -           | 5,000   | -       | 50,000  | 140,00  | 90,000  | 20,000  | -       | -         | 305,000 |
|              | OPC  | 13,618      | 3,312   | 2,119   | -       | -       | -       | -       | 10,000  | 5,000     | 34,049  |
|              | TPC  | 13,618      | 8,312   | 2,119   | 50,000  | 140,00  | 90,000  | 20,000  | 10,000  | 5,000     | 339,049 |

## 6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 3Q FY 2033 |
| Expected Useful Life (number of years)                              | 30         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 3Q FY 2063 |

Related Funding Requirements (\$M)

| Funding Requirements       | Annual Costs*     |                  | Life Cycle Costs  |                  |
|----------------------------|-------------------|------------------|-------------------|------------------|
|                            | Previous Estimate | Current Estimate | Previous Estimate | Current Estimate |
| Operations and Maintenance | 15                | 15               | 450               | 656**            |

\* Annual Costs based on FY2032 dollars

\*\* Lifecycle cost updated to include 2.48% per year escalation (NAP 413.6, Appendix APB-24 (nuclear rates for NNSS))

## 7. D&D Information

The new area being constructed by this project does not replace existing facilities.

|                                                                                                          | Square Feet |
|----------------------------------------------------------------------------------------------------------|-------------|
| New area being constructed by this project at NNSS                                                       | 4,750       |
| Area of D&D in this project at NNSS                                                                      | NA          |
| Area at NNSS to be transferred, sold, and/or D&D outside the project, including area previously “banked” | 4,750       |
| Area of D&D in this project at other sites                                                               | NA          |

## 8. Acquisition Approach

The project is being managed by the NNSS Management and Operating (M&O) contractor because the PULSE facility is an underground operating nuclear facility with limited access. Design and construction of the surface to underground access are expected to be performed by a subcontractor specializing in that type of work, where the underground modifications are expected to be performed by the NNSS M&O contractor through the cost-plus contract.

**23-D-517 Electrical Power Capacity Upgrade  
Los Alamos National Laboratory (LANL), Los Alamos, New Mexico  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary:**

The Fiscal Year (FY) 2027 Request for the Electrical Power Capacity Upgrade (EPCU) Project is \$65,000,000 and will be used to support construction activities. The project will resolve projected future shortfalls in the electrical transmission and distribution system at Los Alamos National Laboratory (LANL), increasing capability and improving reliability and resiliency. The project achieved CD-2/3 on October 4, 2025, with a CD-4 of September 30, 2031. The Project's baseline is \$428,240,000. A CD-3A approval was authorized on February 25, 2025, to enable procurement of long lead electrical equipment in support of the construction schedule. Funds requested will continue to pay for the procurement and installation of the equipment necessary to achieve the project's key performance parameters.

**Significant Changes:**

- This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year.
- CD-2/3 Approve Performance Baseline and Start of Construction Execution was achieved on October 4, 2025.
- The Key Performance Parameters were finalized with CD-2/3 Baseline approval.
- The forecast Total Project Cost (TPC) is increasing based on an updated assessment of remaining project risks driven from continuing condition assessments through the completion of design activities and evolving operational constraints of the operational transmission and distribution systems.
- Significant delays resulted from the National Environmental Policy Act (NEPA) Environmental assessment, which was published September 6, 2024, with a Finding of No Significant Impact (FONSI) on August 12, 2025. The publication of FONSI was delayed compared to the 2026 data sheet due to the requirement for a National Historic Preservation Act Memorandum of Agreement (NHPA MOA) between NNSA, United States Forest Service, New Mexico State Historic Preservation Office, and the Advisory Council on Historic Preservation. This MOA was agreed to by all required parties on June 24, 2025.
- The stipulations agreed to in the NHPA MOA are included in this budget request, which will support tribal monitors and other construction phase stipulations.
- Design progression, of the portion of the project scope through Bureau of Land Management (BLM) and United States Forest Service (USFS) land, was severely delayed by lack of a special use permit for geotechnical investigations. The delay in design definition delayed the procurement and escalated cost of equipment.

## Critical Milestone History

| Fiscal Year | CD-0      | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4       |
|-------------|-----------|----------------------------|------------|------------|-----------------------|------------|--------------|------------|
| FY 2023     | 8/24/2018 | 8/18/2021                  | 4Q FY 2022 | 2Q FY 2024 | 4Q FY 2024            | 3Q FY 2024 | N/A          | 1Q FY 2028 |
| FY 2024     | 8/24/2018 | 8/18/2021                  | 11/16/2022 | 4Q FY 2024 | 4Q FY 2024            | 4Q FY 2024 | N/A          | 1Q FY 2029 |
| FY 2025     | 8/24/2018 | 8/18/2021                  | 11/16/2022 | 2Q FY 2025 | 1Q FY 2026            | 2Q FY 2025 | N/A          | 3Q FY 2030 |
| FY 2026     | 8/24/2018 | 8/18/2021                  | 11/16/2022 | 4Q FY 2025 | 1Q FY 2026            | 4Q FY 2025 | N/A          | 3Q FY 2030 |
| FY 2027     | 8/24/2018 | 8/18/2021                  | 11/16/2022 | 10/04/2025 | 3Q FY 2026            | 10/04/2025 | N/A          | 4Q FY 2031 |

| Fiscal Year | CD-3A      |
|-------------|------------|
| FY 2026     | 02/25/2025 |

**CD-0** – Approve Mission Need

**Conceptual Design Complete** – Actual date the conceptual design was completed (if applicable)

**CD-1** – Approve Alternative Selection and Cost Range

**CD-2** – Approve Project Performance Baseline

**Final Design Complete** – Estimated/Actual date the project design will be/was complete(d)

**CD-3** – Approve Start of Construction/Execution

**D&D Complete** – Completion of D&D work (see Section 9)

**CD-4** – Approve Start of Operations or Project Completion

## Project Cost History

| Fiscal Year | TEC, Design | TEC, Construction | TEC, Total | OPC Except D&D | OPC, D&D | OPC, Total | TPC     |
|-------------|-------------|-------------------|------------|----------------|----------|------------|---------|
| FY 2023     | 24,000      | 260,000           | 284,000    | 9,938          | N/A      | 9,938      | 293,938 |
| FY 2024     | 29,000      | 260,000           | 289,000    | 14,140         | N/A      | 14,140     | 303,140 |
| FY 2025     | 67,683      | 221,317           | 289,000    | 14,140         | N/A      | 14,140     | 303,140 |
| FY 2026     | 62,195      | 286,805           | 349,000    | 19,140         | N/A      | 19,140     | 368,140 |
| FY 2027     | 59,814      | 349,290           | 409,104    | 19,136         | N/A      | 19,136     | 428,240 |

## **2. Project Scope and Justification**

### **Scope**

In support of LANL’s mission growth, the EPCU project will improve the electrical power capacity for the Laboratory as it will allow load growth from 116 MVA (existing limit) up to a minimum of 200 MVA. Improvements include a new offsite 115 kV import transmission line, crossing BLM, USFS, and DOE administered land. Additionally, an on-site 115 kV transmission line approximately 4.5 miles long; upgrades for three 115 kV/13.8 kV substations; addition of medium-voltage, underground, and substation inter-tie circuits and switchgear; and addition of medium-voltage feeder circuits and switchgear to increase power capacity to support 60 MW for strategic computing platforms at LANL, will be provided.



## Justification

The mission of the project is to resolve the projected future shortfalls in the Laboratory's electrical transmission and distribution system to ensure it can reliably support the power demands from all programs performing work at LANL while maintaining compliance with applicable Federal Energy Regulatory Commission (FERC) / North American Electric Reliability Corporation (NERC) requirements for utility operations. The site will exceed peak power demand for the Norton Line (NL), which is one of two 115 kV transmission lines that feeds power to LANL. The NL is forecasted to exceed its operating limit within the 2026/2027 timeframe without operational constraint. LANL anticipates an increase in power demands across several mission areas including integrated nuclear programs, science & technology experiments, and infrastructure re-investment over the next ten years. While most of this demand growth is temporally distributed, growth in high-performance computing for large computing platforms is a key schedule driver. Without sufficient electrical capacity and capability, the DOE's and NNSA's core mission pillars at LANL will be fundamentally compromised.

The funds appropriated under this data sheet may be used for contracted support services to the Federal Program Manager and the Federal Program Director (FPD) to conduct independent assessments of the planning and execution of this project required by DOE O 413.3B and to conduct technical reviews of design and construction documents. The project is being conducted in accordance with the project management requirements in DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets. As allowed by DOE O 413.3B, work will be phased to improve overall efficiency.

## Key Performance Parameters (KPPs)

The Threshold KPPs consider minimum import capacity, power system reliability, and distribution capacity to serve the Strategic Computing Center. Achievement of the Threshold KPPs is a prerequisite for approval of CD-4, *Project Completion*. The preliminary KPPs have been updated and finalized with CD-2/3 baseline approval. The TPC approved at CD-2/3 is based on the Threshold KPPs stated below.

| THRESHOLDS |                                                                                                                                                                                                                                       | OBJECTIVES |                                                                                                                                                                                                                                                                 |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| T1         | Provide a 115 kV transmission system with a minimum system operating limit of 200 MVA that can reliably withstand the next credible contingency within acceptable performance parameters while maintaining interconnection integrity. | O1a        | Provide a 115 kV transmission system with up to a 20% increase in the minimum system operating limit of 200 MVA that can reliably withstand the next credible contingency within acceptable performance parameters while maintaining interconnection integrity. |
|            |                                                                                                                                                                                                                                       | O1b        | Provide a 115 kV transmission system with up to a 30% increase in the minimum system operating limit of 200 MVA that can reliably withstand the next credible contingency within acceptable performance parameters while maintaining interconnection integrity. |
|            |                                                                                                                                                                                                                                       | O1c        | Provide increased operational flexibility using voltage support devices at critical 115 kV substation locations to reduce the impact of credible contingencies.                                                                                                 |
| T2         | Provide a 13.8 kV distribution system with a minimum system operating limit of 200 MVA that can reliably withstand the next credible contingency within acceptable                                                                    | O2a        | Provide increased operational flexibility using voltage support devices at critical 13.8 kV distribution switchgear locations to reduce the impact of credible contingencies.                                                                                   |
|            |                                                                                                                                                                                                                                       | O2b        | Provide increased operational flexibility using 13.8 kV distribution interties between critical switchgear locations to reduce the risk impact of certain credible contingencies.                                                                               |

|    |                                                                                                                                                             |    |                                                                                                                                                             |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | performance parameters while maintaining interconnection integrity.                                                                                         |    |                                                                                                                                                             |
| T3 | Provide a minimum of 60 MVA capacity for dedicated 13.8 kV distribution feeders and associated 13.8 kV switchgear to the Strategic Computing Complex (SCC). | O3 | Provide a minimum of 80 MVA capacity for dedicated 13.8 kV distribution feeders and associated 13.8 kV switchgear to the Strategic Computing Complex (SCC). |

### 3. Financial Schedule

| (\$K)                             |                                      |                |                |
|-----------------------------------|--------------------------------------|----------------|----------------|
|                                   | Budget Authority<br>(Appropriations) | Obligations    | Costs          |
| <b>Total Estimated Cost (TEC)</b> |                                      |                |                |
| <b>Design</b>                     |                                      |                |                |
| Prior Years                       | 24,000                               | 24,000         | 20,738         |
| FY 2025                           | 32,619                               | 32,619         | 13,417         |
| FY 2026                           | 3,195                                | 3,195          | 23,807         |
| FY 2027                           | -                                    | -              | 1,852          |
| <b>Total Design</b>               | <b>59,814</b>                        | <b>59,814</b>  | <b>59,814</b>  |
| <b>Construction</b>               |                                      |                |                |
| Prior Years                       | 75,000                               | 75,000         | -              |
| FY 2025                           | 37,381                               | 37,381         | 10,977         |
| FY 2026                           | 56,805                               | 56,805         | 115,301        |
| FY 2027                           | 65,000                               | 61,000         | 103,250        |
| FY 2028                           | 62,674                               | 63,000         | 62,674         |
| FY 2029                           | 52,430                               | 56,104         | 43,992         |
| FY 2030                           | -                                    | -              | 9,458          |
| FY 2031                           | -                                    | -              | 3,638          |
| <b>Total Construction</b>         | <b>349,290</b>                       | <b>349,290</b> | <b>349,290</b> |
| <b>TEC</b>                        |                                      |                |                |
| Prior Years                       | 99,000                               | 99,000         | 20,738         |
| FY 2025                           | 70,000                               | 70,000         | 24,394         |
| FY 2026 <sup>1</sup>              | 60,000                               | 60,000         | 139,108        |
| FY 2027                           | 65,000                               | 61,000         | 105,102        |
| FY 2028                           | 62,674                               | 63,000         | 62,674         |
| FY 2029                           | 52,430                               | 56,104         | 43,992         |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 in funding to DOE/NNSA. EPCU received \$60M in funding.

|                                  |                |                |                |
|----------------------------------|----------------|----------------|----------------|
| FY 2030                          | -              | -              | 9,458          |
| FY 2031                          | -              | -              | 3,638          |
| <b>Total TEC</b>                 | <b>409,104</b> | <b>409,104</b> | <b>409,104</b> |
| <b>Other Project Costs (OPC)</b> |                |                |                |
| Prior Years                      | 11,122         | 11,122         | 11,055         |
| FY 2025                          | -              | -              | 12             |
| FY 2026                          | 3,198          | 3,198          | 2,000          |
| FY 2027                          | 2,000          | 2,000          | 2,000          |
| FY 2028                          | -              | -              | 1,000          |
| FY 2029                          | -              | -              | -              |
| FY 2030                          | 2,816          | 2,816          | 2,000          |
| FY 2031                          | -              | -              | 1,069          |
| <b>Total, OPC</b>                | <b>19,136</b>  | <b>19,136</b>  | <b>19,136</b>  |
| <b>Total Project Costs (TPC)</b> |                |                |                |
| Prior Years                      | 110,122        | 110,122        | 31,793         |
| FY 2025                          | 70,000         | 70,000         | 24,406         |
| FY 2026                          | 63,198         | 63,198         | 141,108        |
| FY 2027                          | 67,000         | 63,000         | 107,102        |
| FY 2028                          | 62,674         | 63,000         | 63,674         |
| FY 2029                          | 52,430         | 56,104         | 43,992         |
| FY 2030                          | 2,816          | 2,816          | 11,458         |
| FY 2031                          | -              | -              | 4,707          |
| <b>Total TPC</b>                 | <b>428,240</b> | <b>428,240</b> | <b>428,240</b> |

#### 4. Details of Project Cost Estimate

| (\$K)                             |                                       |                                        |                                            |
|-----------------------------------|---------------------------------------|----------------------------------------|--------------------------------------------|
|                                   | <b>Current<br/>Total<br/>Estimate</b> | <b>Previous<br/>Total<br/>Estimate</b> | <b>Original<br/>Validated<br/>Baseline</b> |
| <b>Total Estimated Cost (TEC)</b> |                                       |                                        |                                            |
| <b>Design</b>                     |                                       |                                        |                                            |
| Design                            | 43,403                                | 43,403                                 | 43,403                                     |
| Contingency                       | 16,411                                | 16,411                                 | 16,411                                     |
| <b>Total Design</b>               | <b>59,814</b>                         | <b>62,195</b>                          | <b>59,814</b>                              |
| <b>Construction</b>               |                                       |                                        |                                            |
| Site Work                         | -                                     | -                                      | -                                          |
| Equipment                         | 87,724                                | 65,461                                 | 87,724                                     |
| Construction                      | 105,583                               | 117,008                                | 105,583                                    |
| Title III Services                | 4,566                                 | 2,807                                  | 4,566                                      |
| Oversight & Management            | 58,410                                | 45,508                                 | 58,410                                     |
| Contingency                       | 93,007                                | 56,021                                 | 93,007                                     |

|                                    |                |                |                |
|------------------------------------|----------------|----------------|----------------|
| <b>Total Construction</b>          | <b>349,290</b> | <b>286,805</b> | <b>349,290</b> |
| <b>Total Estimated Cost (TEC)</b>  | <b>409,104</b> | <b>349,000</b> | <b>409,104</b> |
| <i>Contingency, TEC</i>            | <i>109,418</i> | <i>70,429</i>  | <i>109,418</i> |
| <b>Other Project Costs (OPC)</b>   |                |                |                |
| OPC except D&D                     |                |                |                |
| Project Definition                 | 784            | 784            | 784            |
| Conceptual Design                  | 3,305          | 3,305          | 3,305          |
| NEPA &<br>Contracting              | 6,472          | 6,472          |                |
| Start-up                           | 2,993          | 2,993          | 2,993          |
| NHPA MOA<br>Stipulations           | 5,000          | 5,000          | 5,000          |
| Other Project Costs                | 582            | 586            | 582            |
| Contingency                        | -              | -              | -              |
| <b>Total OPC</b>                   | <b>19,136</b>  | <b>19,140</b>  | <b>19,136</b>  |
| <i>Contingency, OPC</i>            | <i>-</i>       | <i>-</i>       | <i>-</i>       |
| <b>Total Project Cost</b>          | <b>428,240</b> | <b>368,140</b> | <b>428,240</b> |
| <b>Total Contingency (TEC+OPC)</b> | <b>109,418</b> | <b>70,429</b>  | <b>109,418</b> |

#### 5. Schedule of Appropriation Requests (K)

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total   |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------|---------|
| FY 2023      | TEC  | 119,000     | 86,000  | 79,000  | -       | -       | -       | -       | -       | -         | 284,000 |
|              | OPC  | 7,127       | -       | -       | -       | -       | -       | -       | -       | 2,811     | 9,938   |
|              | TPC  | 126,127     | 86,000  | 79,000  | -       | -       | -       | -       | -       | 2,811     | 293,938 |
| FY 2024      | TEC  | 99,000      | 86,000  | 104,000 | -       | -       | -       | -       | -       | 0         | 289,000 |
|              | OPC  | 11,329      | -       | -       | -       | -       | -       | -       | -       | 2,811     | 14,140  |
|              | TPC  | 110,329     | 86,000  | 104,000 | -       | -       | -       | -       | -       | 2,811     | 303,140 |
| FY 2025      | TEC  | 99,000      | 70,000  | 85,000  | -       | -       | -       | -       | -       | 35,000    | 289,000 |
|              | OPC  | 11,122      | 190     | -       | -       | -       | -       | -       | -       | 2,828     | 14,140  |
|              | TPC  | 110,122     | 70,190  | 85,000  | -       | -       | -       | -       | -       | 37,828    | 303,140 |
| FY 2026      | TEC  | 99,000      | 70,000  | 85,000  | -       | -       | -       | -       | -       | 95,000    | 349,000 |
|              | OPC  | 11,122      | 190     | 3,000   | -       | -       | -       | -       | -       | 4,828     | 19,140  |
|              | TPC  | 110,122     | 70,190  | 88,000  | -       | -       | -       | -       | -       | 99,828    | 368,140 |
| FY 2027      | TEC  | 99,000      | 70,000  | 60,000  | 65,000  | 62,674  | 52,430  | -       | -       | -         | 409,104 |
|              | OPC  | 11,122      | -       | 3,198   | 2,000   | -       | -       | 2,816   | -       | -         | 19,136  |
|              | TPC  | 110,122     | 70,000  | 63,198  | 67,000  | 62,674  | 52,430  | 2,816   | -       | -         | 428,240 |

The FY 2026 Appropriations Request does not include any funding provided through the FY 2026 Appropriation Bill. The \$85,000k request is pending additional Public Law 119–21 funding decisions.

6. Related Operations and Maintenance Funding Requirements

|                                                                     |            |
|---------------------------------------------------------------------|------------|
| Start of Operation or Beneficial Occupancy (fiscal quarter or date) | 1Q FY 2029 |
| Expected Useful Life (number of years)                              | 41         |
| Expected Future Start of D&D of this capital asset (fiscal quarter) | 1Q FY 2070 |

Related Funding Requirements  
(Budget Authority in Millions of Dollars)

|                            | Annual Costs <sup>1</sup> |                         | Life Cycle Costs       |                         |
|----------------------------|---------------------------|-------------------------|------------------------|-------------------------|
|                            | Current Total Estimate    | Previous Total Estimate | Current Total Estimate | Previous Total Estimate |
| Operations and Maintenance | 3.90                      | 4.08                    | 160                    | 167                     |

7. D&D Information

There is no new area being constructed in this construction project. This scope of this project does not include adding any floor space to an existing facility.

8. Acquisition Approach

The Project will be managed and constructed by the LANL M&O contractor, which in turn is using a Design-Build firm fixed-price, best value procurement subcontract.

<sup>1</sup> Dollars are base year FY 2023 dollars

## **Secure Transportation Asset**

### **Overview**

The Secure Transportation Asset (STA) is responsible for operating the Transportation Safeguards System (TSS) safely and securely in support of nuclear modernization and sustainment program requirements. STA provides the transportation infrastructure that enables sustained delivery of plutonium pits, strategic materials, high explosives, and non-nuclear components to support the stockpile and future deterrence needs throughout the Nuclear Security Enterprise (NSE). Cargo is transported in highly modified secure tractor-trailers and escorted by Federal Agents (FA) providing security and national incident command system response in the event of emergencies. Stockpile modernization programs, limited-life component exchanges, surveillance, dismantlement, nonproliferation activities, and experimental programs rely on safe, secure, and on-schedule transport of STA cargos.

STA currently has the mission capacity to meet National Nuclear Security Administrations (NNSA) stockpile sustainment priorities, strategic material and component transfers, and other NSE workloads. STA will continue to balance and prioritize customer requests against capacity. Since its establishment in 1974, STA has maintained its legacy of safety and security to include no loss of cargo and no radiological release on any shipment.

The Fiscal Year (FY) 2027 Budget Request of \$587,071,000 is 30.8 percent above FY 2026 Enacted to support the Mobile Guardian Transporter (MGT) program development, escort vehicle production, C-UAS operations implementation and FA recruitment and retention efforts. The STA program includes the Operations and Equipment (OPS) and Program Direction (PD) subprograms.

**Secure Transportation Asset  
Funding (\$K)<sup>1</sup>**

|                                                    | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted |             |
|----------------------------------------------------|--------------------|--------------------|-----------------|--------------------|----------------------------------------|-------------|
|                                                    |                    |                    |                 |                    | \$                                     | %           |
| <i>Mission Capacity</i>                            | 59,654             | 71,029             | -               | 148,298            | +77,269                                | +109%       |
| <i>Security/Safety Capability</i>                  | 23,878             | 33,990             | -               | 35,423             | +1,433                                 | +4%         |
| <i>Infrastructure and C5 Systems</i>               | 40,122             | 55,005             | -               | 54,397             | -608                                   | -1%         |
| <i>Program Management</i>                          | 8,886              | 9,032              | -               | 9,139              | +107                                   | +1%         |
| <i>Mobile Guardian Transporter</i>                 | 103,620            | 130,485            | -               | 195,818            | +65,333                                | +50%        |
| Total Operations and Equipment                     | 236,160            | 299,541            | -               | 443,075            | +143,534                               | +48%        |
| <i>Salaries and Benefits</i>                       | 87,674             | 115,155            | -               | 109,214            | -5,941                                 | -5%         |
| <i>Travel</i>                                      | 6,909              | 8,025              | -               | 8,182              | +157                                   | +2%         |
| <i>Other Related Expenses</i>                      | 23,473             | 26,064             | -               | 26,600             | +536                                   | +2%         |
| Total, Program Direction                           | 118,056            | 149,244            | -               | 143,996            | -5,248                                 | -4%         |
| <b>Total, Secure Transportation Asset</b>          | <b>354,216</b>     | <b>448,785</b>     | <b>-</b>        | <b>587,071</b>     | <b>+138,286</b>                        | <b>+31%</b> |
| <b>Federal FTEs - Program Direction<br/>Funded</b> | <b>492</b>         | <b>502</b>         | <b>-</b>        | <b>506</b>         | <b>+4</b>                              | <b>+1%</b>  |

**Secure Transportation Asset  
Outyear Funding (\$K)**

|                                           | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|-------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Mission Capacity</i>                   | 95,596             | 95,818             | 97,023             | 99,018             |
| <i>Security/Safety Capability</i>         | 45,947             | 64,192             | 65,107             | 29,194             |
| <i>Infrastructure and C5 Systems</i>      | 62,844             | 57,750             | 59,025             | 63,440             |
| <i>Program Management</i>                 | 20,100             | 9,802              | 10,877             | 11,105             |
| <i>Mobile Guardian Transporter</i>        | 185,267            | 215,201            | 207,804            | 205,683            |
| Total Operations and Equipment            | 409,754            | 442,763            | 439,836            | 408,440            |
| <i>Salaries and Benefits</i>              | 126,310            | 126,833            | 140,028            | 148,224            |
| <i>Travel</i>                             | 8,347              | 8,517              | 8,687              | 8,869              |
| <i>Other Related Expenses</i>             | 28,254             | 28,475             | 29,089             | 29,701             |
| Total, Program Direction                  | 162,911            | 163,825            | 177,804            | 186,794            |
| <b>Total, Secure Transportation Asset</b> | <b>572,665</b>     | <b>606,588</b>     | <b>617,640</b>     | <b>595,234</b>     |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 in funding to DOE/NNSA.

## **Secure Transportation Asset Operations and Equipment**

### **Overview**

The OPS subprogram budget supports modernization and sustainment of STA communications systems and transportation assets, including life extension of the Safeguard Transporter (SGT) until replaced by the MGT. The MGT First Production Unit (FPU) is planned for completion in FY 2029. Additionally, funding provides for maintenance and replacement of specialized mission vehicles and one 737-400 aircraft (~40 years old), Counter Uncrewed Aircraft Systems (C-UAS), minor construction, command and control system platforms, equipment for the Federal Agent Candidate Training (FACT) program, and support service contracts assisting with program execution in several areas such as aviation, information technology, and engineering.

Within the STA OPS subprogram, five (5) activities make unique contributions to the safety and security of the transport of the nuclear stockpile. These activities accomplish the following:

- (1) Mission Capacity – provides mission-essential agent equipment, maintenance, modification and replacement of the transportation fleet, and aviation services.
- (2) Security/Safety Capability – Conducts FACT courses to help keep up with losses due to mandatory retirements and attrition. Develops and implements new fleet technologies, C-UAS, agent sustainment training equipment, and implements Security, Safety, and Emergency Response programs.
- (3) Infrastructure and Command and Control, Communication, Computer and Cyber (C5) Systems – provides support for minor construction projects, and C5 systems.
- (4) Program Management – provides corporate functions and business operations that control, assist, and direct secure transport operations.
- (5) MGT – allows for the design, development, testing, and fabrication of the MGT.

### ***Mission Capacity***

Sustains STA systems through equipment purchases to fulfill transportation requirements. Current assets include agent equipment, tractors, trailers, escort vehicles, other support vehicles, and aircraft. Lifecycle replacement of the transportation infrastructure is critical to support current and future nuclear security missions. Modernizing and sustaining these assets requires an integrated, long-term strategy and substantial investment. STA's strategy includes retiring outdated assets, refurbishing existing assets to extend their useful life, and procuring new assets with increased capabilities to meet our customers' ever-changing needs and evolving threats.

STA's efforts include:

- Lifecycle replacement of aging vehicles with new vehicles includes the design, engineering, testing, and fielding of specialized vehicles, tractors, and trailers necessary for successful convoy operations.
- Maintenance, sustainment and lifecycle replacement of STA's aircraft fleet ensuring availability and reliability for STA and the Office of Counterterrorism and Counterproliferation's mission operations.
- Sustain the required readiness posture of STA vehicles and aircraft fleet to support the NSE commitments to Department of War (DoW) in strengthening the nuclear posture.

### ***Security/Safety Capability***

Sustains STA systems capacity through integration of safety and security capabilities. This includes the following activities:

- Identify, design, and test new fleet and mission technologies. Deliverables include enhancements to the secure trailers, data analysis, information dissemination, and use of emerging physical security technology.



- Conduct FACT classes each year to increase FA workforce and develop an elite workforce through training and equipping FA candidates with the best products and tools available for mission requirements.
- Sustain specialized FA skills and qualifications by providing technical equipment, logistics, curriculum development, and staffing necessary to conduct Special Response Force training, Operational Readiness Training, Comprehensive Force-on-Force exercises, and Agent Sustainment Training. Sustainment Training includes surveillance detection, tactics, advanced driving skills, and firearms instruction. In addition, funding supports contracts for mission operation support and off-site training venues capable of supporting unit or FA commands during training activities.
- Maintain security and safety programs by conducting liaison activities with state and local law enforcement organizations, analysis of security methods and equipment, vulnerability assessments, development of Safeguards and Security Plans, and combat simulation computer modeling. Furthermore, validation of needed safety and security measures, execution of safety studies recommendations and review of engineering analysis results, execution of Nuclear Explosive Safety protocols and risk reduction of over-the-road safety issues.
- Maintain the Emergency Operations Center and the Transportation Emergency Control Center (TECC) in Albuquerque, New Mexico, train, and exercise the STA emergency response capability. Includes the Emergency Management Program, FA Incident Command System refresher, and sustainment training.
- The unmanned systems program continues to investigate, develop, acquire, and support the integration of unmanned technologies for use in the STA mission operations. Unmanned capabilities, air and ground, enhance situational awareness during emergencies or off-normal events involving critical STA mission assets.
- The C-UAS program continues to develop, test and implement C-UAS capability into STA operations.

#### ***Infrastructure and Command, and Control, Communication, Computer, and Cyber***

Sustains the system platforms operated by STA to provide critical information obtained, analyzed, and disseminated prior to and during missions. Includes continuous monitoring of all data for accuracy, validity and constant communication within convoys and between convoys and headquarters (HQ) to ensure mission success. These activities must be accomplished in real-time while balancing cybersecurity requirements, reliability, and integrity. STA leverages other systems technology supporting business processes, uses commercial products and operations which improve efficiency and effectiveness of STA operations. Additionally, provide for the necessary facility infrastructure to support the STA workforce and mission-essential functions.

This funding supports the following sub-elements:

- Modernize and sustain C5 systems activities to maintain vigilant oversight of nuclear convoys. Operate the TECC and maintain the New Mexico Relay Station, and communications systems across the STA.
- Maintain and expand the Mission Management System, a secure unclassified to classified controlled interface. This allows communications from unclassified to classified systems, and maintenance and enhancement of a common operating picture for the TECC as well as convoys.
- Expand, upgrade, and maintain the STA facilities and equipment in support of mission requirements. STA strives to minimize operational safety and health risks by addressing facility maintenance promptly at four locations with approximately 83 total facilities and infrastructure. Facilities include FA commands, vehicle mechanical and electronic maintenance shops, training command, and support staff buildings. Activities to sustain these facilities include repair, maintenance, and minor construction projects. STA meets at least annually to identify and prioritize facility projects and continues to use commercial standards.

### ***Program Management***

Creates a well-managed, responsive, and accountable organization by employing effective business practices for the STA program. This activity includes:

- Corporate functions such as technical document support and business processes that control, assist, and direct secure transport operations (includes supplies, equipment, and regulation control procedures).
- Assess, evaluate, and improve functions and processes including self-assessments, configuration management, quality assurance program, and business integration activities.

### ***Mobile Guardian Transporter***

Provides for the design, production, and testing of the MGT. The MGT will conduct secure transportation of nuclear assets to assure the safety and security of cargo and containers, protect the public, meet nuclear explosive safety requirements associated with accident scenarios, reduce the risk to security threats, and provide for enhanced communications. This includes the following activities:

- Build two MGT Training Trailers
- Build initial MGT block of four operational trailers.
- Rolling Chassis block one and two acquisition.
- Mechanical Systems Development
- Electronics and Auxiliary Systems Development
- Active Delay System Development
- Begin procurement of Enhanced Cargo Restraint Systems

### **Highlights of the FY 2027 Budget Request**

The development, design, production, and maintenance of specialized mission vehicles, tractors, trailers, escort vehicles, training of FAs, robust communications systems and procurement of one 737-700/800 aircraft.

- SGT life extension and risk reduction activities include refurbishment, major repairs, annual testing, Tester replacement, powerplant replacement, critical spares procurement, Integrated Surety Architecture (ISA) and trailer communication for the aging fleet. SGT life extension is required until the MGT is integrated into mission operations.
- System development and production work of the MGT to include critical system testing, and procurement of components toward the FPU.
- Lifecycle replacement and refurbishment of aircraft, escort vehicles, and support vehicles.
- Minor construction projects to provide safe and secure facility infrastructure to support training, manpower, transportation, and independent operations. Specifically supports the Aviation Hangar extension and Apron replacement.
- Sustainment of system platforms operated by STA, including continuous monitoring of all data and communication within and between convoys and headquarters to ensure mission success.
- A C-UAS program development, procurement, testing and implementation for integration into STA operations.

### **Operations and Equipment (+\$143.534 million)**

The increase reflects efforts to address challenges including ensuring mission assets meet modernization and replacement schedules, limited vendor availability, restricted expertise to integrate specialized equipment, safety and security risks technological advances impose on the TSS, and supply chain challenges. Specific increases provide for the delivery of the MGT rolling chassis, final engineering releases for MGT FPU, and acquisition of Enhanced Cargo Restraints; refurbishment, sustainment and lifecycle replacement of specialized vehicles and aircraft; initial implementation of the C-UAS program and minor construction associated with STA sites.

- **Mission Capacity**  
Refurbishment, sustainment and lifecycle replacement of specialized mission assets including SGT, escort and support vehicles. Additionally, lifecycle replacement of the first 737-400 aircraft (~40 years old).
- **Security/Safety Capability**  
The increase Supports research, development, and procurement of two CUAS special operations prototype vehicles and hardware for on-the-move operations.
- **Infrastructure and C5 Systems**  
The increase reflects planned hiring of specialized support service contractors to support cybersecurity and critical IT services for secure communications for STA's over the road operational mission.
- **Program Management**  
No major change.
- **Mobile Guardian Transporter**  
The FY 2027 increase enables critical progress toward fielding the MGT by scaling engineering and system-integration activities and incorporating lessons learned from the FY 2026 Test Article 2 crash test. Additional resources allow the program to expand procurement of rolling chassis, enhanced cargo restraints, electronics systems, and assembly components needed to maintain production timelines and reduce mission risk.

## **Secure Transportation Asset Program Direction**

### **Overview**

The PD subprogram budget provides for personnel ensuring the safety and security of the nuclear stockpile while in transport. The total planned Full Time Equivalents (FTE) supports the FA force, federal pilots, emergency management personnel to execute plans/activities, security and safety programs, C-UAS personnel and training, and other key elements of the STA mission. STA is committed to a stable human resources strategy to achieve an optimal agent force to meet the NNSA NSE priorities and mission requirements. The optimal FA force is determined by analysis of the projected workload and the resources required to support the NSE weapon modernization and production schedule.

STA is implementing initiatives to attract, hire, and retain the FA workforce, such as increased salaries, recruitment bonuses, career ladder positions and a special pay table to sustain the readiness and deployment requirements required to execute the nuclear deterrence missions. However, the program faces challenges onboarding and sustaining the FA workforce to keep up with turnover. STA pursued a Staffing Supplement to address FA pay disparities to improve recruitment and retention. In Quarter 1 FY2026, the supplement (10 percent salary increase) and the 3.8 percent Law Enforcement Officers pay increase were approved. STA implemented the pay enhancements in calendar year 2026. STA will continue to assess the outcome of the FA initiatives to ensure the FA workforce is properly staffed and postured for successful mission execution.

### ***Salaries and Benefits***

Salaries and Benefits provide for 506 federal FTEs located in Albuquerque, New Mexico, Fort Chaffee, Arkansas, Oak Ridge, Tennessee, Amarillo, Texas and the District of Columbia. Funding includes FA initiatives to attract, hire and retain the FA workforce, overtime, worker's compensation, and Permanent Change of Station (PCS) associated with FAs and support staff.

### ***Travel***

Travel funds utilized for secure convoys, training at military installations and other facilities, and program oversight.

### ***Other Related Expenses***

Provides for support service contracts including Human Reliability Program (HRP) for FAs and designated staff, provides for Energy Information Technology Services/DOE Common Operating Environment (EITS/DOECOE), and other contractual service requirements to include facility maintenance (janitorial and ground maintenance), intelligence and administrative support. Additionally, PD funding provides professional development training for all STA federal employees including new employee orientation, job specific training, supervisory, professional, leadership and soft skills, certification training for pilots, FA's and other key personnel, leadership development programs, and group training not related to FA unit training. Provides uniforms or allowances for uniforms, as authorized by 5 U.S.C. §§ 5901–5902 for select STA staff as outlined in STA Policy 1.22E.

### **Highlights of the FY 2027 Budget Request**

The FY 2027 request supports FA and staff FTEs for STA mission execution and priorities. This includes:

- Support for 506 Federal FTEs, including FA hiring initiatives to attract, hire and retain FAs, federal pilots, TECC personnel, C-UAS operators and staff.
- Travel to support mission, operational, and training requirements.

- EITS/DOECOE fees, support service contracts, HRP, and facility maintenance costs.
- C-UAS personnel and training.
- Certification and training to sustain skills for FAs and staff.

**Program Direction (-\$5.248 million)**

The funding decrease reflects a shift from employing fewer seasoned personnel, paid at a higher rate, to a larger number of junior personnel paid at lower rates.

**Program Direction**  
**Activities and Explanation of Changes**  
**(\$K)**

| <b>FY 2026 Enacted</b>                                                                                                                                                                                                                                                                                                                                                                                                         | <b>FY 2027 Request</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Explanation of Changes<br/>FY 2027 Request vs FY 2026 Enacted</b>                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Program Direction</b>                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     |
| <b>149,244</b>                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>143,996</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>-5,248</b>                                                                                                                                                                                                       |
| <i>Salaries and Benefits</i>                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     |
| <i>115,155</i>                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>109,214</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>-5,941</i>                                                                                                                                                                                                       |
| <ul style="list-style-type: none"> <li>Recruited, hired, and retained quality personnel based on current and future mission needs.</li> <li>Filled FA and pilot vacancies to sustain workload requirements.</li> <li>Conducted FACT courses (projections consider gains from FACT and losses due to mandatory retirements and attrition).</li> <li>Continued recruitment, salary, and retention incentives for FAs.</li> </ul> | <ul style="list-style-type: none"> <li>Continue to fill FA and secondary staff vacancies to sustain workload requirements.</li> <li>Administer FACT courses.</li> <li>Continue to support recruitment, salary, and retention incentives for FAs.</li> <li>C-UAS personnel</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>The funding decrease reflects a shift from employing fewer seasoned personnel, paid at a higher rate, to a larger number of junior personnel paid at lower rates.</li> </ul> |
| <i>Travel</i>                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     |
| <i>8,025</i>                                                                                                                                                                                                                                                                                                                                                                                                                   | <i>8,182</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <i>+157</i>                                                                                                                                                                                                         |
| <ul style="list-style-type: none"> <li>Travel required to transport nuclear weapons, components, and special nuclear materials.</li> <li>Funding supported travel to facilities that provide unique training to maintain FA skills.</li> <li>Charter plane contract funded biennially as a contingency plan to support requirements when current STA aircraft are unavailable.</li> </ul>                                      | <ul style="list-style-type: none"> <li>Travel is required to support safe and secure transportation of nuclear weapons, components, and special nuclear materials. Includes FA and support staff.</li> <li>Funding supports travel to facilities that provide unique training to maintain FA skill sets.</li> <li>Charter planes contract funded biennially as a contingency plan to support requirements when current STA aircraft is unavailable.</li> </ul> | <ul style="list-style-type: none"> <li>Increase supports travel for FA recruitment and FA mission travel required to support the NSE.</li> </ul>                                                                    |
| <i>Other Related Expenses</i>                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     |
| <i>26,064</i>                                                                                                                                                                                                                                                                                                                                                                                                                  | <i>26,600</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <i>+536</i>                                                                                                                                                                                                         |
| <ul style="list-style-type: none"> <li>Continuous medical evaluations of individuals assigned to HRP duties and additional medical training for FA medics.</li> </ul>                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Continuous medical evaluations of individuals assigned to HRP duties and additional medical training for FA medics.</li> </ul>                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>The increase supports personnel training for C-UAS implementation and EITS/DOECOE support.</li> </ul>                                                                        |

| FY 2026 Enacted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FY 2027 Request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Explanation of Changes<br>FY 2027 Request vs FY 2026 Enacted |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Support FACT at the Federal Law Enforcement Training Center (FLETC).</li> <li>• Support processing security clearances.</li> <li>• Support EITS/DOECOE costs.</li> <li>• Support service contracts for facility maintenance, intelligence analysts, and other administrative staff at multiple STA sites.</li> <li>• Provide the necessary training to sustain competencies associated with the job responsibilities (FA, pilots, and technical staff).</li> </ul> | <ul style="list-style-type: none"> <li>• Support FACT at FLETC which provides FA training for legal, use of force and vehicle stops.</li> <li>• Support processing security clearances.</li> <li>• Support EITS/DOECOE costs.</li> <li>• Support service contracts for facility maintenance, intelligence analysts, and other administrative staff at multiple STA sites.</li> <li>• Professional development training for all STA Federal employees.</li> <li>• C-UAS personnel and training.</li> </ul> |                                                              |

**Secure Transportation Asset  
Capital Equipment Summary  
Funding (\$K)**

|                                                     | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Request</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>              |              |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC<br><\$10M)     | N/A          | N/A                    | 9,513                      | 9,787                      | 9,097                      |
| Mobile Guardian Transporter                         | 1,870,994    | 627,432                | 103,620                    | 130,485                    | 195,818                    |
| Counter Uncrewed Vehicle Platform                   | 108,970      | -                      | -                          | -                          | 10,000                     |
| Replacement Aircraft (Lifecycle<br>Replacement 737) | 64,000       | -                      | -                          | -                          | 64,000                     |
| <b>Total, Capital Equipment</b>                     | <b>N/A</b>   | <b>N/A</b>             | <b>113,133</b>             | <b>140,272</b>             | <b>278,915</b>             |

**Secure Transportation Asset  
Capital Equipment Summary  
Outyear Funding (\$K)**

|                                                     | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|-----------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>              |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment<br>(TEC <\$10M)     | 15,300                     | 15,300                     | 15,300                     | 15,300                     | N/A             |
| Mobile Guardian Transporter                         | 185,267                    | 215,202                    | 207,487                    | 205,683                    | N/A             |
| Counter Uncrewed Vehicle Platform                   | 20,100                     | 38,200                     | 38,570                     | 2,100                      | N/A             |
| Replacement Aircraft (Lifecycle<br>Replacement 737) | -                          | -                          | -                          | -                          | N/A             |
| <b>Total, Capital Equipment</b>                     | <b>220,667</b>             | <b>268,702</b>             | <b>261,357</b>             | <b>223,083</b>             | <b>N/A</b>      |



## **Defense Nuclear Security**

### **Overview**

The Defense Nuclear Security (DNS) program leads, develops, and implements the National Nuclear Security Administration's (NNSA) security program, enabling its nuclear security enterprise (NSE) missions. DNS protects NNSA personnel, facilities, nuclear weapons, and special nuclear materials from a full spectrum of threats, ranging from minor security incidents to acts of terrorism, at its national laboratories, production plants, processing facilities, Nevada National Security Site, and satellite facilities for federal staff. Employing more than 2,200 Protective Force (PF) officers, DNS secures more than 6,000 buildings and protects more than 60,000 personnel. Today, the program is charting a course of transformative change to ensure DNS's mission-enabling function keeps pace with the expanding work scope across all elements of the NNSA mission in future years.

The DNS Operations and Maintenance program integrates personnel, equipment, and procedures to protect physical assets and resources against theft, sabotage, diversion, or other criminal acts. Each NNSA contract mission partner has an approved Site Security Plan (SSP) detailing protection measures and resources needed to protect site security interests.

PF duties include, specialized training, performance testing, facilities, equipment, weapons/firearms, ammunition, vehicles, and other expenses. These forces are each site's primary frontline protection and consist of armed, uniformed officers. PF officers are integral to a site's security posture and are trained in tactics and techniques necessary to protect NNSA sites.

Physical Security Systems include Counter Unmanned Aircraft Systems (CUASs), intrusion detection and assessment systems, performance testing and certification/recertification, access control systems, barrier and delay mechanisms, canine explosive detection programs, and tactical systems. This subprogram funds investments in critical security systems and infrastructure upgrades to address assets that are well beyond their designed lifecycles and require increased maintenance and testing. This subprogram includes funding for the Physical Security Center of Excellence (PSCOE) at Sandia National Laboratories in New Mexico, the centrally managed Argus program at Lawrence Livermore National Laboratory in California, as well as the effort to replace the aging centrally managed Argus system with Caerus, a modern security system, at sites with Category I quantities of special nuclear material.

The Physical Security Systems subprogram includes the Security Infrastructure Revitalization Program (SIRP), which executes high-priority replacement and refurbishment projects. SIRP projects include refreshing barriers, sensors, cameras, lighting, communication, power, critical systems, and smaller capital equipment projects. The urgent need to repair systems with the highest risk of failure is driving this program's requirements.

Information Security provides classification guidance, technical surveillance countermeasures, operational security, and protection and control of classified matter.

Personnel Security includes access authorizations, badging, the Human Reliability Program, classified and unclassified visits, and foreign visits and assignments. It encompasses the administrative support for the site clearance process, including security clearance determinations at each site.

Material Control and Accountability controls and accounts for special and alternative nuclear materials through measurements, quality assurance, accounting, containment, surveillance, and physical inventory. This activity also includes Local Area Nuclear Materials Accountability Software application and training, as well as operational support provided to the Department of Energy and NNSA sites and facilities.

Security Program Operations and Planning includes budget development, responses to audits and information requests, SSPs, vulnerability/risk assessments, and performance testing and assurance activities. Additionally, it provides security incident and reporting management, security surveys and self-assessments, support for deviation requests, and control over security technology transfer activities. Security Program Operations and Planning also supports the facility clearance processing and Foreign Ownership, Control, or Influence determinations for security contracts.

**Defense Nuclear Security  
(\$K)<sup>1</sup>**

|                                                          | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Enacted |            |
|----------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|----------------------------------------|------------|
|                                                          |                    |                    |                 |                    | \$                                     | %          |
| Protective Forces                                        | 544,709            | 665,983            | -               | 689,073            | +23,090                                | +3%        |
| Physical Security Systems                                | 190,111            | 235,443            | -               | 251,429            | +15,986                                | +7%        |
| Information Security                                     | 72,061             | 80,043             | -               | 62,287             | -17,756                                | -22%       |
| Personnel Security                                       | 63,565             | 76,763             | -               | 83,011             | +6,248                                 | +8%        |
| Nuclear Material Control and Accountability              | 53,411             | 63,798             | -               | 65,022             | +1,224                                 | +2%        |
| Security Program Operations and Planning                 | 106,228            | 123,388            | -               | 154,971            | +31,583                                | +26%       |
| Total, Operations and Maintenance                        | 1,030,085          | 1,245,418          | -               | 1,305,793          | +60,375                                | +5%        |
| 17-D-710 West End Protected Area Reduction Project, Y-12 | 54,000             | -                  | -               | -                  | -                                      | -          |
| <b>Total, Defense Nuclear Security</b>                   | <b>1,084,085</b>   | <b>1,245,418</b>   | <b>-</b>        | <b>1,305,793</b>   | <b>+60,375</b>                         | <b>+5%</b> |

**Defense Nuclear Security  
Outyear (\$K)**

|                                                          | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|----------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Protective Forces                                        | 716,526            | 742,149            | 742,800            | 770,091            |
| Physical Security Systems                                | 256,358            | 250,965            | 262,602            | 258,388            |
| Information Security                                     | 58,839             | 60,888             | 67,935             | 68,202             |
| Personnel Security                                       | 83,483             | 86,189             | 88,401             | 89,372             |
| Nuclear Material Control and Accountability              | 63,605             | 64,326             | 71,917             | 66,461             |
| Security Program Operations and Planning                 | 153,098            | 154,030            | 152,063            | 160,919            |
| Total, Operations and Maintenance                        | 1,331,909          | 1,358,547          | 1,385,718          | 1,413,432          |
| 17-D-710 West End Protected Area Reduction Project, Y-12 | -                  | -                  | -                  | -                  |
| <b>Total, Defense Nuclear Security</b>                   | <b>1,331,909</b>   | <b>1,358,547</b>   | <b>1,385,718</b>   | <b>1,413,432</b>   |

<sup>1</sup> P.L. 119-21 (Working Families Tax Cut Act, or WFTC) provided \$3,885,000,000 in funding to DOE/NNSA.

## **Defense Nuclear Security Operations and Maintenance**

### **Highlights of the FY 2027 Budget Request for Operations and Maintenance**

The Budget Request supports increased security needs from known mission growth across the NSE, including pit production at Los Alamos National Laboratory (LANL) and the Savannah River Plutonium Production Facility (SRPPF), Kansas City expansion efforts, and Uranium Processing Facility (UPF) testing and transition to operations.

The request includes substantial investments in deploying and comprehensive research, development, testing, and evaluation of next-generation Counter Unmanned Aircraft Systems (NexGen CUAS).

In addition, the request continues to support the initiative to replace the aging Argus system with a modern security system (Caerus), as well as continuous improvement initiatives through the Center for Security Technology, Analysis, Response, and Testing system and PSCOE activities, and the capability to adapt to rapidly evolving technologies.

This request also includes funding SIRP projects, addressing critical security systems, and related security infrastructure and equipment refresh needs.

### **Explanation of Change for Operations and Maintenance**

#### **Operations and Maintenance (+\$60.375 million)**

- The increase reflects growth of security requirements associated with continued mission growth across the NNSA NSE, including plutonium pit production at LANL and SRPPF, Kansas City expansion efforts, and preparation for UPF testing and transition to operations.
- The increase also reflects higher labor rates for PF and other contractor staff.
- NNSA is making substantial investments in NexGen CUAS. These investments include hardware and software updates to existing CUAS platforms, and the acquisition of new technology CUAS platforms. NNSA continues collaborating with the Idaho National Laboratory using its dedicated CUAS range to evaluate future-generation CUAS acquisitions. This testing identifies potential solutions for enhancing NNSA's CUAS capabilities.
- This request includes increased support for the development and implementation of Caerus, including integration with NexGen CUAS.
- PF shooting range upgrades are included.

**Defense Nuclear Security  
Capital Equipment  
Funding (\$K)**

|                                                 | Total | Prior<br>Years | FY 2025<br>Enacted | FY 2026<br>Request | FY 2027<br>Request |
|-------------------------------------------------|-------|----------------|--------------------|--------------------|--------------------|
| <b>Capital Equipment (&gt; \$500K)</b>          |       |                |                    |                    |                    |
| Total Non-MIE Capital Equipment (TEC<br><\$10M) | N/A   | N/A            | 2,397              | 2,445              | 2,494              |
| <b>Total, Capital Equipment</b>                 | -     | -              | <b>2,397</b>       | <b>2,445</b>       | <b>2,494</b>       |

**Capital Equipment  
Outyears Funding (\$K)**

|                                                 | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request | Outyears   |
|-------------------------------------------------|--------------------|--------------------|--------------------|--------------------|------------|
| <b>Capital Equipment (&gt; \$500K)</b>          |                    |                    |                    |                    |            |
| Total Non-MIE Capital Equipment (TEC<br><\$10M) | 2,544              | 2,595              | 2,646              | 2,699              | N/A        |
| <b>Total, Capital Equipment</b>                 | <b>2,544</b>       | <b>2,595</b>       | <b>2,646</b>       | <b>2,699</b>       | <b>N/A</b> |

**Defense Nuclear Security  
Other Information**

**Full Cost Recovery Estimates**

The Budget Request provides direct funding for mission-based DNS programs. Strategic Partnership Projects (SPPs) will continue to fund an allocable share of the base program through full cost recovery. Extraordinary security requirements for SPPs, such as dedicated security for special projects or exercises on an extended basis, will be charged directly to those customers.

**Full Cost Recovery Estimates  
Funding by Site (\$K)**

|                                        | FY 2025<br>Enacted | FY 2026<br>Request | FY 2027<br>Request | FY 2027 Request vs.<br>FY 2026 Request |           |
|----------------------------------------|--------------------|--------------------|--------------------|----------------------------------------|-----------|
|                                        |                    |                    |                    | \$                                     | %         |
| Kansas City National Security Campus   | 2,714              | 3,391              | 4,039              | +648                                   | 24%       |
| Lawrence Livermore National Laboratory | 11,000             | 12,497             | 12,497             | -                                      | -         |
| Los Alamos National Laboratory         | 5,191              | 4,989              | 5,250              | +261                                   | 5%        |
| Nevada National Security Sites         | 1,075              | 1,700              | 1,700              | -                                      | -         |
| Pantex Plant                           | 895                | 498                | 508                | +10                                    | 1%        |
| Sandia National Laboratories           | 26,619             | 26,852             | 26,648             | -204                                   | -1%       |
| Y-12 National Security Complex         | 1,248              | 1,273              | 1,984              | +711                                   | 57%       |
| <b>Total Sites</b>                     | <b>48,742</b>      | <b>51,200</b>      | <b>52,626</b>      | <b>+1,426</b>                          | <b>3%</b> |

## **Information Technology and Cybersecurity**

### **Overview**

The National Nuclear Security Administration's (NNSA) Information Technology (IT) and Cybersecurity Program focuses on investments in technology to effectively support the Nuclear Security Enterprise (NSE). These investments are fundamentally redesigning the NNSA IT and cybersecurity environments, delivering highly secure and risk-informed IT and cybersecurity solutions across the entire NSE. The program implements and maintains modern, innovative, resilient, and secure technology solutions. Delivery of critical functions includes managing classified IT services and systems and ensuring pervasive, strong cybersecurity support throughout the NSE. This approach aims to provide commodity services for NNSA Management and Operating (M&O) partners at laboratories, plants, and sites which will improve the security of sensitive NNSA data and shared services.

To successfully achieve its mission, the NNSA Office of the Associate Administrator for Information Management and Chief Information Officer (NA-IM) organizational structure is comprised of three offices: the Office of IT, the Office of Cybersecurity, and the Office of Mission Integration. NNSA collaborates with the Department of Energy's (DOE) Office of the Chief Information Officer (OCIO) on the development and deployment of IT and cybersecurity solutions to protect DOE information and information assets. Risk management, agility, trust, and partnership serve as essential guiding tenets for NNSA, where aligning people, processes, and technology directly contributes to the IT and Cybersecurity Program's success.

### **Cybersecurity**

The Cybersecurity Program is organized into two subprograms: Site Infrastructure and Enterprise Operations.

The Site Infrastructure subprogram supports cybersecurity operations and activities at NNSA laboratories, plants, and sites. Funds provided for this subprogram sustain local cybersecurity operations at laboratories, plants, and sites in support of NNSA mission priorities and in accordance with DOE and NNSA policy. Approximately 86% of these funds directly support the cybersecurity workforce and the remaining 14% support cybersecurity systems at the laboratories, plants, and sites. Recent initiatives have focused on improving the detection and resolution of cyber risks and issues including, but not limited to, operational technologies and industrial control systems that support the NNSA mission.

The Enterprise Operations subprogram provides essential cybersecurity support and operations to the NSE through active defensive cyber operations, assessments (including exercises, penetration testing, and Red and Blue Teaming tests of NNSA systems and incident response procedures), policy, management, planning, and training. NNSA manages an enterprise Cybersecurity Operations Center (SOC) that provides 24/7/365 cybersecurity services to NNSA and DOE networking enclaves. The NNSA SOC provides near real-time network defense and incident response services that protect these classified and unclassified enclaves and information from attacks. Through its participation in DOE's Integrated Joint Cybersecurity Coordination Center (iJC3) Program, the NNSA SOC further enhances enterprise-level cyber threat management and situational awareness for DOE. The Enterprise Operations subprogram is also responsible for developing and advancing policies and initiatives that support short- and long-term solutions to specific cybersecurity requirements at NNSA sites and headquarters locations. This subprogram also manages enterprise solutions, including the implementation of Zero Trust Architecture (ZTA) enablers, to create a more secure environment. NNSA continues to transition from a defense-in-depth cybersecurity posture towards ZTA.

To sustain the stockpile stewardship program and other core information assets, networks, applications, and systems, NNSA requires an enterprise-level identity model, strong multifactor authentication (MFA), and a

### **Weapons Activities /**

### **Information Technology and Cybersecurity**

### **FY 2027 Congressional Justification**

centralized monitoring and analysis capability function to secure the infrastructure system. This broad base of security and network services includes application integration, authentication services, directory services, enterprise data resource management, the NNSA SOC and Network Operations Center (NOC), Identity and Access Management (IAM), Public Key Infrastructure (PKI), and security monitoring and intrusion detection.

The Cybersecurity Program leverages industry best practices for investing critical resources to address Federal requirements. NNSA also continues to enhance security across the NSE through the implementation of a standardized cybersecurity spending strategy for its laboratories, plants, and sites. Such efforts are building NNSA's capacity to meet evolving IT and cybersecurity threats, gain operational efficiencies, and achieve enterprise-wide improvements for IT infrastructure.

### **Information Technology**

NNSA directs the design, development, and maintenance of all computing aspects, providing staff with the IT resources necessary to achieve mission goals and objectives. The IT Program supports the infrastructure and protection for classified and unclassified computing networks, secure communications, applications, systems, and logical environments. It ensures electronic information and information assets are operating efficiently and effectively and are protected from unauthorized access and malicious acts that could adversely affect national and economic security. Furthermore, the IT Program provides enterprise-level classified computing infrastructure and unclassified applications services to NNSA Federal staff in support of the NNSA mission. Where applicable, it leverages commercial cloud-based services and solutions to support infrastructure hosting, application development, operations, and maintenance.

NNSA's classified IT computing infrastructure enables laboratories, plants, and sites to communicate and share mission-critical information. The program supports IT systems and networks and serves as DOE's computer network defense service provider for the Secret Fabric.

- Significantly enhances NNSA's worldwide radiological and nuclear emergency response missions by ensuring assured communications and continuous modernization of IT infrastructure, network architecture, and classified systems, including the Emergency Communications Network (ECN) and the Nuclear Emergency Support Team Communications (NEST Comms). These efforts also align with digital transformation (DT) and digital engineering (DE) priorities, improving collaboration tools, network services, redundancy, and global performance to deliver continuous, effective, and secure services for all DOE/NNSA response components during operational emergencies.
- The National Security Network (NSN) supports the processing of Secret/National Security Information (NSI) and facilitates the interconnection with Department of War (DoW) SIPRNET.
- The Enterprise Secure Network (ESN) environment operates at the Secret/Restricted Data (S/RD) level and consists of independent site installations of standardized hardware and software integrated through a common infrastructure, shared policies, and procedures. ESN serves as the base network for classified commodity services, enabling classified collaborative computing via secure Virtual Desktop Infrastructure (VDI) to facilitate information sharing among disparate DOE/NNSA entities.
- Other classified networks enable communication and sharing of information in support of NNSA's mission as well as Federal partners.

To think, behave, and respond as one cohesive agency with a shared, critical national security mission, it is necessary to reengineer telecommunications networks and improve service offerings. Such efforts outfit employees with effective communication tools and maximize efficiency, lower operational costs, remove technical barriers, and facilitate collaboration. Additionally, the footprint of the enterprise networks continues to expand as NNSA's mission requirements increase and/or change. Accordingly, the IT Program enhances enterprise services to support emerging technologies and the NNSA mission, investing to:

- Improve connectivity between laboratories, plants, and sites through classified IT infrastructure enhancements and IT modernization projects. These efforts will support digital transformation, digital engineering, and AI initiatives across both nuclear and non-nuclear security activities within the DOE enterprise.
- Enhance IT commodity-based computing infrastructure, leveraging modern systems and secure data transfer technologies, to facilitate effective collaboration and information sharing for NNSA Federal employees and support contractors.
- Increase automation capabilities for rapid, reliable, consistent, and secure technology deployments, and utilize new techniques and technology to achieve rapid development in a modern cloud environment.
- Partner with DOE to ensure technology services consistently meet organizational requirements.

### Information Technology and Cybersecurity (\$K)

|                                                            | FY 2025<br>Enacted | FY 2026<br>Enacted | WFTC<br>Funding | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|------------------------------------------------------------|--------------------|--------------------|-----------------|--------------------|---------------------------------------|-------------|
|                                                            |                    |                    |                 |                    | \$                                    | %           |
| <i>Site Infrastructure</i>                                 | 149,524            | 150,314            | -               | 203,316            | +53,002                               | +35%        |
| <i>Enterprise Operations</i>                               | 181,540            | 206,286            | -               | 246,324            | +40,038                               | +19%        |
| Subtotal, Cybersecurity                                    | 331,064            | 356,600            | -               | 449,640            | +93,040                               | +26%        |
| Information Technology                                     | 267,315            | 331,400            | -               | 485,360            | +153,960                              | +46%        |
| <b>Total, Information Technology<br/>and Cybersecurity</b> | <b>598,379</b>     | <b>688,000</b>     | <b>-</b>        | <b>935,000</b>     | <b>+247,000</b>                       | <b>+36%</b> |

### Information Technology and Cybersecurity Outyear (\$K)

|                                                        | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|--------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| <i>Site Infrastructure</i>                             | 217,383            | 223,905            | 231,899            | 240,481            |
| <i>Enterprise Operations</i>                           | 261,250            | 261,275            | 261,401            | 266,629            |
| Subtotal, Cybersecurity                                | 478,633            | 485,180            | 493,300            | 507,110            |
| Information Technology                                 | 505,067            | 502,594            | 498,929            | 504,964            |
| <b>Total, Information Technology and Cybersecurity</b> | <b>983,700</b>     | <b>987,774</b>     | <b>992,229</b>     | <b>1,012,074</b>   |

### Highlights of the FY 2027 Budget Request for Cybersecurity

Cybersecurity will significantly enhance enterprise resilience, fortify defenses against sophisticated and evolving threats, and streamline incident response through strategic investments in technology, risk management, and collaborative initiatives.

In FY 2027, Cybersecurity will concentrate on:

- Improving enterprise-wide cyber programs and infrastructure, including the NNSA SOC and operational technology security.



- Further developing and strengthening cybersecurity across the ZTA pillars through strategic investments in advanced tools, such as Endpoint Detection and Response (EDR), and specialized Operational Technology security initiatives. These efforts enhance resilience, enable continuous monitoring, and establish a robust, enterprise-wide security model for NNSA information assets.
- Continuing to evolve integrated communications capabilities to enhance information sharing between other government agencies (OGAs) and NNSA, facilitating expanded partnerships, the sharing of lessons learned, and modernizing mission execution.
- Countering malicious actors and nation states through proactive detection, prevention, and disruption of suspicious activity using continuous monitoring and innovative tools, while ensuring quick and effective response to cybersecurity incidents through coordinated enterprise-wide efforts.
- Strengthening the resilience of the NSE by expanding supply chain management collaboration and supply chain risk management.
- Sustaining investment and deployment of Security Data Integration (SDI) across laboratories, plants, and sites.
- Continuing to harness artificial intelligence and machine learning (AI/ML) cybersecurity capabilities, integrating with SDI for a proactive defensive posture against evolving cyber defense capabilities.
- Continuing expansion of NNSA's exercise program as well as Red and Blue Team cybersecurity operations.
- Implementing cloud-based Enterprise Governance, Risk, and Compliance (eGRC), enhancing the ability to analyze and share critical cybersecurity risk information and improving enterprise situational awareness.
- Sustaining Controlled Unclassified Information (CUI) protocols to safeguard information.

#### **Explanation of Changes for Cybersecurity (+\$93.040 million)**

- The funding increase sustains and enhances cybersecurity programs at NNSA laboratories, plants, and sites. Investment will accommodate organizational growth and facilitate crucial workforce expansion, ensuring robust, on-site cybersecurity operations are equipped to manage evolving demands and provide comprehensive protection against emerging threats.
- The increase advances cybersecurity tools, operational capabilities, and the implementation of ZTA enablers across the enterprise. These investments will ensure NNSA meets stringent Federal cybersecurity standards.
- These strategic investments collectively bolster overall cybersecurity postures by fostering comprehensive workforce development and enhancing NNSA's capabilities to meet complex, evolving mission requirements, while simultaneously investing in cybersecurity operations and exercises, a robust portfolio of enterprise cybersecurity tools and infrastructure, Cyber Centers of Excellence (COE), and ZTA to build resilience, reduce vulnerabilities, and mature the NSE cybersecurity posture and protect vital assets against a dynamic threat landscape.

## **Highlights of the FY 2027 Budget Request for Information Technology**

The IT Program will execute a comprehensive modernization of its infrastructure, strategically enhancing data management, and accelerating connectivity. By leveraging advanced technologies, including AI and cloud platforms, the program will bolster mission support and ensure robust operational resilience across the enterprise.

In FY 2027, the IT Program will concentrate on:

- Expanding the adoption of AI/ML and commercial cloud-based technologies for enterprise services to optimize workflows, build foundations for AI infrastructure, and migrate critical applications and data to secure, scalable cloud environments.
- Investing in integrated platforms for DT and DE to enhance collaboration and streamline data sharing.
- Enhancing NNSA's worldwide radiological and nuclear emergency response missions by providing robust interagency communication and collaboration capabilities, particularly at the Secret level.
- Recapitalizing and enhancing aging infrastructure, replacing legacy systems, and strengthening inherited networks, systems, and applications. Efforts improve inter-site connectivity, enhance core services for enterprise secure computing environments, and strengthen overall architectural resiliency through network changes, migrations to commercial data centers, and cloud deployments.
- Strategically deploy advanced classified mobility solutions for authorized personnel, providing secure, remote access to critical information and applications. Classified mobile solutions improve capabilities for manufacturing and logistics systems, enable senior leaders to communicate and collaborate effectively, and improve the reliability of video teleconferencing and wireless solutions for classified systems.
- Modernizing technology to support integrated communications and collaboration services for both classified and unclassified networks.
- Establishing robust data management and governance practices, developing common IT ecosystems across the enterprise to strengthen interoperability, and ensuring data fidelity.

### **Explanation of Change for Information Technology (+\$153.960 million)**

- Increased funding addresses escalating demand for classified networks and unclassified IT services, supporting the continuous modernization of the entire IT infrastructure. Efforts will enhance network architecture, upgrade critical collaboration tools, and improve overall efficiency and resilience of network services.
- Additional funding enables unclassified and classified cloud investments to advance DT/DE initiatives across the NSE.
- Investment further supports the modernization of high-risk, classified compartmented systems. This critical contribution will enable enhanced collaborative capabilities across the NSE, directly addressing vulnerabilities in existing infrastructure and significantly elevating security postures and operational efficiency for these essential systems.
- Increased investment in assured communications improves radiological and nuclear emergency response capabilities and ensures continuous, secure services for NNSA's vital IT infrastructure and classified systems.

## Information Technology and Cybersecurity Other Information

The FY 2027 Budget Request supports funding for mission-driven activities to achieve IT and cybersecurity solutions. Costs for materials and services provided to OGAs will be allocated to Strategic Partnership Program (SPP) customers as work is accomplished at the laboratories, plants, and sites. The table below provides an estimate of costs that will be recovered from SPP customers.

### Full Cost Recovery Estimates Funding by Site (\$K)

|                                                        | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|--------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|-------------|
|                                                        |                    |                    |                    | \$                                    | %           |
| Kansas City National Security Campus                   | 1,443              | 1,313              | 1,300              | -13                                   | -1%         |
| Lawrence Livermore National Laboratory                 | 4,813              | 4,813              | 4,813              | -                                     | -           |
| Los Alamos National Laboratory                         | 2,007              | 1,853              | 2,168              | +316                                  | +17%        |
| Nevada National Security Site                          | 475                | 475                | 475                | -                                     | -           |
| Pantex Plant                                           | 55                 | 41                 | 34                 | -7                                    | -16%        |
| Y-12 National Security Complex                         | 107                | 135                | 104                | -31                                   | -23%        |
| Sandia National Laboratories                           | 16,373             | 17,041             | 16,283             | -758                                  | -4%         |
| Savannah River Site                                    | -                  | -                  | -                  | -                                     | -           |
| <b>Total, Information Technology and Cybersecurity</b> | <b>25,273</b>      | <b>25,671</b>      | <b>25,073</b>      | <b>-493</b>                           | <b>-28%</b> |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                        | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Argonne National Laboratory</b>                     |                            |                            |                            |
| Secondary Capability Modernization                     | -                          | 2,500                      | 2,000                      |
| Secondary Capability Modernization (SCM)               | -                          | 2,500                      | 2,000                      |
| Total, Production Modernization                        | -                          | 2,500                      | 2,000                      |
| Assessment Science (AS)                                | 9,055                      | 10,000                     | 20,000                     |
| Assessment Science                                     | 9,055                      | 10,000                     | 20,000                     |
| Total, Stockpile Research, Technology, and Engineering | 9,055                      | 10,000                     | 20,000                     |
| Safety and Environmental Operations                    | 20                         | -                          | -                          |
| Total, Operating                                       | 20                         | -                          | -                          |
| Total, Infrastructure and Operations                   | 20                         | -                          | -                          |
| <b>Total Argonne National Laboratory</b>               | <b>9,075</b>               | <b>12,500</b>              | <b>22,000</b>              |
| <b>Brookhaven National Laboratory</b>                  |                            |                            |                            |
| Safety and Environmental Operations                    | 425                        | 615                        | 500                        |
| Total, Operating                                       | 425                        | 615                        | 500                        |
| Total, Infrastructure and Operations                   | 425                        | 615                        | 500                        |
| <b>Total Brookhaven National Laboratory</b>            | <b>425</b>                 | <b>615</b>                 | <b>500</b>                 |
| <b>Chicago Operations Office</b>                       |                            |                            |                            |
| Academic Programs                                      | 2,000                      | -                          | -                          |
| <b>Total Chicago Operations Office</b>                 | <b>2,000</b>               | <b>-</b>                   | <b>-</b>                   |
| <b>Idaho National Laboratory</b>                       |                            |                            |                            |
| High Explosives & Energetics                           | 179                        | -                          | -                          |
| High Explosives and Energetics                         | 179                        | -                          | -                          |
| Total, Primary Capability Modernization                | 179                        | -                          | -                          |
| Tritium and Defense Fuels Program                      | 3,599                      | 3,339                      | 1,909                      |
| Total, Tritium and Defense Fuels Program               | 3,599                      | 3,339                      | 1,909                      |
| Capability Based Investments                           | 150                        | -                          | -                          |
| Total, Production Modernization                        | 3,928                      | 3,339                      | 1,909                      |
| Rapid & Advanced Capabilities                          | -                          | -                          | 1,125                      |
| Total, Stockpile Research, Technology, and Engineering | -                          | -                          | 1,125                      |
| Safety and Environmental Operations                    | 95                         | 100                        | 100                        |
| Total, Operating                                       | 95                         | 100                        | 100                        |
| Total, Infrastructure and Operations                   | 95                         | 100                        | 100                        |
| <b>Total Idaho National Laboratory</b>                 | <b>4,023</b>               | <b>3,439</b>               | <b>3,134</b>               |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                            | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Kansas City National Security Complex (KCNSC)</b>       |                            |                            |                            |
| B61-12 LEP                                                 | 615                        | -                          | -                          |
| W80-4 LEP                                                  | 321,886                    | 378,656                    | 441,852                    |
| W80-5 Modification Program                                 | 7,982                      | -                          | -                          |
| W87-1 Modification Program                                 | 79,561                     | 135,511                    | 180,605                    |
| W93 Program                                                | 38,394                     | 75,847                     | 144,631                    |
| Future Programs                                            | -                          | -                          | 15,833                     |
| Total, Stockpile Modernization                             | 448,438                    | 590,014                    | 782,921                    |
| Stockpile Operations                                       | 187,461                    | 222,592                    | 254,630                    |
| Stockpile Operations (SO)                                  | 187,461                    | 222,592                    | 254,630                    |
| Weapons Dismantlement and Disposition                      | -                          | 51                         | 548                        |
| Production Operations                                      | 175,296                    | 200,220                    | 237,671                    |
| Nuclear Enterprise Assurance                               | 10,000                     | 11,806                     | 11,522                     |
| Total, Stockpile Management                                | 821,195                    | 1,024,683                  | 1,287,292                  |
| Enterprise Pit Production Support                          | 12,591                     | 14,091                     | 55,347                     |
| Total, Plutonium Modernization                             | 12,591                     | 14,091                     | 55,347                     |
| Total, Primary Capability Modernization                    | 12,591                     | 14,091                     | 55,347                     |
| Secondary Capability Modernization                         | 500                        | 510                        | 700                        |
| Secondary Capability Modernization (SCM)                   | 500                        | 510                        | 700                        |
| Non-Nuclear Capability Modernization                       | 56,080                     | 72,760                     | 78,926                     |
| Total, Non-Nuclear Capability Modernization                | 56,080                     | 72,760                     | 78,926                     |
| Capability Based Investments                               | 8,816                      | 12,425                     | 16,000                     |
| Total, Production Modernization                            | 77,987                     | 99,786                     | 150,973                    |
| Engineering                                                | 3,610                      | 3,489                      | 3,682                      |
| Total, Engineering                                         | 3,610                      | 3,489                      | 3,682                      |
| Rapid & Advanced Capabilities                              | 14,701                     | 12,566                     | 35,171                     |
| Weapon Technology and Manufacturing Maturation             | 37,257                     | 31,657                     | 47,942                     |
| Advanced Simulation & Computing                            | 4,750                      | 5,105                      | 5,212                      |
| Total, Stockpile Research, Technology, and Engineering     | 60,318                     | 52,817                     | 92,007                     |
| Operations of Facilities                                   | 115,113                    | 136,000                    | 150,000                    |
| Safety and Environmental Operations                        | 3,230                      | 3,477                      | 5,041                      |
| Maintenance and Repair of Facilities                       | 104,598                    | 5,000                      | 55,000                     |
| Recapitalization                                           | 51,435                     | 64,755                     | 135,986                    |
| Total, Operating                                           | 274,376                    | 209,232                    | 346,027                    |
| Total, Infrastructure and Operations                       | 274,376                    | 209,232                    | 346,027                    |
| Operations and Equipment - STA                             | 48,588                     | 81,288                     | 146,452                    |
| Total, Secure Transportation Asset                         | 48,588                     | 81,288                     | 146,452                    |
| Operations and Maintenance - DNS                           | 37,127                     | 39,794                     | 52,243                     |
| Defense Nuclear Security                                   | 37,127                     | 39,794                     | 52,243                     |
| Information Technology and Cybersecurity                   | 20,062                     | 27,731                     | 41,350                     |
| <b>Total Kansas City National Security Complex (KCNSC)</b> | <b>1,339,653</b>           | <b>1,535,331</b>           | <b>2,116,344</b>           |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                           | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Lawrence Berkeley National Laboratory</b>              |                            |                            |                            |
| Information Technology and Cybersecurity                  | 3,306                      | 5,000                      | 5,513                      |
| <b>Total Lawrence Berkeley National Laboratory</b>        | <b>3,306</b>               | <b>5,000</b>               | <b>5,513</b>               |
| <br><b>Lawrence Livermore National Laboratory</b>         |                            |                            |                            |
| W80-4 LEP                                                 | 153,000                    | 130,729                    | 68,134                     |
| W80-5 Modification Program                                | 12,800                     | -                          | -                          |
| W87-1 Modification Program                                | 271,243                    | 151,166                    | 188,666                    |
| W93 Program                                               | 2,000                      | 4,002                      | 2,948                      |
| Future Programs                                           | -                          | -                          | 8,367                      |
| Total, Stockpile Modernization                            | 439,043                    | 285,897                    | 268,115                    |
| Stockpile Operations                                      | 115,125                    | 136,809                    | 225,914                    |
| Stockpile Operations (SO)                                 | 115,125                    | 136,809                    | 225,914                    |
| Weapons Dismantlement and Disposition                     | 1,108                      | 3,197                      | 3,545                      |
| Production Operations                                     | 11,250                     | 16,307                     | 15,829                     |
| Nuclear Enterprise Assurance                              | 10,000                     | 17,000                     | 26,156                     |
| Total, Stockpile Management                               | 576,526                    | 459,210                    | 539,559                    |
| Enterprise Pit Production Support                         | 82,858                     | 80,096                     | 166,696                    |
| Total, Plutonium Modernization                            | 82,858                     | 80,096                     | 166,696                    |
| High Explosives & Energetics                              | 21,765                     | 26,722                     | 76,500                     |
| High Explosives and Energetics                            | 21,765                     | 26,722                     | 76,500                     |
| Total, Primary Capability Modernization                   | 104,623                    | 106,818                    | 243,196                    |
| Secondary Capability Modernization                        | 15,365                     | 27,675                     | 34,953                     |
| Secondary Capability Modernization (SCM)                  | 15,365                     | 27,675                     | 34,953                     |
| Tritium and Defense Fuels Program                         | 115                        | 115                        | -                          |
| Total, Tritium and Defense Fuels Program                  | 115                        | 115                        | -                          |
| Non-Nuclear Capability Modernization                      | 1,538                      | 800                        | -                          |
| Total, Non-Nuclear Capability Modernization               | 1,538                      | 800                        | -                          |
| Capability Based Investments                              | 31,262                     | 31,000                     | 36,250                     |
| Total, Production Modernization                           | 152,903                    | 166,408                    | 314,399                    |
| Assessment Science (AS)                                   | 289,151                    | 340,351                    | 352,616                    |
| Assessment Science                                        | 289,151                    | 340,351                    | 352,616                    |
| Engineering                                               | 52,752                     | 46,912                     | 55,709                     |
| Total, Engineering                                        | 52,752                     | 46,912                     | 55,709                     |
| Rapid & Advanced Capabilities                             | 55,608                     | 25,790                     | 87,188                     |
| Inertial Confinement Fusion                               | 433,088                    | 493,000                    | 494,757                    |
| 26-D-514 NIF Enhanced Fusion Yield Capability,<br>LLNL    | -                          | 25,000                     | 84,000                     |
| Inertial Confinement Fusion (ICF)                         | 433,088                    | 518,000                    | 578,757                    |
| Weapon Technology and Manufacturing Maturation            | 43,737                     | 37,937                     | 55,049                     |
| Advanced Simulation & Computing                           | 297,408                    | 238,172                    | 233,274                    |
| Total, Stockpile Research, Technology, and<br>Engineering | 1,171,744                  | 1,207,162                  | 1,362,593                  |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                                      | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Academic Programs                                                    | 4,700                      | 1,000                      | -                          |
| Operations of Facilities                                             | 133,351                    | 130,000                    | 140,000                    |
| Safety and Environmental Operations                                  | 36,173                     | 36,226                     | 41,683                     |
| Maintenance and Repair of Facilities                                 | 76,994                     | 50,180                     | 100,000                    |
| Recapitalization                                                     | 81,335                     | 60,339                     | 140,216                    |
| Total, Operating                                                     | 327,853                    | 276,745                    | 421,899                    |
| Total, Infrastructure and Operations                                 | 327,853                    | 276,745                    | 421,899                    |
| Operations and Maintenance - DNS                                     | 91,694                     | 100,596                    | 103,022                    |
| Defense Nuclear Security                                             | 91,694                     | 100,596                    | 103,022                    |
| Information Technology and Cybersecurity                             | 79,489                     | 84,364                     | 94,881                     |
| <b>Total Lawrence Livermore National Laboratory</b>                  | <b>2,404,909</b>           | <b>2,295,485</b>           | <b>2,836,353</b>           |
| <b>Livermore Field Office</b>                                        |                            |                            |                            |
| Safety and Environmental Operations                                  | 300                        | -                          | -                          |
| Total, Operating                                                     | 300                        | -                          | -                          |
| Total, Infrastructure and Operations                                 | 300                        | -                          | -                          |
| <b>Total Livermore Field Office</b>                                  | <b>300</b>                 | <b>-</b>                   | <b>-</b>                   |
| <b>Los Alamos National Laboratory</b>                                |                            |                            |                            |
| B61-12 LEP                                                           | 20,477                     | 8,000                      | -                          |
| B61-13                                                               | 5,000                      | 10,557                     | 11,858                     |
| W88 ALT 370                                                          | 4,326                      | -                          | -                          |
| W80-4 LEP                                                            | 105,000                    | 118,295                    | 106,622                    |
| W80-5 Modification Program                                           | 1,119                      | -                          | -                          |
| W87-1 Modification Program                                           | 30,410                     | 5,544                      | 18,410                     |
| W93 Program                                                          | 197,185                    | 366,981                    | 477,852                    |
| Future Programs                                                      | -                          | -                          | 10,261                     |
| Total, Stockpile Modernization                                       | 363,517                    | 509,377                    | 625,003                    |
| Stockpile Operations                                                 | 287,250                    | 372,111                    | 367,732                    |
| Stockpile Operations (SO)                                            | 287,250                    | 372,111                    | 367,732                    |
| Weapons Dismantlement and Disposition                                | 2,400                      | 3,797                      | 4,384                      |
| Production Operations                                                | 73,205                     | 83,196                     | 111,439                    |
| Nuclear Enterprise Assurance                                         | 8,500                      | 14,000                     | 16,281                     |
| Total, Stockpile Management                                          | 734,872                    | 982,481                    | 1,124,839                  |
| Los Alamos Pit Production                                            | 954,382                    | 807,702                    | 1,402,359                  |
| 21-D-512 Plutonium Pit Production Project, LANL                      | 470,000                    | 450,100                    | 812,100                    |
| 15-D-302 TA-55 Reinvestments Project, Phase 3, LANL                  | 39,475                     | 7,942                      | -                          |
| 07-D-220-04 Transuranic Liquid Waste Facility, LANL                  | -                          | 5,865                      | 10,000                     |
| 04-D-125 Chemistry and Metallurgy Research Replacement Project, LANL | -                          | -                          | 110,000                    |
| Total, Los Alamos Plutonium Modernization                            | 1,463,857                  | 1,271,609                  | 2,334,459                  |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                               | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|---------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Total, Plutonium Modernization                                | 1,463,857                  | 1,271,609                  | 2,334,459                  |
| High Explosives & Energetics                                  | 19,957                     | 22,372                     | 50,000                     |
| High Explosives and Energetics                                | 19,957                     | 22,372                     | 50,000                     |
| Total, Primary Capability Modernization                       | 1,483,814                  | 1,293,981                  | 2,384,459                  |
| Secondary Capability Modernization                            | 52,380                     | 52,144                     | 59,108                     |
| Secondary Capability Modernization (SCM)                      | 52,380                     | 52,144                     | 59,108                     |
| Tritium and Defense Fuels Program                             | 2,255                      | 6,370                      | 2,321                      |
| Total, Tritium and Defense Fuels Program                      | 2,255                      | 6,370                      | 2,321                      |
| Non-Nuclear Capability Modernization                          | 961                        | 1,180                      | -                          |
| Total, Non-Nuclear Capability Modernization                   | 961                        | 1,180                      | -                          |
| Capability Based Investments                                  | 20,302                     | 30,287                     | 26,108                     |
| Total, Production Modernization                               | 1,559,712                  | 1,383,962                  | 2,471,996                  |
| Assessment Science (AS)                                       | 317,638                    | 385,966                    | 539,430                    |
| 26-D-512 LANSCE Modernization Project<br>(LAMP), LANL         | -                          | 20,000                     | 15,200                     |
| Assessment Science                                            | 317,638                    | 405,966                    | 554,630                    |
| Engineering                                                   | 62,087                     | 54,832                     | 71,836                     |
| Total, Engineering                                            | 62,087                     | 54,832                     | 71,836                     |
| Rapid & Advanced Capabilities                                 | 53,951                     | 32,809                     | 114,915                    |
| Inertial Confinement Fusion                                   | 25,246                     | 35,000                     | 28,571                     |
| Inertial Confinement Fusion (ICF)                             | 25,246                     | 35,000                     | 28,571                     |
| Weapon Technology and Manufacturing Maturation                | 60,370                     | 55,170                     | 76,239                     |
| Advanced Simulation & Computing                               | 274,472                    | 308,040                    | 214,015                    |
| Total, Stockpile Research, Technology, and<br>Engineering     | 793,764                    | 891,817                    | 1,060,206                  |
| Academic Programs                                             | 1,100                      | -                          | -                          |
| Operations of Facilities                                      | 459,804                    | 580,000                    | 615,000                    |
| Safety and Environmental Operations                           | 20,915                     | 19,674                     | 22,124                     |
| Maintenance and Repair of Facilities                          | 211,910                    | 235,473                    | 305,000                    |
| Recapitalization                                              | 40,530                     | 45,667                     | 83,259                     |
| Total, Operating                                              | 733,159                    | 880,814                    | 1,025,383                  |
| 27-D-512 Plutonium Engineering Support<br>Building, LANL      | -                          | -                          | 88,700                     |
| 25-D-510 Plutonium Mission Safety & Quality<br>Building, LANL | 48,500                     | -                          | -                          |
| 23-D-517 Electrical Power Capacity Upgrade,<br>LANL           | 70,000                     | -                          | 65,000                     |
| Mission Enabling Construction                                 | 118,500                    | -                          | 153,700                    |
| Total, Mission Enabling Construction                          | 118,500                    | -                          | 153,700                    |
| Total, Infrastructure and Operations                          | 851,659                    | 880,814                    | 1,179,083                  |
| Operations and Maintenance - DNS                              | 144,491                    | 156,336                    | 160,720                    |
| Defense Nuclear Security                                      | 144,491                    | 156,336                    | 160,720                    |
| Information Technology and Cybersecurity                      | 38,193                     | 40,799                     | 57,107                     |
| <b>Total Los Alamos National Laboratory</b>                   | <b>4,123,791</b>           | <b>4,336,209</b>           | <b>6,053,951</b>           |



**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

| <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------|----------------------------|----------------------------|
|----------------------------|----------------------------|----------------------------|

**Los Alamos Field Office**

|                                          |           |          |           |
|------------------------------------------|-----------|----------|-----------|
| Information Technology and Cybersecurity | 14        | -        | 25        |
| <b>Total Los Alamos Field Office</b>     | <b>14</b> | <b>-</b> | <b>25</b> |

**National Energy Technology Lab**

|                                                        |        |        |         |
|--------------------------------------------------------|--------|--------|---------|
| B61-12 LEP                                             | 3,834  | 1,060  | -       |
| B61-13                                                 | -      | -      | 3,925   |
| W88 ALT 370                                            | 7,300  | -      | -       |
| W80-4 LEP                                              | 11,160 | 4,930  | 13,000  |
| W80-5 Modification Program                             | 1,886  | 655    | -       |
| W87-1 Modification Program                             | 15,000 | 49     | 15,965  |
| W93 Program                                            | 7,757  | 4,371  | 20,152  |
| Future Programs                                        | -      | -      | 2,588   |
| Total, Stockpile Modernization                         | 46,937 | 11,065 | 55,630  |
| Stockpile Operations                                   | 25,278 | 10,970 | 41,111  |
| Stockpile Operations (SO)                              | 25,278 | 10,970 | 41,111  |
| Production Operations                                  | 7,201  | 3,330  | 7,651   |
| Nuclear Enterprise Assurance                           | 4,699  | 3,260  | 5,500   |
| Total, Stockpile Management                            | 84,115 | 28,625 | 109,892 |
| Enterprise Pit Production Support                      | 5,500  | 5,500  | 15,000  |
| Total, Plutonium Modernization                         | 5,500  | 5,500  | 15,000  |
| High Explosives & Energetics                           | 1,784  | 759    | -       |
| High Explosives and Energetics                         | 1,784  | 759    | -       |
| Total, Primary Capability Modernization                | 7,284  | 6,259  | 15,000  |
| Secondary Capability Modernization                     | -      | 2,252  | -       |
| Secondary Capability Modernization (SCM)               | -      | 2,252  | -       |
| Tritium and Defense Fuels Program                      | 4,096  | 3,113  | 3,055   |
| Total, Tritium and Defense Fuels Program               | 4,096  | 3,113  | 3,055   |
| Non-Nuclear Capability Modernization                   | 7,074  | 768    | -       |
| Total, Non-Nuclear Capability Modernization            | 7,074  | 768    | -       |
| Capability Based Investments                           | 758    | 200    | 760     |
| Warhead Assembly Modernization                         | 762    | 550    | -       |
| Total, Warhead Assembly Modernization                  | 762    | 550    | -       |
| Total, Production Modernization                        | 19,974 | 13,142 | 18,815  |
| Assessment Science (AS)                                | 1,350  | 465    | 1,435   |
| Assessment Science                                     | 1,350  | 465    | 1,435   |
| Engineering                                            | 1,395  | 1,296  | 1,978   |
| Total, Engineering                                     | 1,395  | 1,296  | 1,978   |
| Rapid & Advanced Capabilities                          | 1,211  | 1,553  | 6,503   |
| Weapon Technology and Manufacturing Maturation         | 878    | 2,815  | 4,212   |
| Total, Stockpile Research, Technology, and Engineering | 4,834  | 6,129  | 14,128  |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                             | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|---------------------------------------------|----------------------------|----------------------------|----------------------------|
| Operations of Facilities                    | 1,100                      | -                          | -                          |
| Total, Operating                            | 1,100                      | -                          | -                          |
| Total, Infrastructure and Operations        | 1,100                      | -                          | -                          |
| <b>Total National Energy Technology Lab</b> | <b>110,023</b>             | <b>47,896</b>              | <b>142,835</b>             |

**Naval Reactors Facility**

|                                      |            |              |            |
|--------------------------------------|------------|--------------|------------|
| Safety and Environmental Operations  | 709        | 1,530        | 859        |
| Total, Operating                     | 709        | 1,530        | 859        |
| Total, Infrastructure and Operations | 709        | 1,530        | 859        |
| <b>Total Naval Reactors Facility</b> | <b>709</b> | <b>1,530</b> | <b>859</b> |

**Naval Research Laboratory**

|                                                        |              |              |              |
|--------------------------------------------------------|--------------|--------------|--------------|
| Assessment Science (AS)                                | 2,745        | 2,900        | 3,650        |
| Assessment Science                                     | 2,745        | 2,900        | 3,650        |
| Total, Stockpile Research, Technology, and Engineering | 2,745        | 2,900        | 3,650        |
| <b>Total Naval Research Laboratory</b>                 | <b>2,745</b> | <b>2,900</b> | <b>3,650</b> |

**Nevada Field Office**

|                                                        |              |              |              |
|--------------------------------------------------------|--------------|--------------|--------------|
| Assessment Science (AS)                                | 70           | -            | -            |
| Assessment Science                                     | 70           | -            | -            |
| Total, Stockpile Research, Technology, and Engineering | 70           | -            | -            |
| Information Technology and Cybersecurity               | 1,491        | 1,475        | 1,318        |
| <b>Total Nevada Field Office</b>                       | <b>1,561</b> | <b>1,475</b> | <b>1,318</b> |

**Nevada National Security Site**

|                                          |        |        |        |
|------------------------------------------|--------|--------|--------|
| Future Programs                          | -      | -      | 116    |
| Total, Stockpile Modernization           | -      | -      | 116    |
| Stockpile Operations                     | 2,322  | 3,521  | 5,170  |
| Stockpile Operations (SO)                | 2,322  | 3,521  | 5,170  |
| Weapons Dismantlement and Disposition    | -      | 160    | 125    |
| Production Operations                    | 250    | 200    | 2,144  |
| Nuclear Enterprise Assurance             | 6,000  | 6,750  | 7,242  |
| Total, Stockpile Management              | 8,572  | 10,631 | 14,797 |
| Enterprise Pit Production Support        | 12,378 | 12,870 | 22,508 |
| Total, Plutonium Modernization           | 12,378 | 12,870 | 22,508 |
| High Explosives & Energetics             | 940    | 2,800  | 5,000  |
| High Explosives and Energetics           | 940    | 2,800  | 5,000  |
| Total, Primary Capability Modernization  | 13,318 | 15,670 | 27,508 |
| Tritium and Defense Fuels Program        | 136    | 140    | 144    |
| Total, Tritium and Defense Fuels Program | 136    | 140    | 144    |

**DEPARTMENT OF ENERGY**  
**Funding by Site Detail**  
TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                                       | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Non-Nuclear Capability Modernization                                  | 50                         | -                          | -                          |
| Total, Non-Nuclear Capability Modernization                           | 50                         | -                          | -                          |
| Capability Based Investments                                          | 16,200                     | 14,500                     | 27,075                     |
| Total, Production Modernization                                       | 29,704                     | 30,310                     | 54,727                     |
| Assessment Science (AS)                                               | 157,454                    | 129,516                    | 197,157                    |
| 17-D-640 U1a Complex Enhancements Project, NNSS                       | 69,583                     | -                          | 150,642                    |
| 24-D-513 Z-pinch Experimental Underground System (ZEUS) (ZTBFI), NNSS | -                          | -                          | 88,200                     |
| Assessment Science                                                    | 227,037                    | 129,516                    | 435,999                    |
| Engineering                                                           | 2,400                      | 2,450                      | 3,250                      |
| Total, Engineering                                                    | 2,400                      | 2,450                      | 3,250                      |
| Rapid & Advanced Capabilities                                         | 3,265                      | 2,215                      | 3,288                      |
| Inertial Confinement Fusion                                           | 2,000                      | 802                        | 4,080                      |
| Inertial Confinement Fusion (ICF)                                     | 2,000                      | 802                        | 4,080                      |
| Weapon Technology and Manufacturing Maturation                        | 1,350                      | 3,850                      | 7,129                      |
| Advanced Simulation & Computing                                       | -                          | 750                        | -                          |
| Total, Stockpile Research, Technology, and Engineering                | 236,052                    | 139,583                    | 453,746                    |
| Operations of Facilities                                              | 124,307                    | 135,000                    | 152,000                    |
| Safety and Environmental Operations                                   | 5,650                      | 6,298                      | 7,143                      |
| Maintenance and Repair of Facilities                                  | 103,132                    | 110,435                    | 165,000                    |
| Recapitalization                                                      | 47,411                     | 63,871                     | 117,325                    |
| Total, Operating                                                      | 280,500                    | 315,604                    | 441,468                    |
| 25-D-511 PULSE New Access, NNSS                                       | 5,000                      | -                          | 50,000                     |
| Mission Enabling Construction                                         | 5,000                      | -                          | 50,000                     |
| Total, Mission Enabling Construction                                  | 5,000                      | -                          | 50,000                     |
| Total, Infrastructure and Operations                                  | 285,500                    | 315,604                    | 491,468                    |
| Program Direction - STA                                               | 354                        | 200                        | 368                        |
| Total, Secure Transportation Asset                                    | 354                        | 200                        | 368                        |
| Operations and Maintenance - DNS                                      | 136,096                    | 141,935                    | 147,755                    |
| Defense Nuclear Security                                              | 136,096                    | 141,935                    | 147,755                    |
| Information Technology and Cybersecurity                              | 50,079                     | 50,078                     | 50,111                     |
| <b>Total Nevada National Security Site</b>                            | <b>746,357</b>             | <b>688,341</b>             | <b>1,212,972</b>           |

**DEPARTMENT OF ENERGY**  
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TAS\_0240 - Weapons Activities - FY 2027  
(Dollars in Thousands)

|                                                                            | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>NNSA Albuquerque Complex</b>                                            |                            |                            |                            |
| B61-12 LEP                                                                 | 1                          | 1,879                      | -                          |
| B61-13                                                                     | -                          | 768                        | 3,363                      |
| W88 ALT 370                                                                | 9,177                      | -                          | -                          |
| W80-4 LEP                                                                  | 39,082                     | 83,977                     | -                          |
| W80-5 Modification Program                                                 | 31,491                     | 181,180                    | -                          |
| W87-1 Modification Program                                                 | 15,000                     | 36,240                     | 16,957                     |
| W93 Program                                                                | 43,602                     | 29,867                     | 42,720                     |
| Future Programs                                                            | -                          | -                          | 3,167                      |
| Total, Stockpile Modernization                                             | 138,353                    | 333,911                    | 66,207                     |
| Stockpile Operations                                                       | 39,619                     | 113,044                    | 40,516                     |
| Stockpile Operations (SO)                                                  | 39,619                     | 113,044                    | 40,516                     |
| Weapons Dismantlement and Disposition                                      | -                          | 4,759                      | -                          |
| Production Operations                                                      | -                          | 4,644                      | 68,265                     |
| Nuclear Enterprise Assurance                                               | 242                        | 6,294                      | 4,750                      |
| Total, Stockpile Management                                                | 178,214                    | 462,652                    | 179,738                    |
| Los Alamos Pit Production                                                  | 19,830                     | 10,562                     | 36,520                     |
| 21-D-512 Plutonium Pit Production Project,<br>LANL                         | -                          | 7,800                      | -                          |
| Total, Los Alamos Plutonium Modernization                                  | 19,830                     | 18,362                     | 36,520                     |
| Savannah River Pit Production                                              | 500                        | 4,221                      | 3,020                      |
| 21-D-511 Savannah River Plutonium<br>Processing Facility, SRS              | -                          | 52,000                     | -                          |
| Total, Savannah River Plutonium<br>Modernization                           | 500                        | 56,221                     | 3,020                      |
| Enterprise Pit Production Support                                          | 6,484                      | 7,089                      | 6,772                      |
| Total, Plutonium Modernization                                             | 26,814                     | 81,672                     | 46,312                     |
| Total, Primary Capability Modernization                                    | 26,814                     | 81,672                     | 46,312                     |
| Tritium and Defense Fuels Program                                          | 127,610                    | 87,459                     | 102,696                    |
| Total, Tritium and Defense Fuels Program                                   | 127,610                    | 87,459                     | 102,696                    |
| Total, Production Modernization                                            | 154,424                    | 169,131                    | 149,008                    |
| Assessment Science (AS)                                                    | 6,500                      | 6,500                      | 6,500                      |
| Assessment Science                                                         | 6,500                      | 6,500                      | 6,500                      |
| Engineering                                                                | 13,591                     | 7,742                      | 18,056                     |
| 26-D-513 Combined Radiation Environments for<br>Survivability Testing, SNL | -                          | 7,248                      | 980                        |
| Total, Engineering                                                         | 13,591                     | 14,990                     | 19,036                     |
| Rapid & Advanced Capabilities                                              | 13,292                     | 34,162                     | 90,183                     |
| Inertial Confinement Fusion                                                | 39,500                     | 47,000                     | 45,000                     |
| Inertial Confinement Fusion (ICF)                                          | 39,500                     | 47,000                     | 45,000                     |
| Weapon Technology and Manufacturing Maturation                             | 2,326                      | 3,661                      | 61,187                     |
| Total, Stockpile Research, Technology, and<br>Engineering                  | 75,209                     | 106,313                    | 221,906                    |
| Academic Programs                                                          | 102,600                    | 93,000                     | -                          |

**Weapons Activities**

**FY 2027 Congressional Justification**

**DEPARTMENT OF ENERGY****Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                             | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Operations and Equipment - STA                              | 94,156                     | 126,142                    | 202,363                    |
| Program Direction - STA                                     | 117,702                    | 149,044                    | 143,628                    |
| Total, Secure Transportation Asset                          | 211,858                    | 275,186                    | 345,991                    |
| Operations and Maintenance - DNS                            | 9,292                      | 21,900                     | 20,483                     |
| Defense Nuclear Security                                    | 9,292                      | 21,900                     | 20,483                     |
| Legacy Contractor Pensions and Settlement Payments<br>- DNN | 12,500                     | 4,100                      | 40,869                     |
| <b>Total NNSA Albuquerque Complex</b>                       | <b>744,097</b>             | <b>1,132,282</b>           | <b>957,995</b>             |

**Oak Ridge Institute for Science and Education**

|                                                            |          |           |          |
|------------------------------------------------------------|----------|-----------|----------|
| Information Technology and Cybersecurity                   | -        | 17        | -        |
| <b>Total Oak Ridge Institute for Science and Education</b> | <b>-</b> | <b>17</b> | <b>-</b> |

**Oak Ridge National Laboratory**

|                                                           |               |               |                |
|-----------------------------------------------------------|---------------|---------------|----------------|
| Production Operations                                     | 450           | 700           | -              |
| Total, Stockpile Management                               | 450           | 700           | -              |
| Secondary Capability Modernization                        | -             | 350           | 350            |
| Secondary Capability Modernization (SCM)                  | -             | 350           | 350            |
| Tritium and Defense Fuels Program                         | 30,000        | 60,000        | 90,000         |
| Total, Tritium and Defense Fuels Program                  | 30,000        | 60,000        | 90,000         |
| Non-Nuclear Capability Modernization                      | 750           | 1,750         | -              |
| Total, Non-Nuclear Capability Modernization               | 750           | 1,750         | -              |
| Capability Based Investments                              | 750           | 1,750         | -              |
| Warhead Assembly Modernization                            | -             | 1,000         | -              |
| Total, Warhead Assembly Modernization                     | -             | 1,000         | -              |
| Total, Production Modernization                           | 31,500        | 64,850        | 90,350         |
| Advanced Simulation & Computing                           | 1,252         | 510           | 505            |
| Total, Stockpile Research, Technology, and<br>Engineering | 1,252         | 510           | 505            |
| Safety and Environmental Operations                       | 8,915         | 10,963        | 10,514         |
| Total, Operating                                          | 8,915         | 10,963        | 10,514         |
| Total, Infrastructure and Operations                      | 8,915         | 10,963        | 10,514         |
| Information Technology and Cybersecurity                  | -             | 11            | 28             |
| <b>Total Oak Ridge National Laboratory</b>                | <b>42,117</b> | <b>77,034</b> | <b>101,397</b> |

**Office of Scientific and Technical Information**

|                                                             |            |            |            |
|-------------------------------------------------------------|------------|------------|------------|
| Assessment Science (AS)                                     | 220        | 220        | 220        |
| Assessment Science                                          | 220        | 220        | 220        |
| Total, Stockpile Research, Technology, and<br>Engineering   | 220        | 220        | 220        |
| Information Technology and Cybersecurity                    | 359        | 400        | 460        |
| <b>Total Office of Scientific and Technical Information</b> | <b>579</b> | <b>620</b> | <b>680</b> |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

| <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------|----------------------------|----------------------------|
|----------------------------|----------------------------|----------------------------|

**Pacific Northwest National Laboratory**

|                                                        |                |                |                |
|--------------------------------------------------------|----------------|----------------|----------------|
| Production Operations                                  | 150            | 100            | -              |
| Nuclear Enterprise Assurance                           | 4,590          | 6,000          | 6,485          |
| Total, Stockpile Management                            | 4,740          | 6,100          | 6,485          |
| High Explosives & Energetics                           | 600            | 887            | -              |
| High Explosives and Energetics                         | 600            | 887            | -              |
| Total, Primary Capability Modernization                | 600            | 887            | -              |
| Secondary Capability Modernization                     | 4,600          | 6,285          | 5,780          |
| Secondary Capability Modernization (SCM)               | 4,600          | 6,285          | 5,780          |
| Tritium and Defense Fuels Program                      | 84,976         | 93,839         | 87,721         |
| Total, Tritium and Defense Fuels Program               | 84,976         | 93,839         | 87,721         |
| Non-Nuclear Capability Modernization                   | 645            | 1,200          | -              |
| Total, Non-Nuclear Capability Modernization            | 645            | 1,200          | -              |
| Capability Based Investments                           | 3,500          | 3,000          | 3,420          |
| Warhead Assembly Modernization                         | -              | 650            | -              |
| Total, Warhead Assembly Modernization                  | -              | 650            | -              |
| Total, Production Modernization                        | 94,321         | 105,861        | 96,921         |
| Assessment Science (AS)                                | 150            | 175            | 3,040          |
| Assessment Science                                     | 150            | 175            | 3,040          |
| Engineering                                            | 700            | 825            | 100            |
| Total, Engineering                                     | 700            | 825            | 100            |
| Weapon Technology and Manufacturing Maturation         | 2,900          | 2,400          | 4,234          |
| Advanced Simulation & Computing                        | 1,135          | 261            | 521            |
| Total, Stockpile Research, Technology, and Engineering | 4,885          | 3,661          | 7,895          |
| Safety and Environmental Operations                    | 2,885          | 3,266          | 5,775          |
| Total, Operating                                       | 2,885          | 3,266          | 5,775          |
| Total, Infrastructure and Operations                   | 2,885          | 3,266          | 5,775          |
| Information Technology and Cybersecurity               | 5,275          | 4,461          | 7,069          |
| <b>Total Pacific Northwest National Laboratory</b>     | <b>112,106</b> | <b>123,349</b> | <b>124,145</b> |

**Pantex Plant**

|                                |         |         |         |
|--------------------------------|---------|---------|---------|
| B61-12 LEP                     | -       | 3,085   | -       |
| B61-13                         | -       | 18,232  | 18,115  |
| W88 ALT 370                    | 33,575  | -       | -       |
| W80-4 LEP                      | 77,000  | 110,221 | 109,764 |
| W80-5 Modification Program     | 5,982   | -       | -       |
| W87-1 Modification Program     | 13,842  | 11,758  | 34,383  |
| W93 Program                    | 4,720   | 18,213  | 17,520  |
| Future Programs                | -       | -       | 184     |
| Total, Stockpile Modernization | 135,119 | 161,509 | 179,966 |
| Stockpile Operations           | 131,048 | 181,738 | 180,683 |
| Stockpile Operations (SO)      | 131,048 | 181,738 | 180,683 |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                           | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Weapons Dismantlement and Disposition                     | 32,251                     | 48,725                     | 55,460                     |
| Production Operations                                     | 151,153                    | 199,294                    | 204,398                    |
| Nuclear Enterprise Assurance                              | 3,000                      | 4,250                      | 3,382                      |
| Total, Stockpile Management                               | 452,571                    | 595,516                    | 623,889                    |
| Enterprise Pit Production Support                         | 385                        | 250                        | 510                        |
| Total, Plutonium Modernization                            | 385                        | 250                        | 510                        |
| High Explosives & Energetics                              | 17,467                     | 30,399                     | 29,375                     |
| 15-D-301 HE Science & Engineering Facility,<br>PX         | 15,000                     | -                          | -                          |
| High Explosives and Energetics                            | 32,467                     | 30,399                     | 29,375                     |
| Total, Primary Capability Modernization                   | 32,852                     | 30,649                     | 29,885                     |
| Secondary Capability Modernization                        | 250                        | -                          | 250                        |
| Secondary Capability Modernization (SCM)                  | 250                        | -                          | 250                        |
| Non-Nuclear Capability Modernization                      | 350                        | 200                        | -                          |
| Total, Non-Nuclear Capability Modernization               | 350                        | 200                        | -                          |
| Capability Based Investments                              | 11,000                     | 9,000                      | 13,350                     |
| Warhead Assembly Modernization                            | 24,042                     | 22,000                     | 35,100                     |
| Total, Warhead Assembly Modernization                     | 24,042                     | 22,000                     | 35,100                     |
| Total, Production Modernization                           | 68,494                     | 61,849                     | 78,585                     |
| Engineering                                               | 2,860                      | 2,820                      | 4,088                      |
| Total, Engineering                                        | 2,860                      | 2,820                      | 4,088                      |
| Rapid & Advanced Capabilities                             | 8,420                      | 4,647                      | 16,948                     |
| Weapon Technology and Manufacturing Maturation            | 3,340                      | 1,985                      | 4,719                      |
| Advanced Simulation & Computing                           | 1,516                      | -                          | 782                        |
| Total, Stockpile Research, Technology, and<br>Engineering | 16,136                     | 9,452                      | 26,537                     |
| Operations of Facilities                                  | 105,567                    | 107,000                    | 109,000                    |
| Safety and Environmental Operations                       | 24,696                     | 20,302                     | 31,795                     |
| Maintenance and Repair of Facilities                      | 135,010                    | 120,000                    | 190,000                    |
| Recapitalization                                          | 74,729                     | 51,018                     | 81,357                     |
| Total, Operating                                          | 340,002                    | 298,320                    | 412,152                    |
| 24-D-510 Analytic Gas Laboratory, PX                      | 36,000                     | -                          | -                          |
| Mission Enabling Construction                             | 36,000                     | -                          | -                          |
| Total, Mission Enabling Construction                      | 36,000                     | -                          | -                          |
| Total, Infrastructure and Operations                      | 376,002                    | 298,320                    | 412,152                    |
| Operations and Equipment - STA                            | 8,655                      | 8,188                      | 9,651                      |
| Total, Secure Transportation Asset                        | 8,655                      | 8,188                      | 9,651                      |
| Operations and Maintenance - DNS                          | 174,729                    | 180,221                    | 179,969                    |
| Defense Nuclear Security                                  | 174,729                    | 180,221                    | 179,969                    |
| Information Technology and Cybersecurity                  | 14,536                     | 14,493                     | 15,483                     |
| <b>Total Pantex Plant</b>                                 | <b>1,111,123</b>           | <b>1,168,039</b>           | <b>1,346,266</b>           |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                      | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Pantex Field Office</b>                           |                            |                            |                            |
| Safety and Environmental Operations                  | 221                        | -                          | -                          |
| Total, Operating                                     | 221                        | -                          | -                          |
| Total, Infrastructure and Operations                 | 221                        | -                          | -                          |
| <b>Total Pantex Field Office</b>                     | <b>221</b>                 | <b>-</b>                   | <b>-</b>                   |
| <b>Portsmouth Gaseous Diffusion Plant</b>            |                            |                            |                            |
| Secondary Capability Modernization                   | 19,400                     | 15,000                     | 26,250                     |
| Secondary Capability Modernization (SCM)             | 19,400                     | 15,000                     | 26,250                     |
| Tritium and Defense Fuels Program                    | 39,000                     | 40,000                     | 50,000                     |
| Total, Tritium and Defense Fuels Program             | 39,000                     | 40,000                     | 50,000                     |
| Total, Production Modernization                      | 58,400                     | 55,000                     | 76,250                     |
| <b>Total Portsmouth Gaseous Diffusion Plant</b>      | <b>58,400</b>              | <b>55,000</b>              | <b>76,250</b>              |
| <b>Sandia National Laboratories</b>                  |                            |                            |                            |
| B61-12 LEP                                           | 1,800                      | 800                        | -                          |
| B61-13                                               | 6,000                      | 300                        | -                          |
| W88 ALT 370                                          | 8,199                      | -                          | -                          |
| W80-4 LEP                                            | 420,381                    | 298,410                    | 203,549                    |
| W80-5 Modification Program                           | 35,300                     | -                          | -                          |
| W87-1 Modification Program                           | 443,182                    | 227,775                    | 314,477                    |
| W93 Program                                          | 121,235                    | 219,333                    | 305,172                    |
| Future Programs                                      | -                          | -                          | 55,066                     |
| Total, Stockpile Modernization                       | 1,036,097                  | 746,618                    | 878,264                    |
| Stockpile Operations                                 | 461,819                    | 526,952                    | 584,385                    |
| Stockpile Operations (SO)                            | 461,819                    | 526,952                    | 584,385                    |
| Weapons Dismantlement and Disposition                | 4,200                      | 5,226                      | 5,052                      |
| Production Operations                                | 224,998                    | 255,841                    | 265,289                    |
| Nuclear Enterprise Assurance                         | 14,500                     | 21,750                     | 22,540                     |
| Total, Stockpile Management                          | 1,741,614                  | 1,556,387                  | 1,755,530                  |
| High Explosives & Energetics                         | 23,985                     | 17,361                     | 21,400                     |
| High Explosives and Energetics                       | 23,985                     | 17,361                     | 21,400                     |
| Total, Primary Capability Modernization              | 23,985                     | 17,361                     | 21,400                     |
| Secondary Capability Modernization                   | 200                        | 250                        | 500                        |
| Secondary Capability Modernization (SCM)             | 200                        | 250                        | 500                        |
| Tritium and Defense Fuels Program                    | 917                        | 941                        | 736                        |
| Total, Tritium and Defense Fuels Program             | 917                        | 941                        | 736                        |
| Non-Nuclear Capability Modernization                 | 65,839                     | 82,688                     | 141,540                    |
| 26-D-511 MESA Photolithography Capability (MPC), SNL | -                          | -                          | 49,000                     |
| 22-D-513 Power Sources Capability, SNL               | 50,000                     | 4,000                      | 137,000                    |
| Total, Non-Nuclear Capability Modernization          | 115,839                    | 86,688                     | 327,540                    |
| Capability Based Investments                         | 28,998                     | 13,000                     | 21,103                     |
| Total, Production Modernization                      | 169,939                    | 118,240                    | 371,279                    |

**Weapons Activities**

**FY 2027 Congressional Justification**



**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                                            | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Assessment Science (AS)                                                    | 56,891                     | 46,506                     | 46,049                     |
| Assessment Science                                                         | 56,891                     | 46,506                     | 46,049                     |
| Engineering                                                                | 77,580                     | 57,699                     | 61,884                     |
| 26-D-513 Combined Radiation Environments for<br>Survivability Testing, SNL | -                          | 45,000                     | 104,020                    |
| Total, Engineering                                                         | 77,580                     | 102,699                    | 165,904                    |
| Rapid & Advanced Capabilities                                              | 49,014                     | 18,046                     | 95,907                     |
| Inertial Confinement Fusion                                                | 91,989                     | 107,000                    | 118,645                    |
| Inertial Confinement Fusion (ICF)                                          | 91,989                     | 107,000                    | 118,645                    |
| Weapon Technology and Manufacturing Maturation                             | 98,991                     | 93,291                     | 118,721                    |
| Advanced Simulation & Computing                                            | 251,670                    | 213,479                    | 240,705                    |
| Total, Stockpile Research, Technology, and<br>Engineering                  | 626,135                    | 581,021                    | 785,931                    |
| Academic Programs                                                          | 4,600                      | -                          | -                          |
| Operations of Facilities                                                   | 132,108                    | 135,000                    | 145,000                    |
| Safety and Environmental Operations                                        | 10,171                     | 10,693                     | 13,095                     |
| Maintenance and Repair of Facilities                                       | 35,495                     | 5,000                      | 50,000                     |
| Recapitalization                                                           | 42,714                     | 50,710                     | 115,575                    |
| Total, Operating                                                           | 220,488                    | 201,403                    | 323,670                    |
| Total, Infrastructure and Operations                                       | 220,488                    | 201,403                    | 323,670                    |
| Operations and Equipment - STA                                             | 84,761                     | 83,923                     | 84,609                     |
| Total, Secure Transportation Asset                                         | 84,761                     | 83,923                     | 84,609                     |
| Operations and Maintenance - DNS                                           | 93,226                     | 95,184                     | 98,132                     |
| Defense Nuclear Security                                                   | 93,226                     | 95,184                     | 98,132                     |
| Information Technology and Cybersecurity                                   | 60,085                     | 63,022                     | 74,084                     |
| <b>Total Sandia National Laboratories</b>                                  | <b>3,000,848</b>           | <b>2,699,180</b>           | <b>3,493,235</b>           |
| <b><u>Savannah River National Laboratory</u></b>                           |                            |                            |                            |
| Stockpile Operations                                                       | 2,653                      | 3,164                      | 3,400                      |
| Stockpile Operations (SO)                                                  | 2,653                      | 3,164                      | 3,400                      |
| Production Operations                                                      | -                          | 500                        | -                          |
| Nuclear Enterprise Assurance                                               | 3,000                      | 4,500                      | 4,714                      |
| Total, Stockpile Management                                                | 5,653                      | 8,164                      | 8,114                      |
| Tritium and Defense Fuels Program                                          | 11,550                     | 14,194                     | 10,000                     |
| Total, Tritium and Defense Fuels Program                                   | 11,550                     | 14,194                     | 10,000                     |
| Non-Nuclear Capability Modernization                                       | 115                        | 117                        | -                          |
| Total, Non-Nuclear Capability Modernization                                | 115                        | 117                        | -                          |
| Capability Based Investments                                               | 2,985                      | 1,988                      | 420                        |
| Total, Production Modernization                                            | 14,650                     | 16,299                     | 10,420                     |
| Assessment Science (AS)                                                    | 328                        | 800                        | 800                        |
| Assessment Science                                                         | 328                        | 800                        | 800                        |
| Engineering                                                                | 2,900                      | 3,150                      | 3,250                      |
| Total, Engineering                                                         | 2,900                      | 3,150                      | 3,250                      |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                        | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Weapon Technology and Manufacturing Maturation         | 8,234                      | 6,234                      | 9,275                      |
| Advanced Simulation & Computing                        | 1,011                      | 100                        | 521                        |
| Total, Stockpile Research, Technology, and Engineering | 12,473                     | 10,284                     | 13,846                     |
| Operations of Facilities                               | 34,000                     | -                          | -                          |
| Safety and Environmental Operations                    | 8,396                      | 8,377                      | 10,197                     |
| Maintenance and Repair of Facilities                   | 8,000                      | -                          | -                          |
| Total, Operating                                       | 50,396                     | 8,377                      | 10,197                     |
| Total, Infrastructure and Operations                   | 50,396                     | 8,377                      | 10,197                     |
| Information Technology and Cybersecurity               | 3,399                      | 3,022                      | 3,725                      |
| <b>Total Savannah River National Laboratory</b>        | <b>86,571</b>              | <b>46,146</b>              | <b>46,302</b>              |

**Savannah River Operations Office**

|                                               |            |            |            |
|-----------------------------------------------|------------|------------|------------|
| Information Technology and Cybersecurity      | 990        | 955        | 436        |
| <b>Total Savannah River Operations Office</b> | <b>990</b> | <b>955</b> | <b>436</b> |

**Savannah River Site**

|                                                            |           |           |           |
|------------------------------------------------------------|-----------|-----------|-----------|
| W80-4 LEP                                                  | 3,200     | 4,940     | 2,901     |
| W80-5 Modification Program                                 | 1,678     | -         | -         |
| W87-1 Modification Program                                 | 1,736     | 1,710     | 3,411     |
| W93 Program                                                | 1,707     | 2,639     | 714       |
| Future Programs                                            | -         | -         | 721       |
| Total, Stockpile Modernization                             | 8,321     | 9,289     | 7,747     |
| Stockpile Operations                                       | 42,955    | 54,570    | 54,624    |
| Stockpile Operations (SO)                                  | 42,955    | 54,570    | 54,624    |
| Weapons Dismantlement and Disposition                      | 212       | 250       | 411       |
| Production Operations                                      | 33,625    | 38,193    | 35,370    |
| Nuclear Enterprise Assurance                               | 2,900     | 3,000     | 4,516     |
| Total, Stockpile Management                                | 88,013    | 105,302   | 102,668   |
| Savannah River Pit Production                              | 73,740    | 69,906    | 294,450   |
| 21-D-511 Savannah River Plutonium Processing Facility, SRS | 800,000   | 1,078,000 | 1,946,523 |
| Total, Savannah River Plutonium Modernization              | 873,740   | 1,147,906 | 2,240,973 |
| Total, Plutonium Modernization                             | 873,740   | 1,147,906 | 2,240,973 |
| Total, Primary Capability Modernization                    | 873,740   | 1,147,906 | 2,240,973 |
| Tritium and Defense Fuels Program                          | 143,162   | 130,600   | 177,759   |
| Total, Tritium and Defense Fuels Program                   | 143,162   | 130,600   | 177,759   |
| Capability Based Investments                               | 6,485     | 10,800    | 13,873    |
| Total, Production Modernization                            | 1,023,387 | 1,289,306 | 2,432,605 |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                        | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Rapid & Advanced Capabilities                          | 50                         | 100                        | 375                        |
| Weapon Technology and Manufacturing Maturation         | -                          | 50                         | -                          |
| Total, Stockpile Research, Technology, and Engineering | 50                         | 150                        | 375                        |
| Operations of Facilities                               | 108,587                    | 210,000                    | 217,000                    |
| Safety and Environmental Operations                    | 75                         | 50                         | 100                        |
| Maintenance and Repair of Facilities                   | 49,326                     | 32,000                     | 80,000                     |
| Recapitalization                                       | 25,566                     | 21,775                     | 37,202                     |
| Total, Operating                                       | 183,554                    | 263,825                    | 334,302                    |
| Total, Infrastructure and Operations                   | 183,554                    | 263,825                    | 334,302                    |
| Operations and Maintenance - DNS                       | 9,917                      | 131,131                    | 153,453                    |
| Defense Nuclear Security                               | 9,917                      | 131,131                    | 153,453                    |
| Information Technology and Cybersecurity               | 9,645                      | 11,773                     | 27,163                     |
| <b>Total Savannah River Site</b>                       | <b>1,314,566</b>           | <b>1,801,487</b>           | <b>3,050,566</b>           |
| <b>SLAC National Accelerator Laboratory</b>            |                            |                            |                            |
| Assessment Science (AS)                                | 1,000                      | -                          | -                          |
| Assessment Science                                     | 1,000                      | -                          | -                          |
| Inertial Confinement Fusion                            | 180                        | 60                         | 180                        |
| Inertial Confinement Fusion (ICF)                      | 180                        | 60                         | 180                        |
| Total, Stockpile Research, Technology, and Engineering | 1,180                      | 60                         | 180                        |
| <b>Total SLAC National Accelerator Laboratory</b>      | <b>1,180</b>               | <b>60</b>                  | <b>180</b>                 |
| <b>University of Rochester</b>                         |                            |                            |                            |
| Inertial Confinement Fusion                            | 94,839                     | 111,000                    | 88,028                     |
| Inertial Confinement Fusion (ICF)                      | 94,839                     | 111,000                    | 88,028                     |
| Total, Stockpile Research, Technology, and Engineering | 94,839                     | 111,000                    | 88,028                     |
| <b>Total University of Rochester</b>                   | <b>94,839</b>              | <b>111,000</b>             | <b>88,028</b>              |
| <b>Washington Headquarters</b>                         |                            |                            |                            |
| B61-12 LEP                                             | 773                        | 1,176                      | -                          |
| W88 ALT 370                                            | 1,123                      | -                          | -                          |
| W80-4 LEP                                              | 21,041                     | 22,708                     | 20,967                     |
| W80-5 Modification Program                             | 1,762                      | 4,165                      | -                          |
| W87-1 Modification Program                             | 17,899                     | 11,684                     | 22,390                     |
| W93 Program                                            | 8,026                      | 14,522                     | 21,206                     |
| Future Programs                                        | -                          | -                          | 1,881                      |
| Total, Stockpile Modernization                         | 50,624                     | 54,255                     | 66,444                     |
| Stockpile Operations                                   | 21,420                     | 25,136                     | 38,115                     |
| Stockpile Operations (SO)                              | 21,420                     | 25,136                     | 38,115                     |

**DEPARTMENT OF ENERGY****Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                                       | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Weapons Dismantlement and Disposition                                 | 986                        | 1,483                      | 1,729                      |
| Production Operations                                                 | 5,557                      | 34,076                     | 21,467                     |
| Nuclear Enterprise Assurance                                          | 3,721                      | 10,359                     | 2,450                      |
| Total, Stockpile Management                                           | 82,308                     | 125,309                    | 130,205                    |
| Los Alamos Pit Production                                             | 10,399                     | 14,999                     | 21,912                     |
| Total, Los Alamos Plutonium Modernization                             | 10,399                     | 14,999                     | 21,912                     |
| Savannah River Pit Production                                         | 1,092                      | 1,359                      | 4,530                      |
| Total, Savannah River Plutonium Modernization                         | 1,092                      | 1,359                      | 4,530                      |
| Enterprise Pit Production Support                                     | 1,768                      | 2,198                      | 4,064                      |
| Total, Plutonium Modernization                                        | 13,259                     | 18,556                     | 30,506                     |
| High Explosives & Energetics                                          | 44,998                     | 30,723                     | 69,490                     |
| High Explosives and Energetics                                        | 44,998                     | 30,723                     | 69,490                     |
| Total, Primary Capability Modernization                               | 58,257                     | 49,279                     | 99,996                     |
| 18-D-690 Lithium Processing Facility, Y-12                            | -                          | 205,000                    | -                          |
| Secondary Capability Modernization                                    | 130,842                    | 81,109                     | 898,992                    |
| Secondary Capability Modernization (SCM)                              | 130,842                    | 286,109                    | 898,992                    |
| Tritium and Defense Fuels Program                                     | 131,082                    | 75,376                     | 351,302                    |
| Total, Tritium and Defense Fuels Program                              | 131,082                    | 75,376                     | 351,302                    |
| Non-Nuclear Capability Modernization                                  | 7,898                      | 28,975                     | 37,542                     |
| 26-D-511 MESA Photolithography Capability (MPC), SNL                  | -                          | -                          | 2,000                      |
| 22-D-513 Power Sources Capability, SNL                                | -                          | 1,000                      | 3,000                      |
| Total, Non-Nuclear Capability Modernization                           | 7,898                      | 29,975                     | 42,542                     |
| Capability Based Investments                                          | 6,169                      | 19,046                     | 21,629                     |
| Warhead Assembly Modernization                                        | 9,196                      | 10,136                     | 12,865                     |
| 18-D-680 Material Staging Capability, PX                              | -                          | -                          | 22,500                     |
| Total, Warhead Assembly Modernization                                 | 9,196                      | 10,136                     | 35,365                     |
| Total, Production Modernization                                       | 343,444                    | 469,921                    | 1,449,826                  |
| Assessment Science (AS)                                               | 19,987                     | 31,892                     | 72,370                     |
| 17-D-640 U1a Complex Enhancements Project, NNSS                       | 3,500                      | -                          | 3,500                      |
| 24-D-513 Z-pinch Experimental Underground System (ZEUS) (ZTBFI), NNSS | -                          | -                          | 3,500                      |
| Assessment Science                                                    | 23,487                     | 31,892                     | 79,370                     |
| Engineering                                                           | 3,550                      | 3,990                      | 3,978                      |
| Total, Engineering                                                    | 3,550                      | 3,990                      | 3,978                      |
| Rapid & Advanced Capabilities                                         | 2,870                      | 6,063                      | 16,661                     |
| Inertial Confinement Fusion                                           | 12,988                     | 9,138                      | 50,475                     |
| 26-D-514 NIF Enhanced Fusion Yield Capability, LLNL                   | -                          | 1,000                      | -                          |
| Inertial Confinement Fusion (ICF)                                     | 12,988                     | 10,138                     | 50,475                     |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                        | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|--------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Weapon Technology and Manufacturing Maturation         | 4,153                      | 7,026                      | 5,657                      |
| Advanced Simulation & Computing                        | 15,036                     | 97,791                     | 212,405                    |
| Total, Stockpile Research, Technology, and Engineering | 62,084                     | 156,900                    | 368,546                    |
| Academic Programs                                      | -                          | 6,000                      | -                          |
| Operations of Facilities                               | 26,105                     | 37,605                     | 69,310                     |
| Safety and Environmental Operations                    | 9,055                      | 45,388                     | 44,558                     |
| Maintenance and Repair of Facilities                   | 9,144                      | 113,172                    | 189,323                    |
| Recapitalization                                       | 291,258                    | 319,254                    | 357,724                    |
| Total, Operating                                       | 335,562                    | 515,419                    | 660,915                    |
| Total, Infrastructure and Operations                   | 335,562                    | 515,419                    | 660,915                    |
| Operations and Maintenance - DNS                       | 121,385                    | 158,963                    | 162,368                    |
| Defense Nuclear Security                               | 121,385                    | 158,963                    | 162,368                    |
| Information Technology and Cybersecurity               | 291,986                    | 360,821                    | 535,713                    |
| <b>Total Washington Headquarters</b>                   | <b>1,236,769</b>           | <b>1,793,333</b>           | <b>3,307,573</b>           |

**Waste Isolation Pilot Plant**

|                                                        |            |            |          |
|--------------------------------------------------------|------------|------------|----------|
| Assessment Science (AS)                                | 70         | 500        | -        |
| Assessment Science                                     | 70         | 500        | -        |
| Total, Stockpile Research, Technology, and Engineering | 70         | 500        | -        |
| Operations of Facilities                               | 214        | -          | -        |
| Safety and Environmental Operations                    | 350        | -          | -        |
| Total, Operating                                       | 564        | -          | -        |
| Total, Infrastructure and Operations                   | 564        | -          | -        |
| <b>Total Waste Isolation Pilot Plant</b>               | <b>634</b> | <b>500</b> | <b>-</b> |

**Y-12 National Security Complex**

|                                       |         |         |         |
|---------------------------------------|---------|---------|---------|
| B61-13                                | 5,000   | 19,500  | 9,167   |
| W80-4 LEP                             | 43,000  | 106,182 | 81,551  |
| W87-1 Modification Program            | 128,458 | 67,659  | 117,967 |
| W93 Program                           | 31,150  | 71,022  | 73,191  |
| Future Programs                       | -       | -       | 1,610   |
| Total, Stockpile Modernization        | 207,608 | 264,363 | 283,486 |
| Stockpile Operations                  | 59,310  | 69,593  | 89,010  |
| Stockpile Operations (SO)             | 59,310  | 69,593  | 89,010  |
| Weapons Dismantlement and Disposition | 14,843  | 14,719  | 19,506  |
| Production Operations                 | 133,432 | 183,642 | 177,063 |
| Nuclear Enterprise Assurance          | 3,850   | 8,224   | 5,477   |
| Total, Stockpile Management           | 419,043 | 540,541 | 574,542 |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**

Weapons Activities - FY 2027

(Dollars in Thousands)

|                                                          | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| 18-D-690 Lithium Processing Facility, Y-12               | 195,302                    | -                          | -                          |
| 06-D-141 Uranium Processing Facility, Y-12               | 790,700                    | 716,500                    | 276,500                    |
| Secondary Capability Modernization                       | 546,816                    | 460,951                    | 699,663                    |
| Secondary Capability Modernization (SCM)                 | 1,532,818                  | 1,177,451                  | 976,163                    |
| Tritium and Defense Fuels Program                        | 3,240                      | 4,548                      | 3,138                      |
| Total, Tritium and Defense Fuels Program                 | 3,240                      | 4,548                      | 3,138                      |
| Non-Nuclear Capability Modernization                     | -                          | 150                        | -                          |
| Total, Non-Nuclear Capability Modernization              | -                          | 150                        | -                          |
| Capability Based Investments                             | 15,869                     | 16,000                     | 23,175                     |
| Total, Production Modernization                          | 1,551,927                  | 1,198,149                  | 1,002,476                  |
| Engineering                                              | 4,458                      | 2,631                      | 2,232                      |
| Total, Engineering                                       | 4,458                      | 2,631                      | 2,232                      |
| Rapid & Advanced Capabilities                            | 8,800                      | 7,290                      | 30,945                     |
| Weapon Technology and Manufacturing Maturation           | 9,653                      | 7,903                      | 11,049                     |
| Advanced Simulation & Computing                          | 1,750                      | 1,787                      | 1,825                      |
| Total, Stockpile Research, Technology, and Engineering   | 24,661                     | 19,611                     | 46,051                     |
| Operations of Facilities                                 | 138,469                    | 145,000                    | 155,000                    |
| Safety and Environmental Operations                      | 22,689                     | 27,401                     | 24,418                     |
| Maintenance and Repair of Facilities                     | 185,991                    | 159,240                    | 250,000                    |
| Recapitalization                                         | 86,693                     | 30,239                     | 134,483                    |
| Total, Operating                                         | 433,842                    | 361,880                    | 563,901                    |
| Total, Infrastructure and Operations                     | 433,842                    | 361,880                    | 563,901                    |
| Operations and Maintenance - DNS                         | 212,128                    | 219,358                    | 227,648                    |
| 17-D-710 West End Protected Area Reduction Project, Y-12 | 54,000                     | -                          | -                          |
| Construction - Defense Nuclear Security                  | 54,000                     | -                          | -                          |
| Defense Nuclear Security                                 | 266,128                    | 219,358                    | 227,648                    |
| Information Technology and Cybersecurity                 | 19,470                     | 19,578                     | 20,534                     |
| <b>Total Y-12 National Security Complex</b>              | <b>2,715,071</b>           | <b>2,359,117</b>           | <b>2,435,152</b>           |
| <b>Y-12 Field Office</b>                                 |                            |                            |                            |
| 18-D-690 Lithium Processing Facility, Y-12               | 14,698                     | 65,000                     | -                          |
| 06-D-141 Uranium Processing Facility, Y-12               | 9,300                      | 13,500                     | 13,500                     |
| Secondary Capability Modernization                       | -                          | 660                        | -                          |
| Secondary Capability Modernization (SCM)                 | 23,998                     | 79,160                     | 13,500                     |
| Total, Production Modernization                          | 23,998                     | 79,160                     | 13,500                     |
| <b>Total Y-12 Field Office</b>                           | <b>23,998</b>              | <b>79,160</b>              | <b>13,500</b>              |
| <b>Total Funding by Site for Weapons Activities</b>      | <b>19,293,000</b>          | <b>20,378,000</b>          | <b>27,441,159</b>          |

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# Defense Nuclear Nonproliferation

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**Defense Nuclear Nonproliferation  
(\$K)**

| <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2027 Request vs<br/>FY 2026 Enacted</b> |
|----------------------------|----------------------------|----------------------------|-----------------------------------------------|
| 2,396,000                  | 2,367,000                  | 2,389,595                  | +22,595                                       |

**Proposed Appropriation Language**

*For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for defense nuclear nonproliferation activities, in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion \$2,389,595,000, to remain available until expended.*

**Overview**

The Defense Nuclear Nonproliferation (DNN) appropriation funds the nonproliferation, counterproliferation, counterterrorism, and emergency response programs within the Department of Energy’s National Nuclear Security Administration (DOE/NNSA). Collectively, these programs are America’s shield against nuclear and radiological attack. DOE/NNSA stops threats before they can reach the U.S. Homeland through a multi-layered defense that:

- Denies adversary access to weapons-usable material, technology, and expertise
- Detects nuclear proliferation and breakouts
- Defeats efforts by adversaries to attack or threaten the U.S. homeland with the world’s most dangerous weapons

DOE/NNSA’s Weapons Activities, Naval Reactors, and DNN appropriations work in concert to deter strategic attacks against the United States and achieve Peace through Atomic Strength. The U.S. nuclear stockpile is a critical element of strategic deterrence but is not enough on its own to protect the Homeland against all threats. The U.S. must also deny, detect, and defeat efforts by rogue states and terrorists to acquire nuclear weapons, as well as efforts by existing nuclear-armed adversaries to improve their arsenals and gain an advantage over the U.S. NNSA achieves its nuclear nonproliferation goals to keep America safe and secure through a variety of work, including global material security, counterterrorism and counterproliferation, emergency preparedness, nuclear emergency response, research and development, material management and minimization, nuclear forensics, export controls, and more.

In executing this mission, DOE/NNSA also advances American Energy Dominance and helps implement President Trump’s May 2025 executive orders on nuclear energy. DOE/NNSA partners with industry to advance nonproliferation and commercial goals at every step of the deployment process, from the design of nuclear reactors, to the high-assay low-enriched uranium used to fuel them, to the agreements for nuclear cooperation that enable their export. In turn, a strong and healthy U.S. commercial nuclear industry enhances national security and is a force multiplier for the DNN appropriation’s global mission.

The current global threat landscape is characterized by states with existing nuclear weapons capabilities, such as Russia and China, that continue to expand and diversify their arsenals to threaten the U.S.; destabilizing proliferation activities by states with emerging or latent capabilities, including Iran; and the risk of hostile non-state actors gaining access to nuclear or radioactive material that can be used in a terrorist attack against the U.S. or our allies. Additionally, the rapid development of critical emerging technologies (including artificial



intelligence (AI)) could improve U.S. capabilities to detect and respond to proliferation or, alternatively, could be used by adversaries to lower the barriers to proliferation, conceal proliferation efforts, and enable new proliferation pathways.

The DNN appropriation programs execute their missions in partnership with other U.S. Government agencies, most notably the Departments of State, War, Commerce, Justice, and Homeland Security; the Intelligence Community; and the Nuclear Regulatory Commission (NRC). Internationally, the programs have a strong and long-established partnership with the International Atomic Energy Agency (IAEA), which has a critical role in international nuclear safeguards, setting guidelines for nuclear security, and enabling the nuclear renaissance.

In order to deny, detect, and defeat nuclear and radiological threats, the DNN appropriation programs depend on the scientific and technical expertise of the Department and the DOE/NNSA National Laboratories. DNN also relies on competencies of other elements of DOE/NNSA, such as NNSA's Offices of Defense Programs and Infrastructure; and DOE, particularly the Office of Nuclear Energy (DOE-NE), the Office of Environmental Management (DOE-EM), and the Office of Science (DOE-SC).

The major elements of the DNN appropriation account include the following:

### **Material Management and Minimization (M3)**

The M3 program denies terrorists and bad actors the materials needed to produce a nuclear weapon by minimizing the need for and presence of weapons-usable nuclear material around the world. The M3 program makes America safer by partnering with U.S. industry and the National Laboratories to develop innovative technical solutions to advance nonproliferation solutions in nuclear applications. This includes minimizing the use of highly enriched uranium (HEU); removing or eliminating at-risk nuclear material; and disposing of excess nuclear material in the U.S. through multiple pathways.

### **Global Material Security (GMS)**

The GMS program directly contributes to U.S. national security by securing and preventing the smuggling of radioactive and nuclear (R/N) materials before they can be used in an attack against the U.S., its interests, or allies. GMS denies terrorists and bad actors access to nuclear and radioactive material and detects and defeats their attempts to smuggle such material. GMS makes America safer and stronger by protecting U.S. communities, preventing threats before they can reach U.S. borders, and advancing U.S. leadership and influence on nuclear security. GMS also helps unleash American Energy Dominance by protecting U.S. international investments from a costly R/N incident, by supporting the competitiveness and exportability of U.S. advanced reactor technology through cooperation on "security by design", and by encouraging deployment of U.S. technologies and security solutions. GMS executes its mission through 11 national laboratories and a number of U.S. businesses and industry partners.

### **Nonproliferation and Arms Control (NPAC)**

The NPAC program enhances U.S. national security and unleashes U.S. dominance in the civil nuclear sector by reducing global nuclear proliferation threats. NPAC plays a key role in denying and detecting nuclear proliferation and advancing American Energy Dominance. NPAC applies unique technical and analytic expertise to support U.S. nonproliferation and arms control objectives to deny proliferation, support peaceful nuclear uses, and enable verifiable nuclear reductions. NPAC programs protect American international investments and America's civil nuclear infrastructure and associated, critical supply chains and implement regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. NPAC safeguards America's emerging technologies (e.g. AI, quantum, semiconductors) and the associated U.S. industrial base from exploitation from international competitors and the global influence of malign and adversarial states. NPAC also strengthens America's global leadership in international nuclear safeguards, export control, and nuclear verification, directly supporting U.S.

national security by denying the illegal diversion of dangerous nuclear materials and weapons of mass destruction (WMD) related commodities and technologies to prevent threats before they reach the U.S. border. NPAC plays a leading role in addressing current threats to U.S. national security while also drawing upon its expertise to anticipate emerging nonproliferation challenges and develop technical and analytic approaches and solutions.

### **Defense Nuclear Nonproliferation Research and Development (DNN R&D)**

DNN R&D advances U.S. technical capabilities to detect and characterize foreign nuclear weapons development activities; foreign nuclear warhead stockpiles; the presence, movement, or diversion of special nuclear materials; nuclear threats in the space environment; and nuclear detonations in all environments including in the atmosphere, space, and underground. The program also sustains and develops foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nuclear nonproliferation activities and to anticipate future threats. It develops nuclear forensics technical capabilities for enabling rapid decision-making during and after nuclear or radiological incidents and aid in determining the origin of interdicted materials or nuclear devices. DNN R&D leverages the unique facilities and scientific skills of the National Laboratories and universities to perform research, conduct technology demonstrations, develop prototypes, and produce and deliver sensors for integration into operational systems.

### **Nonproliferation Construction**

The Nonproliferation Construction Program consolidates all construction costs supporting DNN programs. The Surplus Plutonium Disposition (SPD) Project is DNN's only line-item project. DNN partnered with NNSA's Office of Defense Programs (DP) and DOE's Office of Nuclear Energy to assess surplus plutonium material inventories to support implementation of the President's Executive Order (EO) 14302 on Reinvigorating the Nuclear Industrial Base and meet DOE's legal obligations to the State of South Carolina. Once material is officially transferred to support defense or industry purposes, the K-Area Interim Surveillance (KIS) glovebox at Savannah River Site will be sufficient to disposition the remaining material to meet the legal obligations to the State of South Carolina. The SPD Project is being terminated and NNSA is pursuing appropriate DOE O 413.3 approval authority to allow transfer of all equipment, gloveboxes, and support systems from the SPD project, to include management oversight for the termination and closeout activities for the remaining SPD project scope, to the Savannah River Plutonium Processing Facility (SRPPF) project to support DP's pit production mission.

### **Nuclear Counterterrorism and Incident Response (NCTIR) Programs**

#### **Counterterrorism and Counterproliferation (CTCP)**

The CTCP subprogram harnesses the Department's unparalleled command of nuclear science to prepare for, counter, and respond to nuclear and radiological threats, incidents, and accidents worldwide. CTCP provides the Nation's technical capability to understand and defeat nuclear devices, including improvised nuclear devices (INDs) and lost or stolen foreign nuclear weapons. This knowledge in turn informs U.S. Government priorities on terrorist and proliferant state nuclear threats and related contingency planning. In support of the CTCP mission, the FY 2027 Budget Request for NCTIR supports programs to manage and deploy the DOE/NNSA Nuclear Emergency Support Team (NEST), comprised of scientific and technical experts who are trained and equipped to respond rapidly to all manners of nuclear and radiological events. CTCP includes nuclear forensics capabilities that support identifying the origin of nuclear material interdicted outside of regulatory control or used in a nuclear attack. Additionally, CTCP cooperates with select international partners and allies to strengthen their abilities to effectively address radiological or nuclear incidents—with or without U.S. involvement—thereby minimizing risk to U.S. territory, citizens, or interests and keeping America safe and secure. Finally, CTCP integrates DOE/NNSA capabilities, planning, and operations on counterproliferation priorities. This work supports urgent needs and proactively pursues opportunities to prevent nuclear threats, in part through technology development with counterproliferation applications.

## **Emergency Management (EM)**

The EM subprogram provides the structure and processes to support a comprehensive and integrated approach to emergency management and continuity programs. The EM subprogram improves the readiness and effectiveness of the DOE Emergency Management System and the Nuclear Security Enterprise (NSE) on a programmatic and performance level to address deal with all types of emergencies potentially impacting the DOE/NNSA enterprise or its equities anywhere in the world. This promotes unity of effort and a culture of continuous improvement to safeguard the health and safety of workers and the public and enhance the resilience of the Department and the Nation.

The DNN appropriation FY 2027 Budget Request supports the following key priorities:

### **DNN Programs**

- Convert and/or verify the shutdown of research reactors from highly enriched uranium (HEU) to high-assay low-enriched uranium (HALEU).
- Pack and deliver 900 kilograms of scrap material from Y-12 to BWXT and produce up to 1.5 MT of HALEU oxide to support advanced reactors.
- Demonstrate the Modular Reduction Process for HALEU (MORPH) to produce HALEU metal from enriched uranium
- Remove excess HEU and plutonium from international partners.
- Ship the Mobile-Melt and Consolidate System to Norway to downblend Norway's remaining HEU.
- Complete a small-scale international exercise of the Mobile Uranium Facility (MUF) and the Mobile Plutonium Facility (MPF).
- Halt Dilute and Dispose, except with respect to meeting DOE's legal obligations to the State of South Carolina.
- Eliminate surplus HEU by downblending it to LEU to reduce operating risk in deteriorating infrastructure.
- Complete the transfer equipment, gloveboxes, and support systems from the Surplus Plutonium Disposition (SPD) project, to include management oversight for the termination and closeout activities for the remaining SPD project scope, to the Savannah River Pit Production Facility project to support DP's pit production mission.
- Achieve permanent risk reduction by eliminating unwanted radioactive sources in the U.S. and abroad before they can threaten the U.S. Homeland.
- Promote and facilitate the adoption of viable alternative technologies that do not use high-activity radioactive sources with a focus on the replacement of cesium and cobalt devices to provide permanent risk reduction.
- Engage with U.S. industry on deploying advanced and small modular reactors for the responsible development of nuclear power and identify innovative security solutions to both protect nuclear and radioactive materials and support the Energy Dominance agenda.
- Expand cooperation with key allies to prevent sabotage at nuclear power plants in support of energy security.
- Enhance layered defenses to detect, disrupt, and investigate the illicit trafficking of nuclear and radioactive material through critical pathways before those materials reach the U.S. Homeland.
- Provide critical mission support to the IAEA, including strengthening the international nuclear safeguards system and supporting nuclear security activities.
- Execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches (Project Carousel).

- Continue implementation of the Advanced Reactor International Safeguards Engagement (ARISE) program, including working with key stakeholders to incorporate Safeguards-by-Design elements into advanced reactor designs.
- Protect America's emerging technologies (i.e., AI, quantum) and associated U.S. industrial base from exploitation from international competitors and would-be proliferators.
- Strengthen DOE/NNSA National Laboratory capabilities (i.e., equipment and human resources) to enhance the U.S. Government's ability to implement and develop dual-use export controls on semiconductors and associated equipment.
- Facilitate U.S. trade by providing roughly 10,000 technical reviews of U.S. export license applications, and technical support and training to U.S. law enforcement to help prevent the exploitation of the U.S. industrial base.
- Complete significant refurbishment for the Pantex Monitoring and Verification Test Facility (PMVTF) to advance testing, demonstration, and exercising of warhead monitoring and verification capabilities to support future arms control treaties.
- Streamline the regulatory and programmatic process to allow U.S. nuclear industry to engage with foreign partners more efficiently and timely (123 Agreements, 10 CFR Part 810), including through the development of advanced automation tools.
- Provide nonproliferation assessments of emerging nuclear technologies and other emerging strategic risks.
- Sustain and improve U.S. nuclear explosion monitoring capabilities, including delivering the Nation's space-based nuclear detonation detection payloads and related activities that support monitoring and military missions.
- Demonstrate new U.S. capabilities for detecting and characterizing foreign material and weapons production and detecting and monitoring of special nuclear material movement and diversion.
- Sustain and develop long-term, foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats.
- Advance technical nuclear forensics analysis capabilities that support the U.S. Government's response to a nuclear event, with an emphasis on advancing timelines to support attribution and novel approaches to material provenance.
- Continue to establish research, development, and demonstration activities to advance and validate sensors and systems to enable nuclear monitoring in and from space to address emerging challenges in the space environment.

## **NCTIR Programs**

### **Counterterrorism and Counterproliferation (CTCP)**

- Ensure NEST remains prepared to respond to radiological/nuclear incidents and accidents with highly trained and appropriately equipped personnel.
- Enhance capabilities to counter nuclear and radiological threats including improved tools to locate, characterize, defeat, and conduct forensics on these threats.
- Develop universal technical training for NEST and its interagency partners, focused on actions to Secure and Defeat WMD Devices.
- Enhance NEST consequence management capabilities based on lessons learned from recent major exercises and adopt a more agile and streamlined initial response to protect public health and safety following a major radiological emergency.
- Detect, measure, and track radioactive material in an emergency to determine contamination levels through the Aerial Measuring System.

- Provide security and assessment capabilities for non-stockpile nuclear threat device designs, including INDs.
- Increase capacity to perform assessments of nuclear threat device designs and materials in support of Department of War (DoW) and other strategic partnerships to inform national-level planning against emergent and novel nuclear threats.
- Develop and maintain a core set of expertise addressing critical gaps in nuclear counterproliferation, as well as develop and assess technologies for U.S. Government nuclear counterproliferation mission partners.
- Develop nuclear forensics capabilities to accelerate attribution timelines.
- Develop and retain experts whose authoritative understanding of nuclear science can be applied to the AI domain, enabling timely evaluations of the R/N knowledge, capabilities, and implications of frontier AI models at appropriate classification levels.
- Strengthen federal, state, local, and international emergency preparedness and response through targeted nuclear counterterrorism and incident response training, exercises, and technical exchanges leveraging best practices and lessons learned from NEST Federal expertise and capabilities.
- Coordinate with NNSA's Office of Infrastructure to manage risks to the global security mission from competing demands on NNSA's aging infrastructure across the nuclear security enterprise, to include reaching consensus on a prioritized plan for delivering the CTCP infrastructure needs and capabilities.

### **Emergency Management (EM)**

- Advance emergency preparedness programs and serve as the Departmental lead for emergency management and continuity programs.
- Leveraging a risk-based approach for the Department to plan and prepare for the most likely incidents with the potential for the greatest impact, deliver emergency management training, exercise support, consequence modeling, and readiness assurance programs.
- Lead, manage, and operate the DOE/NNSA Headquarters 24/7/365 Emergency Operations Center (EOC), providing situational awareness and decision-making support to Departmental leadership.
- Operate and maintain facilities, capabilities, and teams to deliver a robust continuity and devolution capability for the Department.
- Ensure interoperability and availability of continuity communications systems across DOE/NNSA and with interagency partners.

### **Legacy Contractor Pensions and Settlement Payments**

This budget line includes the Defense Nuclear Nonproliferation share of funding for DOE's annual reimbursement made to the University of California (UC) Retirement Plan (UCRP) for former UC employees and annuitants who worked at the Lawrence Livermore National Laboratory (LLNL) and Los Alamos National Laboratory (LANL). The annual reimbursement is based on the actuarial valuation report and an annual assessment provided by UC and is covered by the terms described in the contracts. These contracts are paid through the Legacy Contractor Pensions and Settlement Payments budget line. The DNN share of these costs in the FY 2027 Budget is \$14,128,000.

### **Entry Level Hires**

DOE/NNSA supports a variety of programs to help train and recruit the next generation of leaders in managing the nuclear stockpile, nonproliferation, nuclear security, and international security, including the NNSA Graduate Fellowship Program (NGFP). These programs foster the pipeline of qualified professionals who will sustain expertise in these areas through future employment within the nuclear security enterprise. In FY 2027, the DNN appropriation projects providing \$4,500,000 for NGFP support and development activities.

**DOE Working Capital Fund (WCF) Support**

The DOE/NNSA DNN appropriation projected contribution to the DOE WCF for FY 2027 is \$4,216,000. This funding covers shared enterprise activities including managing enterprise-wide systems and data, telecommunications, and supporting the integrated acquisition environment.

**Defense Nuclear Nonproliferation  
Funding by Budget Control (\$K)**

|                                                                      | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |              |
|----------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|--------------|
|                                                                      |                    |                    |                    | \$                                    | %            |
| Reactor Conversion and Uranium Supply                                | 143,227            | 143,200            | 117,820            | -25,380                               | -18%         |
| Nuclear Material Removal and Elimination                             | 37,825             | 37,725             | 68,945             | +31,220                               | +83%         |
| Plutonium Management                                                 | 147,045            | 147,045            | 79,039             | -68,006                               | -46%         |
| <b>Total, Material Management and Minimization</b>                   | <b>328,097</b>     | <b>327,970</b>     | <b>265,804</b>     | <b>-62,166</b>                        | <b>-19%</b>  |
| International Nuclear Security                                       | 64,707             | 86,000             | 61,013             | -24,987                               | -29%         |
| Radiological Security                                                | 246,033            | 258,000            | 193,104            | -64,896                               | -25%         |
| Nuclear Smuggling Detection and Deterrence                           | 181,308            | 181,308            | 136,457            | -44,851                               | -25%         |
| <b>Total, Global Material Security</b>                               | <b>492,048</b>     | <b>525,308</b>     | <b>390,574</b>     | <b>-134,734</b>                       | <b>-26%</b>  |
| <b>Nonproliferation and Arms Control</b>                             | <b>227,008</b>     | <b>212,000</b>     | <b>214,494</b>     | <b>+2,494</b>                         | <b>+1%</b>   |
| Proliferation Detection                                              | 305,728            | 300,000            | 296,170            | -3,830                                | -1%          |
| Nuclear Detonation Detection                                         | 309,488            | 309,000            | 318,447            | +9,447                                | +3%          |
| Forensics R&D                                                        | 37,759             | 37,759             | 30,000             | -7,759                                | -21%         |
| Nonproliferation Stewardship Program                                 | 124,875            | 162,000            | 174,383            | +12,383                               | +8%          |
| <b>Total, Defense Nuclear Nonproliferation R&amp;D</b>               | <b>777,850</b>     | <b>808,759</b>     | <b>819,000</b>     | <b>+10,241</b>                        | <b>+1%</b>   |
| 18-D-150 Surplus Plutonium Disposition Project,<br>SRS               | 40,000             | 10,000             | -                  | -10,000                               | -100%        |
| <b>Total, Nonproliferation Construction</b>                          | <b>40,000</b>      | <b>10,000</b>      | <b>-</b>           | <b>-10,000</b>                        | <b>-100%</b> |
| <b>Total, Defense Nuclear Nonproliferation Programs</b>              | <b>1,865,003</b>   | <b>1,884,037</b>   | <b>1,689,872</b>   | <b>-194,165</b>                       | <b>-10%</b>  |
| Emergency Management                                                 | 23,847             | 33,122             | 35,045             | +1,923                                | +6%          |
| Counterterrorism and Counterproliferation                            | 507,050            | 498,337            | 650,550            | +152,213                              | +31%         |
| <b>Total, Nuclear Counterterrorism Incident Response<br/>Program</b> | <b>530,897</b>     | <b>531,459</b>     | <b>685,595</b>     | <b>+154,136</b>                       | <b>+29%</b>  |
| Legacy Contractor Pensions                                           | 100                | 500                | 14,128             | +13,628                               | +2726%       |
| Use of Prior Year Balances                                           | -                  | -48,996            | -                  | +48,996                               | -100%        |
| <b>Total, Defense Nuclear Nonproliferation Appropriation</b>         | <b>2,396,000</b>   | <b>2,367,000</b>   | <b>2,389,595</b>   | <b>+22,595</b>                        | <b>+1%</b>   |

**Defense Nuclear Nonproliferation  
Out Year Funding by Budget Control (\$K)**

|                                                                      | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Reactor Conversion and Uranium Supply                                | 130,376                    | 132,984                    | 135,643                    | 138,356                    |
| Nuclear Material Removal and Elimination                             | 49,636                     | 50,629                     | 51,642                     | 52,675                     |
| Plutonium Management                                                 | 80,620                     | 82,232                     | 83,877                     | 85,555                     |
| <b>Total, Material Management and Minimization</b>                   | <b>260,632</b>             | <b>265,845</b>             | <b>271,162</b>             | <b>276,586</b>             |
| International Nuclear Security                                       | 62,233                     | 63,478                     | 64,748                     | 66,043                     |
| Radiological Security                                                | 196,966                    | 200,905                    | 204,923                    | 209,021                    |
| Nuclear Smuggling Detection and Deterrence                           | 139,186                    | 141,970                    | 144,809                    | 147,705                    |
| <b>Total, Global Material Security</b>                               | <b>398,385</b>             | <b>406,353</b>             | <b>414,480</b>             | <b>422,769</b>             |
| <b>Nonproliferation and Arms Control</b>                             | <b>229,272</b>             | <b>233,858</b>             | <b>238,535</b>             | <b>243,305</b>             |
| Proliferation Detection                                              | 302,093                    | 308,135                    | 314,298                    | 320,584                    |
| Nuclear Detonation Detection                                         | 324,816                    | 331,312                    | 337,938                    | 344,697                    |
| Forensics R&D                                                        | 30,600                     | 31,212                     | 31,836                     | 32,473                     |
| Nonproliferation Stewardship Program                                 | 177,871                    | 181,428                    | 185,057                    | 188,758                    |
| <b>Total, Defense Nuclear Nonproliferation R&amp;D</b>               | <b>835,380</b>             | <b>852,087</b>             | <b>869,129</b>             | <b>886,512</b>             |
| 18-D-150 Surplus Plutonium Disposition Project,<br>SRS               | -                          | -                          | -                          | -                          |
| <b>Total, Nonproliferation Construction</b>                          | <b>-</b>                   | <b>-</b>                   | <b>-</b>                   | <b>-</b>                   |
| <b>Total, Defense Nuclear Nonproliferation Programs</b>              | <b>1,723,669</b>           | <b>1,758,143</b>           | <b>1,793,306</b>           | <b>1,829,172</b>           |
| Emergency Management                                                 | 35,746                     | 36,461                     | 37,190                     | 37,934                     |
| Counterterrorism and Counterproliferation                            | 663,561                    | 676,832                    | 690,369                    | 704,176                    |
| <b>Total, Nuclear Counterterrorism Incident Response<br/>Program</b> | <b>699,307</b>             | <b>713,293</b>             | <b>727,559</b>             | <b>742,110</b>             |
| Legacy Contractor Pensions                                           | 14,411                     | 14,699                     | 14,993                     | 15,293                     |
| <b>Total, Defense Nuclear Nonproliferation Appropriation</b>         | <b>2,437,387</b>           | <b>2,486,135</b>           | <b>2,535,858</b>           | <b>2,586,575</b>           |



## **Material Management and Minimization**

### **Overview**

The Material Management and Minimization (M3) program mission is to deny terrorists and adversary state actors the materials needed to produce a nuclear weapon by minimizing the need for and presence of weapons-usable nuclear material around the world. The M3 program makes America safer by partnering with Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratories and United States (U.S.) industry to develop innovative technical solutions to minimize the availability of highly enriched uranium (HEU); remove or eliminate at-risk nuclear material; and dispose of excess nuclear material in the U.S. through multiple pathways.

M3 partners and trains with the U.S. military and Department of War to remove weapons-usable nuclear material from semi-permissive environments, denying access to this material from adversarial or terrorist networks. This mission is executed through the Mobile Uranium Facility (MUF) or Mobile Plutonium Facility (MPF) infrastructure and highly trained experts.

In furtherance of Administration priorities to reinvigorate the U.S. nuclear industrial base and achieve energy dominance, M3 is a crucial partner for material supply. M3 has made available over one metric ton (MT) of high-assay low-enriched uranium (HALEU) from stocks declared surplus to defense needs to support U.S. advanced reactors. By the end of Fiscal Year (FY) 2027, M3 expects to make available over seven MT (out of NNSA's overall 11.7 MT commitment to the Department's Office of Nuclear Energy (DOE-NE) of HALEU from multiple sources, including from the processing of inventories not usable by NNSA, to support broader U.S. nuclear energy goals while advancing the NNSA/M3 material management and minimization mission. M3 will also help the DOE-NE make plutonium available to industry to fuel advanced nuclear technologies.

**Material Management and Minimization  
Funding by Budget Control (\$K)**

|                                                    | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|----------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|-------------|
|                                                    |                    |                    |                    | \$                                    | %           |
| Reactor Conversion and Uranium Supply              | 143,227            | 143,200            | 117,820            | -25,380                               | -18%        |
| Nuclear Material Removal and Elimination           | 37,825             | 37,725             | 68,945             | +31,220                               | +83%        |
| Plutonium Management                               | 147,045            | 147,045            | 79,039             | -68,006                               | -46%        |
| <b>Total, Material Management and Minimization</b> | <b>328,097</b>     | <b>327,970</b>     | <b>265,804</b>     | <b>-62,166</b>                        | <b>-19%</b> |

**Outyear Funding (\$K)**

|                                                    | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|----------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Reactor Conversion and Uranium Supply              | 130,376            | 132,984            | 135,643            | 138,356            |
| Nuclear Material Removal and Elimination           | 49,636             | 50,629             | 51,642             | 52,675             |
| Plutonium Management                               | 80,620             | 82,232             | 83,877             | 85,555             |
| <b>Total, Material Management and Minimization</b> | <b>260,632</b>     | <b>265,845</b>     | <b>271,162</b>     | <b>276,586</b>     |

## **Material Management and Minimization Reactor Conversion and Uranium Supply**

### **Overview**

The Reactor Conversion and Uranium Supply subprogram, referred to as the Convert subprogram, supports the implementation of key domestic and international nuclear nonproliferation activities while also providing key support to the U.S. advanced reactor industry. The Convert subprogram supports the conversion of civilian research reactors and isotope production facilities to use non-weapons-usable nuclear materials. The subprogram also includes activities to downblend HEU deemed surplus to defense needs and make the resulting HALEU available for sale for research reactors and medical isotope production. These efforts result in permanent threat reduction by minimizing and, to the extent possible, eliminating the use of HEU in civilian applications while supporting the long-term use of HALEU to strengthen the U.S. nuclear energy industry.

As of the end of FY 2025, the Convert subprogram has converted or verified the shutdown of 111 HEU research reactors and isotope production facilities worldwide, including all major global molybdenum-99 (Mo-99) producers. The Convert subprogram is working to convert and verify the shutdown of HEU-fueled reactors around the world, including by providing technical support to develop and make available first-of-a-kind new HALEU fuels for existing and future research reactors. Funding will also support the development and implementation of the proliferation resistance optimization program, under which the subprogram will work with U.S. and international partners on the design of new-build research and advanced/small modular reactors to explore technical options to reduce the ability for these facilities to be misused for proliferation purposes.

The Convert subprogram also supports DOE and NNSA's HALEU supply, uranium enrichment, and deconversion initiatives. For example, the Convert subprogram identified 3.6 MT of HALEU scrap material, mainly at the Y-12 National Security Complex (Y-12), that will be packaged and shipped to BWX Technologies (BWXT) for processing into a usable form. This project will support Y-12's transition to the Uranium Processing Facility (UPF) by clearing material out of Y-12's Building 9212 and enabling the U.S. to make HALEU available for U.S. companies' advanced reactor demonstration projects. The subprogram will also disposition legacy material at Y-12 to support the timely transition to the UPF and to reduce NNSA risks resulting from deteriorating infrastructure. The HEU Thorium/Building 9206, Area 5 De-inventory, and Building 9212 discards were completed by the end of FY 2025, while offsite shipments will be completed by the end of FY 2026. Limited work will continue related to characterization and disposition of HEU not suitable for other needs.

### **Highlights of the FY 2027 Budget Request**

The FY 2027 funding request will support activities to convert or verify the shutdown of research reactors from HEU to HALEU fuel. Funding will also support the Convert subprogram's uranium activities, including packaging and delivering 900 kilograms (kg) of scrap material from Y-12 to BWXT and the production of up to 1.5 MT of HALEU oxide to support advanced reactors. The Convert subprogram will also eliminate hundreds of kg of surplus HEU by downblending it to HALEU to support advanced reactors and for sale to research reactors and medical isotope producers. Further, the Convert subprogram will demonstrate its Modular Reduction Process for HALEU (MORPH) to produce HALEU metal from enriched uranium. The Convert subprogram will collaborate with U.S. entities (e.g., Missouri University and the National Institute of Standards and Technology) and international partners (e.g., Nigeria, Japan) to increase proliferation resistance features in research and advanced/small modular reactor designs.

**Reactor Conversion and Uranium Supply (-\$25.380 million)**

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level for the U.S. high performance research reactor program, which will be executed throughout FY 2027. That decrease is offset by the addition of funds to complete the first scrap recovery contract and initiate a new contract to continue recovering HALEU oxide to support advanced reactors. This second contract directly supports the President's Executive Orders (EO 14299 and EO 14302).

## **Material Management and Minimization Nuclear Material Removal and Elimination**

### **Overview**

The Nuclear Material Removal and Elimination subprogram, referred to as the Remove subprogram, supports the removal, consolidation, and disposal of weapons-usable nuclear material internationally to support permanent threat reduction. Each kg of excess nuclear material removed from civilian sites worldwide reduces the risk of terrorists or other malevolent actors acquiring HEU or plutonium for use in an improvised nuclear device. The subprogram directly advances U.S. national security HEU minimization objectives.

This subprogram consists of two primary lines of effort (1) Mobile Packaging and (2) Nuclear Material Removal and Consolidation. Under Mobile Packaging, the Remove subprogram maintains the capability to promptly respond and enable the safe and secure removal of nuclear material worldwide. This specialized capability focuses on addressing HEU and plutonium inventories using MUF and the MPF. Both the MUF and MPF include specialized teams and mobile facilities needed to conduct in-country characterization, stabilization, packaging, and removal of nuclear materials. The Mobile Packaging program undertakes full-scale and small-scale training exercises with the MUF and MPF to maintain team proficiency and ensure both facilities are ready to be deployed on short notice. The program also regularly exercises with the military and Department of War to enable rapid deployment of these unique U.S. Government capabilities in support of U.S. national security objectives.

Under Nuclear Material Removal and Consolidation, the Remove subprogram supports the removal, consolidation, and disposal of weapons-usable nuclear material from civilian facilities around the world. This material includes unirradiated and irradiated HEU of U.S.-origin and other international origins, as well as separated plutonium. The Remove subprogram has also removed HEU and HALEU that will be provided to the Office of Nuclear Energy's HALEU Availability Program, supporting U.S. nuclear industry while permanently reducing the risk of nuclear terrorism. On a case-by-case basis, in support of nonproliferation objectives, some U.S.-origin LEU may be repatriated to the U.S.

The subprogram has also developed new capabilities, such as the Mobile Melt-Consolidate (MMC) system, to address inventories of weapons-usable nuclear material that currently do not have a disposition pathway. MMC is a mobile platform for stabilizing excess nuclear material and converting it into a more proliferation-resistant, low-attractiveness waste form that can be readily disposed of in a storage facility or repository outside the U.S. The subprogram will continue development of a next-generation modular processing system in FY 2027 to support downblending activities in other partner countries. The Nuclear Infrastructure Threat Reduction (NITR) program will also continue to support permanent risk reduction by assisting partner countries to eliminate sensitive nuclear infrastructure at research reactor facilities that are being decommissioned so that the equipment cannot be sold, transferred, or diverted for unauthorized use.

The Remove subprogram plans to begin development of a rapid spent nuclear fuel removal capability in FY 2027 to complement and enhance its capability to respond to emerging nuclear threats. By procuring versatile spent nuclear fuel transport casks, a mobile crane, transfer casks, and specially configured shipping containers, the Remove subprogram will be prepared to rapidly deploy internationally to package and remove at-risk irradiated nuclear material.

The Remove subprogram evaluates excess weapons-usable nuclear material located at civilian sites abroad to prioritize candidate material for removal or disposition. Furthermore, the subprogram works with foreign partners to obtain regulatory permits; characterize, stabilize, package, and transport material; and provide replacement LEU or other incentives to encourage elimination of these materials. Additionally, the subprogram

coordinates all future U.S. receipts with relevant DOE stakeholders, including the Office of Environmental Management (DOE EM), to enable long-term planning and appropriate resource allocation.

### **Highlights of the FY 2027 Budget Request**

The FY 2027 budget request will permanently reduce risks presented by legacy nuclear materials by eliminating excess HEU and plutonium from foreign research reactors. It includes removing and/or confirming the disposition of 15 kg of weapons-usable nuclear material from partner countries. The Remove subprogram will further reduce nuclear security risks by partnering with countries to eliminate sensitive nuclear infrastructure and expanding NITR partnerships.

The Remove subprogram will address inventories of weapons-usable nuclear material that lack a disposition pathway by deploying the MMC system to Norway. This system will be used to downblend Norway's remaining HEU. Additionally, the subprogram will advance the development of a next-generation modular processing system to address additional excess HEU inventories.

To maintain proficiency and readiness for urgent nuclear material removal missions, the program will conduct a small-scale international exercise of the MUF and MPF. Upgrades and repairs on both the MUF and MPF will follow a FY 2026 large-scale exercise. Furthermore, the subprogram will enhance its ability to respond to emerging nuclear threats by developing a rapid spent nuclear fuel removal capability.

### **Nuclear Material Removal and Elimination (+\$31.220 million)**

The increase supports development of a new rapid spent nuclear fuel removal capability, deployment of the MMC system to Norway, and HEU removals to advance U.S. national security from partner countries in Asia, the Americas, Europe, and the Middle East.

## **Material Management and Minimization Plutonium Management**

### **Overview**

The Plutonium Management subprogram (formerly known as Plutonium Disposition), referred to as the Manage subprogram, is responsible for disposing of surplus plutonium in a safe and secure manner, including removing surplus plutonium to meet DOE's legal obligations to the State of South Carolina and in compliance with the President's Executive Order 14302 on Reinvigorating the Nuclear Industrial Base.

NNSA's Office of Defense Nuclear Nonproliferation (DNN) partnered with NNSA's Offices of Defense Programs and Nuclear Energy to determine which materials are suitable for defense or industry purposes and which materials will need to be dispositioned through the Program to meet DOE's legal obligations to the State of South Carolina.

DOE has identified 19.7 MT of surplus plutonium, including 10.1 MT from NNSA, that can be made available to U.S. industry to fuel advanced nuclear technologies. NNSA has also identified the inventory of surplus pits and other weapon-grade plutonium that will be needed to support defense purposes and is pursuing efforts to reclassify that material as vital to defense needs. Any material that is not suitable for either defense or industry purposes will be dispositioned to meet DOE's legal obligations to the State of South Carolina, including a small amount of plutonium material with safety concerns for long-term storage.

In compliance with the President's Executive Order 14302, in FY 2027 the Manage subprogram will transfer the Advanced Recovery and Integrated Extraction System (ARIES) capability at Los Alamos National Laboratory (LANL) to NNSA's Office of Defense Programs in support of its pit production mission at LANL. No funding for ARIES is requested within the Plutonium Management program.

### **Highlights of the FY 2027 Budget Request**

The FY 2027 budget request supports the President's direction to halt the Dilute and Dispose program, except with respect to DOE's legal obligations to the State of South Carolina. The Plutonium Management program will maintain existing capabilities to dilute and dispose of plutonium from South Carolina that neither industry nor Defense Programs want for their purposes.

### **Plutonium Management (-\$68.006 million)**

Decrease primarily reflects the transfer of the ARIES facility operations and work scope at LANL to Defense Programs in support of plutonium pit production. The remaining decrease reflects the reduction in disposition scope following implementation of the President's Executive Order 14302.

**DNN Material Management and Minimization  
Capital Equipment Summary  
(\$K)**

|                                              | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>       |              |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC <\$10M) | N/A          | N/A                    | -                          | -                          | -                          |
| Acid Cleaning Line, BWXT <sup>1</sup>        | 6,125        | 4,000                  | 2,125                      | -                          | -                          |
| Integrated Data Management System, SRS       | 18,000       | 18,000                 | -                          | -                          | -                          |
| <b>Total, Capital Equipment</b>              | <b>N/A</b>   | <b>22,000</b>          | <b>2,125</b>               | <b>-</b>                   | <b>-</b>                   |

**DNN Material Management and Minimization  
Capital Equipment Summary  
Outyears (\$K)**

|                                              | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|----------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>       |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment (TEC <\$10M) | -                          | -                          | -                          | -                          | N/A             |
| Acid Cleaning Line, BWXT                     | -                          | -                          | -                          | -                          |                 |
| Integrated Data Management System, SRS       | -                          | -                          | -                          | -                          |                 |
| <b>Total, Capital Equipment</b>              | <b>-</b>                   | <b>-</b>                   | <b>-</b>                   | <b>-</b>                   | <b>N/A</b>      |



## **Global Material Security**

### **Overview**

The Office of Global Material Security (GMS) denies adversary access to radioactive and nuclear (R/N) materials by securing and preventing the smuggling of these materials. GMS makes America safer and stronger by protecting U.S. communities and stopping threats before they reach U.S. borders. GMS also strengthens America's global leadership on nuclear security, counters malign influence from competitor countries, advances the interests of U.S. industry, and supports the Administration's energy dominance agenda.

GMS leads NNSA efforts to work with the DOE Office of Nuclear Energy to accelerate improvements to U.S. commercial nuclear designs through the implementation of "security by design." This partnership with U.S. industry increases the attractiveness of U.S. industry in the international market, while ensuring advanced methodologies of nuclear security set the world standard. This budget request reflects measures implemented in FY 2026 to improve program efficiency, to increase burden-sharing with bilateral partners as well as likeminded countries, who provide financial contributions to GMS, and to prioritize efforts with the greatest impact in making America safer, stronger, and more prosperous.

A single use of an improvised nuclear or radiological dispersal device anywhere in the world would have significant impacts, including loss of life and damage to U.S. assets or interests, and could result in billions of dollars in economic costs and significantly set back the expansion of U.S. nuclear power.

Instead of allowing nuclear threats to reach the U.S. homeland, GMS prioritizes international partnerships and programs to preclude less secure nations from introducing these risks abroad. This investment greatly reduces the investments needed to combat these threats at home, while increasing the time to respond if a threat materialized overseas. GMS is the away team offense to deny, detect, and defeat would-be R/N adversaries and non-state actors. GMS's work is critical in protecting the Homeland and addressing current and evolving risks, including: the increasing amount of R/N materials in use globally, continued attempts at R/N smuggling, global conflict and terrorist activity, and continued state-based actions to disrupt critical infrastructure and undermine security norms.

GMS prioritizes efforts that provide permanent risk reduction by eliminating disused radioactive materials or sources that do not have a commercial disposition pathway and eliminating the use of sources through replacement with non-radioisotopic alternatives where possible. GMS focuses on top two of the most important R/N threats to the United States: cesium and cobalt. Leveraging its success with cesium replacements, GMS will increase focus on alternatives to cobalt-60 (Co-60) through the launch of its "Accelerators for America" initiative, which will advance the U.S. accelerator industry and promote eBeam as a viable replacement for Co-60.

GMS will engage with foreign counterparts, primarily through technical exchanges with Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratory experts, to verify they are employing strong nuclear and radiological security practices at their facilities. With countries pursuing nuclear power programs, GMS will raise nuclear security awareness, increase demand for secure and reliable U.S. technologies, and counter Russian and Chinese influence. GMS also will work with the U.S. advanced and small modular reactor industry to export safe, secure, and reliable nuclear technologies, while preventing sabotage at foreign sites that could have grave consequences for the future viability of nuclear power.

GMS will lead technical exchanges, drawing upon DOE/NNSA National Laboratory and U.S. law enforcement experts, to train foreign counterparts on strong law enforcement standards to enhance their ability to disrupt

smuggling of R/N materials that could be used in acts of terrorism against the United States, its interests, or allies. GMS’s targeted cooperation with priority foreign partners may include delivering American-made radiation detection equipment. Cooperation will be conditional on each counterpart sharing information related to detections, with a revised execution model focused on the partner quickly assuming responsibility for all operations and systems maintenance. This approach drives foreign partners to fund operations in support of U.S. national security priorities without creating financial dependencies on the United States.

GMS will conduct technical exchanges and exercises to verify that foreign counterparts have implemented and are maintaining upgrades and security best practices that GMS has provided. These efforts verify the ongoing national security return on investment for prior U.S. security assistance. GMS will continue to execute the majority, over 95%, of its funding through the National Laboratories and U.S. businesses, supporting American prosperity, technical expertise, and export of superior U.S. technologies. GMS also will seek continued burden-sharing arrangements with like-minded countries, who provide funding to GMS to execute security projects overseas. Finally, GMS will provide tailored and targeted expertise to drive other countries to invest their own resources to secure and stop movement of R/N materials.

**Global Material Security  
Funding by Budget Control (\$K)**

|                                            | FY 2025<br>Enacted <sup>1</sup> | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|--------------------------------------------|---------------------------------|--------------------|--------------------|---------------------------------------|-------------|
|                                            |                                 |                    |                    | \$                                    | %           |
| International Nuclear Security             | 64,707                          | 86,000             | 61,013             | -24,987                               | -29%        |
| Radiological Security                      | 246,033                         | 258,000            | 193,104            | -64,896                               | -25%        |
| Nuclear Smuggling Detection and Deterrence | 181,308                         | 181,308            | 136,457            | -44,851                               | -25%        |
| <b>Total, Global Material Security</b>     | <b>492,048</b>                  | <b>525,308</b>     | <b>390,574</b>     | <b>-134,734</b>                       | <b>-26%</b> |

**Global Material Security  
Outyear Funding (\$K)**

|                                            | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|--------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| International Nuclear Security             | 62,233             | 63,478             | 64,748             | 66,043             |
| Radiological Security                      | 196,966            | 200,905            | 204,923            | 209,021            |
| Nuclear Smuggling Detection and Deterrence | 139,186            | 141,970            | 144,809            | 147,705            |
| <b>Total, Global Material Security</b>     | <b>398,385</b>     | <b>406,353</b>     | <b>414,480</b>     | <b>422,769</b>     |

<sup>1</sup> The FY 2025 Enacted level for International Nuclear Security does not reflect the use of \$20 million in prior year carryover.

## **Global Material Security International Nuclear Security**

### **Overview**

The International Nuclear Security (INS) subprogram leads U.S. efforts abroad to prevent theft of nuclear material and sabotage of nuclear facilities worldwide that keep the United States safe, strong, and prosperous. By working with U.S. industry to export safe, secure, and reliable nuclear facilities, while preventing sabotage at foreign operating sites, these efforts support the Administration's focus on the critical role of nuclear power in unleashing energy dominance by exporting superior U.S. technologies.

The INS subprogram leverages the experience and expertise at DOE/NNSA National Laboratories to support the secure expansion of civil nuclear power around the world, including deployment of advanced and small modular reactors (A/SMRs) and associated fuel cycle facilities. The subprogram engages with U.S. companies to assist with integration of security by design for A/SMRs, further improving U.S. leadership in the nuclear industry and fostering competitive advantage for American exports. In parallel, the subprogram works bilaterally and multilaterally to advance U.S. leadership in nuclear security, counter malign influence from competitor countries, and drive demand for the most secure technologies by countries embarking on new or expanded civil nuclear power programs.

Additionally, INS has expanded cooperation with key strategic partners as part of its efforts to promote the role of nuclear power plants in overall energy security and prevent sabotage incidents that could impact the nuclear industry, impeding global nuclear commerce. The subprogram is working with sites on resilience to attacks against targets critical to plant operation in a holistic fashion that includes insider threat mitigation, cybersecurity, physical protection and uncrewed aerial systems.

The INS subprogram also secures vulnerable inventories of nuclear materials that could pose direct threats to the safety, security, and prosperity of the American people. U.S. leadership has improved nuclear security around the world substantially; however, evolving adversary capabilities, threats from state-based actors and regional conflicts, and advances in technologies, such as artificial intelligence and uncrewed aerial systems, present new challenges and opportunities to traditional security approaches that INS must address.

The subprogram uses a risk-informed and graded approach to prioritize engagements and maximize resources, while identifying opportunities for burden sharing and contributions from like-minded partners. The subprogram has implemented additional measures to maximize program resources as well as its impact on U.S. national security through collaborating with more partners regionally, instead of bilaterally, and focusing security upgrades on the highest-consequence nuclear materials to mitigate the risk of theft by non-state actors. The subprogram also is requiring more cost-sharing from partners in these endeavors to reduce dependency on the United States.

Finally, the INS subprogram engages bilaterally with peers to build international consensus around nuclear security topics. Engaging peers also allows the subprogram to address shared technical challenges and experiences, leverage a peer's technical expertise in other INS engagements, conduct joint technical exchanges or studies, and provide the United States and DOE/NNSA experts access to nuclear fuel cycle facility types that may not exist in the United States to broaden technical knowledge domestically.

## **Highlights of the FY 2027 Budget Request**

In Fiscal Year (FY) 2027, the INS subprogram will secure facilities with the highest-consequence nuclear materials to prevent theft and protect the U.S. Homeland, requiring more cost-sharing from partners. The subprogram also will provide technical support to U.S. industry, such as engineering research and modelling tools, to enhance cost-effective system designs. It also will provide more in-kind technical partnerships with national lab experts on security by design for A/SMRs to support U.S. leadership in responsible nuclear power development and global deployment dominance.

In addition, for countries embarking on or expanding civil nuclear energy infrastructure, the subprogram will raise awareness of nuclear security tools and best practices to prepare them to develop their nuclear power programs and drive demand for most secure and reliable U.S. technologies.

Finally, the INS subprogram will expand cooperation with key partners to prevent sabotage at nuclear power plants and engage partner countries on planning for crisis contingency events that could have negative implications for a U.S.-led nuclear energy renaissance.

### **Explanation of Change: International Nuclear Security (-\$24.987 million)**

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will begin priority projects in FY 2026 that will be executed in FY 2027, including nuclear security support for new 123 Agreements, additional security by design outreach to U.S. industry interested in international exports, and accelerated efforts to secure vulnerable nuclear materials. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.

## **Global Material Security Radiological Security**

### **Overview**

The Radiological Security (RS) subprogram makes the United States safer, stronger, and more prosperous by eliminating the risk of a radiological dispersal device, or any other malicious use of radioactive material. Every day in the United States and around the world, vital industries like oil and gas, healthcare, pharmaceutical, and medical research use radioactive material to save lives, create prosperity, and strengthen American competitiveness. However, a single incident of radiological terrorism anywhere in the world would have severe economic consequences, create setbacks for the growing demand for peaceful uses of nuclear technologies, and undercut U.S. companies leading innovation in these critical industries.

RS's top priority is the elimination of radioactive material in the United States that could be used to threaten the Homeland. RS also reduces radiological risks globally to eliminate threats before they reach American borders and to protect vital U.S. commercial and military interests around the world. To balance the risk that these materials pose with the benefits that they offer to American society and business, the subprogram works closely with industry to forge partnerships that make the American people safer and encourage American innovation.

RS achieves permanent risk reduction through the elimination of high-activity radioactive material that industry no longer needs. Due to the lack of commercial disposition options, this material may sit idly, often for years, posing a security risk and burdening industry. Leveraging the unique expertise of the DOE/NNSA National Laboratories, RS removes these materials, thus eliminating the risk of malicious use at hundreds of locations, mostly in the United States, and directly protecting American communities. Additionally, the subprogram is developing tools and solutions that allow users to manage their unwanted material safely, securely, and independently of long-term U.S. Government support.

RS is the global leader in promoting transition to safer, more secure advanced nuclear technologies whenever feasible. These cutting-edge technologies do not rely on radioactive material, and, therefore, pose no security risks. For example, X-ray irradiators are a proven alternative to cesium-based devices, delivering equal or superior performance in life-saving medicine and research—all while eliminating the risk of a dirty bomb and securing American healthcare. This also enhances U.S. economic self-reliance and mitigates supply chain issues as most radioactive material comes from outside of the United States, including from Russia and China.

The 2019 National Defense Authorization Act mandated that RS eliminate all cesium-based blood irradiators in the United States by the end of 2027. As of December 31, 2025, RS eliminated 389 of 436 devices. In FY 2027, the subprogram will prioritize completion of this effort. RS also will work to eliminate all remaining research irradiators in the United States. Building from this success and tapping into DOE's Small Business Innovation Research Program, the subprogram supports the development of groundbreaking technologies to replace radioactive material, such as cobalt-60 and americium-241. Through its 'Accelerators for America' initiative, RS will work with industry partners to prove electron beam technology for use in inline or end-of-line radiation processing facilities, in place of cobalt.

Where radioactive material is still needed, RS works with industry, law enforcement, and other government organizations to prevent adversaries from acquiring and using radioactive material by providing cutting edge technologies and capabilities to partners. This includes focusing on such areas as cyber security, insider threat mitigation, transportation security, and response force engagement. RS maintains its extensive network of relationships in the United States and abroad through radiological security advisory assessments, technical

exchanges, and training. RS uses these activities to verify that partners continue to employ security practices and achieve the expected return on previous subprogram investments.

### **Highlights of the FY 2027 Budget Request**

In FY 2027, the RS subprogram will prioritize elimination of radioactive sources to protect the Homeland and advance U.S. innovation and industry. RS will eliminate 700 unwanted radioactive sources (600 from across the United States and 100 from abroad). Additionally, RS will facilitate transition from high-risk radioactive sources to safer, more secure, and more advanced alternatives, including elimination or replacement of 70 devices, and developing, promoting, and incentivizing the use of alternatives to cobalt-60 for cancer treatment, medical product sterilization, food irradiation, and agricultural pest management.

RS will drive American innovation by launching a demonstration project, “Accelerators for America,” with U.S. accelerator and medical device manufacturers to prove the feasibility of using eBeam for inline or end-of-line radiation processing at three facilities across the United States. In support of increased burden-sharing, the subprogram will work with international partners to increase their ability to manage disused sources safely and securely by themselves without extended U.S. support and will continue to support the adoption and transition to alternative technologies around the world.

For sites with radioactive materials that cannot be eliminated, RS will use its expertise to advise on technical solutions to secure material from theft, cyber-attacks, and insider threat. The subprogram will also provide local law enforcement the tools, knowledge, and awareness they need to prepare for and respond quickly and safely to suspected thefts of radioactive material. Activities conducted will include 15 tabletop exercises with state and local law enforcement officials and 15 Radiological Awareness Security and Response workshops (ten domestically and five internationally) to demonstrate and reinforce the efficiencies and capabilities gained by adopting new policies and procedures for responding to attempted thefts of high-activity radioactive material.

Finally, RS will maintain and expand partnerships with U.S. industry and build new relationships to identify innovative security solutions to address risks and increase security of radioactive materials. RS will collaborate with industry partners to deploy corporate training programs to enhance security of large sterilization facilities, where transition to alternatives is not yet feasible.

### **Explanation of Change: Radiological Security (-\$64.896 million)**

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will fund additional projects consistent with the administration priority to eliminate radiological risk. These projects would be funded in FY 2026 and executed in FY 2027, including domestic and international radioactive device replacements and removals, cyber security, transportation security, and the development of alternative technologies to replace radioactive sources. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.

## **Global Material Security**

### **Nuclear Smuggling Detection and Deterrence**

#### **Overview**

The Nuclear Smuggling Detection and Deterrence (NSDD) subprogram increases U.S. national security by countering the smuggling of R/N materials before they can be weaponized and used against the U.S. Homeland, its interests, or allies. Continued U.S. leadership is needed to address existing and evolving threats, including increases in terrorist activity in multiple regions; growing supply and demand for radiological and nuclear technologies; and the continued dissemination of information on developing weapons of mass destruction information in open sources. To address these threats, NSDD provides a suite of proven radiation detection equipment, along with tailored process and procedure development, to enable foreign partners to perform their own operations to detect, disrupt, and investigate R/N materials out of regulatory control. This approach has driven foreign partners to fund their own counter nuclear smuggling (CNS) programs and has resulted in interdictions of dozens of radioactive sources as well as hundreds of kilograms of nuclear material. Intelligence demonstrates that most interdictions of R/N material occur in targeted operations and law enforcement investigations between official border points (e.g., frontier areas) and within the interior of a country. Because of this, the NSDD subprogram prioritizes law enforcement collaboration, which may include providing American-made detection equipment to a limited number of priority foreign counterparts, thereby maximizing risk reduction using existing resources. Equipment deployments for frontier and interior operations typically cost 20% of radiation portal monitor deployments, which the subprogram deployed historically, and have lower lifecycle costs.

To further improve efficiency and increase burden sharing, the NSDD subprogram is accelerating the speed at which partners assume programmatic responsibility for all systems, training, and maintenance. This drives foreign partners to assume primary responsibility for their own CNS programs, while avoiding financial dependency on the United States. This approach results in the development of a global network advancing U.S. national security interests.

To assess return on program investments, the NSDD subprogram will continue to evaluate operational capabilities of partners to verify effectiveness of detection operations, promote information sharing on interdictions, and make partners less reliant on U.S. resources. The subprogram cooperates with economically and scientifically advanced countries and multilateral partners to promote future risk reduction by others outside the United States. The subprogram will continue to seek burden-sharing arrangements with like-minded countries, who provide funding to the subprogram to execute projects overseas.

The NSDD subprogram is the global leader in CNS because it maintains critical relationships with the American private sector and the DOE/NNSA National Laboratory network. Ensuring that U.S. technology and U.S. standards drive the world forward, the NSDD subprogram functions as a major market driver for advancement of radiation detection technology, working closely with American industry to improve technology and minimize operator burden. These advancements have allowed the subprogram to convince high-priority countries to purchase American technologies to counter China's investment in this area, maintaining a balance of power to protect U.S. interests and prevent the emergence of a dominate adversary. The subprogram's efforts yield information from partner countries' CNS operations that can be critical to the U.S. understanding of threats that, were they to go unaddressed, could result in catastrophic consequences. The subprogram can provide early warning indicators on a range of nuclear nonproliferation activities that connect with and may initiate a U.S. counterterrorism (CT) response by the Department of War (DoW), the Federal Bureau of Investigation (FBI), and NNSA's Nuclear Emergency Support Team. The subprogram's collaboration with members of the CT response community improves standardization of U.S.-based technology and supports

seamless information sharing or transition to a response when materials are interdicted through NSDD's broad network of alliances in strategically important regions.

### **Highlights of the FY2027 Budget Request**

In FY 2027, the NSDD subprogram will enhance layered CNS capabilities in a limited number of priority countries to advance U.S. national security interests in the Indo-Pacific, Latin America, the Middle East, and Africa.

The subprogram will pursue cost-sharing opportunities with partners to promote burden sharing and increase global market penetration of U.S.-manufactured detection systems. This includes continuing to integrate the use of machine learning technologies and investigating new project approaches to reduce costs and minimize operational burden.

The subprogram will expand collaboration among NNSA offices and U.S. interagency partners, including the NNSA Office of Counterterrorism and Counterproliferation, the FBI, DoW, and the Department of Homeland Security to promote consistency in U.S. operational approaches and curriculum regarding procedures to detect, disrupt, and investigate efforts to smuggle R/N material.

Finally, the subprogram will design and deliver workshops, exercises, and training courses to enable transfer of responsibility for radiation detection, disruption, and/or investigation operations and equipment maintenance to partners. The subprogram will provide nuclear forensics consultation to improve attribution of R/N material smuggling and prosecution and disruption of trafficking networks.

### **Explanation of Change: Nuclear Smuggling Detection and Deterrence (-\$44,851 million)**

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will fund additional priority projects in FY 2026 that will be executed in FY 2027, including accelerating global deployment of counter nuclear smuggling capabilities in support of U.S. national security and Administration priorities. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.



## Nonproliferation and Arms Control

### Overview

The Nonproliferation and Arms Control (NPAC) program implements the Administration's programs and policies that support the American nuclear industry while advancing U.S. nonproliferation, monitoring and verification priorities and U.S export objectives.

**Civil Nuclear Cooperation.** NPAC implements the President's Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security by streamlining regulatory and programmatic processes to allow the U.S. nuclear industry to engage with foreign partners (123 Agreements, 10 CFR Part 810), including through the Department's development and deployment of advanced automation tools. NPAC strengthens U.S. national security and facilitates peaceful civil nuclear cooperation by reducing global nuclear proliferation threats and enabling U.S. industry in the expansion of U.S. nuclear influence globally. It also develops programs and strategies to advance U.S. nuclear energy dominance, including through the development of close relationships with new nuclear market entrants, while supporting nonproliferation objectives. NPAC advances American leadership at the International Atomic Energy Agency (IAEA) to ensure that partner states implement the highest standard of international safeguards required to enable peaceful nuclear cooperation consistent with U.S. law. NPAC also implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally to counter Russian and Chinese influence.

**Securing the Industrial Supply Chain.** NPAC protects America's civil nuclear infrastructure and associated, critical supply chains and implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. In addition, NPAC protects America's emerging technologies (i.e., Artificial Intelligence, quantum technologies) and the associated U.S. industrial base from exploitation from international competitors and would-be proliferators. NPAC also conducts high-efficiency technical reviews of thousands of export licenses for nuclear and dual-use commodities and strengthens domestic and global capacity to detect and prevent diversion of commodities and technologies to adversaries' weapons of mass destruction (WMD) and military programs, creating a more secure environment for U.S. industry to operate globally. NPAC further implements the President's Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security by engaging with American advanced reactor designers and other stakeholders to provide expert support in promoting the timely incorporation of safeguards by design, through programmatic and technical initiatives. NPAC has trained 27 U.S. designers on safeguards by design and engages directly with 8 U.S. developers.

**Monitoring and Verification.** NPAC strengthens the IAEA's ability to verify the post-conflict status of Iran's nuclear program and the peaceful use of nuclear materials in 190 countries, supports monitoring and verification of Iranian nuclear capabilities (including impacts of Operations MIDNIGHT HAMMER and EPIC FURY), and develops efficient and cost-effective safeguards tools, technologies, and methods, including a uranium enrichment platform to enhance IAEA and U.S. monitoring capabilities. NPAC prevents the illegal diversion of dangerous nuclear materials and WMD-related commodities and technologies to prevent threats before they reach the U.S. border, and NPAC strengthens domestic and global capacity to detect and prevent diversion of commodities and technologies to adversaries' WMD and military programs. NPAC delivers applied technical measures and implementation capabilities to enable safe, secure, and verifiable reductions and limitations and monitoring of nuclear warheads, fissile material production and associated facilities, and chemical weapons. NPAC also maintains technical readiness to negotiate and implement future arms control agreements, including through the development of high-fidelity assets to train technical experts on warhead monitoring and verification.

In order to take an effective crosscutting approach to its key objectives, the NPAC program has introduced a new reporting-level structure: (1) Civil Nuclear Cooperation; (2) Securing the Industrial Supply Chain; and (3) Monitoring and Verification. NPAC pursues these objectives through four subprograms: (1) International Nuclear Safeguards; (2) Nuclear Export Controls; (3) Nuclear Verification; and (4) Civil Nuclear Cooperation and Engagement. This structure is designed to maximize expertise in core technical areas while taking an integrated and coordinated approach to effectively meet the objectives detailed in the new reporting levels. This comprehensive approach positions NPAC to play a leading role in addressing national security and economic competitiveness threats while also drawing upon its expertise to anticipate emerging nonproliferation challenges and develop technical solutions.

**Nonproliferation and Arms Control  
Funding by Budget Control (\$K)**

|                                                 | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |            |
|-------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|------------|
|                                                 |                    |                    |                    | \$                                    | %          |
| Civil Nuclear Cooperation                       | 67,145             | 60,633             | 61,361             | +728                                  | +1%        |
| Securing the Industrial Supply Chain            | 41,749             | 48,585             | 49,154             | +569                                  | +1%        |
| Monitoring and Verification                     | 118,114            | 102,782            | 103,979            | +1,197                                | +1%        |
| <b>Total, Nonproliferation and Arms Control</b> | <b>227,008</b>     | <b>212,000</b>     | <b>214,494</b>     | <b>+2,494</b>                         | <b>+1%</b> |

**Outyear Funding (\$K)**

|                                                 | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|-------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Civil Nuclear Cooperation                       | 68,076             | 69,438             | 70,827             | 72,243             |
| Securing the Industrial Supply Chain            | 52,638             | 53,690             | 54,763             | 55,859             |
| Monitoring and Verification                     | 108,558            | 110,730            | 112,945            | 115,203            |
| <b>Total, Nonproliferation and Arms Control</b> | <b>229,272</b>     | <b>233,858</b>     | <b>238,535</b>     | <b>243,305</b>     |

**Highlights of the FY 2027 Budget Request**

The NPAC program will execute a wide-ranging set of activities in FY 2027.

**Civil Nuclear Cooperation.** NPAC will strengthen the expansion of U.S. nuclear cooperation globally by working with the IAEA to ensure effective implementation of all safeguards agreements by current and future U.S. partners. NPAC will engage with American advanced reactor designers and other stakeholders to provide expert support in promoting the timely incorporation of safeguards by design thereby making these American designs more attractive to foreign customers. NPAC will also advance U.S. civil nuclear technologies globally and empower U.S. trade by streamlining civil nuclear technology transfer requests under 10 CFR Part 810 and provide critical technical expertise to complex 123 Agreement negotiations with both new and existing

international partners to support U.S. nuclear industry and to counter foreign competition. NPAC is also actively supporting the U.S. Department of State's negotiation of 20 new 123 Agreements by the 120<sup>th</sup> Congress - an unprecedented number of agreements to negotiate in the given timeframe. NPAC will also leverage multilateral nuclear cooperation fora, such as the Nuclear Suppliers Group and Nuclear Nonproliferation Treaty, to promote the United States as the preferred nuclear cooperation partner and promote U.S. nuclear energy dominance.

**Securing the Industrial Supply Chain.** NPAC will reinvigorate the U.S. nuclear industrial base and global marketplace by advancing global nuclear safeguards and improving foreign partner strategic trade control systems. NPAC will also enhance interactions with U.S. reactor designers, and international and maritime regulatory authorities to unleash U.S.-based reactor technologies into the global marketplace. NPAC will increase the marketability of U.S. nuclear designs by providing in-kind support as well as direct funding to U.S. industry to address international safeguards requirements. In addition, NPAC will strengthen technical capabilities at national laboratories in critical emerging technologies (i.e., semi-conductors/microelectronics, quantum, advanced manufacturing, hypersonics) to proactively identify proliferation risks associated with these technologies and develop/implement export controls to protect them from adversaries and strategic competitors. This will help protect America's key emerging technologies and associated U.S. industrial base from exploitation from international competitors and would-be proliferators. NPAC will provide data analysis and technical reachback to support U.S. enforcement agencies to prevent adversaries from illicitly acquiring sensitive dual use commodities from U.S. industry and from diversion through countries with less stringent export control systems in place. NPAC will continue to grow its data analytics capabilities to secure a robust and competitive supply chain at home and identify where partners controls can be strengthened abroad. Together, this strengthens America's economy, which aligns with national security.

**Monitoring and Verification.** The NPAC program will strengthen the IAEA's capacity to verify the post-conflict status of Iran's nuclear program and nuclear materials in 190 countries, close the holes in the global safeguards system by working with partner countries to build domestic capabilities to control nuclear materials, and implement U.S. safeguards obligations. NPAC will target investments in U.S. laboratory capabilities to further the development of tools, technologies, and methods that improve the effectiveness and efficiency of international nuclear safeguards. NPAC will execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches. NPAC will also deploy technical expertise to support interagency maximum pressure efforts in export control and interdiction to counter proliferant countries. NPAC will develop solutions to address new strategic stability challenges requiring innovative monitoring and verification technologies and approaches, including for novel weapon systems, nuclear weapon-free zones, and potential arms control with Russia, China or others. NPAC maintains a scalable readiness posture to support future nuclear threat reduction initiatives that require onsite monitoring and verification of nuclear material production and related weapons facilities. NPAC will complete significant refurbishment for the Pantex Monitoring and Verification Test Facility to advance testing, demonstration, and exercising of warhead monitoring and verification capabilities to support future arms control treaties, and more broadly, develop, demonstrate, and deploy applied monitoring and verification technologies. NPAC will deliver innovations in applied monitoring and verification technologies and approaches and maintain U.S. readiness and technical capabilities to support onsite monitoring and verification activities.

**Explanation of Changes: Nonproliferation and Arms Control (+ \$2.494 million)**

No significant changes

# **Defense Nuclear Nonproliferation Research and Development**

## **Overview**

The Defense Nuclear Nonproliferation Research and Development (DNN R&D) program directly contributes to national security by developing United States (U.S.) capabilities to detect and characterize global nuclear threats in full coordination with the goals and priorities of U.S. Government mission stakeholders across nonproliferation, nuclear warfighting, counterterrorism, and counterproliferation mission areas. In addition, the DNN R&D program sustains and develops foundational nonproliferation technical competencies to provide the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats. To execute these activities, the program leverages the unique facilities and scientific skills of the Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratories and sites and universities to perform research and demonstrate advances in capabilities, develop prototypes, and produce sensors for integration into operational systems.

Specifically, the DNN R&D program makes these strategic contributions through the development of innovative U.S. technical capabilities to detect, identify, locate, and characterize foreign nuclear material production and weapons development activities, movement and illicit diversion of special nuclear materials, and global nuclear detonations. The program advances U.S. capabilities to monitor and characterize foreign nuclear programs independently of treaties or agreements. It also develops nuclear forensics technical capabilities to enable rapid decision-making during nuclear or radiological incidents and determinations of the origin of interdicted materials or nuclear devices. These technical capabilities are either advanced to higher maturities, transitioned to stakeholders for further development for mission-specific applications, or transferred to operational performers. In addition, the program sustains and develops foundational nonproliferation technical capabilities by providing targeted, long-term support for enabling infrastructure, science and technology, and an expert workforce. The program supports four university consortia to conduct basic research addressing program requirements in collaboration with the DOE/NNSA National Laboratories.

The DNN R&D program also leverages artificial intelligence (AI) to advance national security. The program harnesses the unique capabilities of the DOE/NNSA National Laboratories to develop and apply AI technologies to critical national security challenges in nuclear nonproliferation. Activities include the development of robust data management capabilities and AI models that leverage the program's extensive data to detect and characterize foreign nuclear weapons development activities.

**Defense Nuclear Nonproliferation Research and Development  
Funding by Budget Control (\$K)**

|                                                        | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |            |
|--------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|------------|
|                                                        |                    |                    |                    | \$                                    | %          |
| Proliferation Detection                                | 305,728            | 300,000            | 296,170            | -3,830                                | -1%        |
| Nuclear Detonation Detection                           | 309,488            | 309,000            | 318,447            | +9,447                                | +3%        |
| Forensics R&D                                          | 37,759             | 37,759             | 30,000             | -7,759                                | -21%       |
| Nonproliferation Stewardship Program                   | 124,875            | 162,000            | 174,383            | +12,383                               | +8%        |
| <b>Total, Defense Nuclear Nonproliferation R&amp;D</b> | <b>777,850</b>     | <b>808,759</b>     | <b>819,000</b>     | <b>+10,241</b>                        | <b>+1%</b> |

**Defense Nuclear Nonproliferation Research and Development  
Outyear Funding (\$K)**

|                                                        | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|--------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Proliferation Detection                                | 302,093            | 308,135            | 314,298            | 320,584            |
| Nuclear Detonation Detection                           | 324,816            | 331,312            | 337,938            | 344,697            |
| Forensics R&D                                          | 30,600             | 31,212             | 31,836             | 32,473             |
| Nonproliferation Stewardship Program                   | 177,871            | 181,428            | 185,057            | 188,758            |
| <b>Total, Defense Nuclear Nonproliferation R&amp;D</b> | <b>835,380</b>     | <b>852,087</b>     | <b>869,129</b>     | <b>886,512</b>     |

## **Defense Nuclear Nonproliferation Research and Development Proliferation Detection**

### **Overview**

The Proliferation Detection (PD) subprogram develops capabilities for detecting and characterizing foreign nuclear weapons programs, establishing independent United States (U.S.) capabilities to monitor and characterize foreign development of nuclear weapons irrespective of treaties or agreements, and interdicting nuclear materials outside of regulatory control. Efforts are aligned along major functional areas: (1) Nuclear Weapons Development and Material Production Detection efforts targeted toward the detection, identification, location, and characterization of foreign nuclear weapons program activities; (2) Nuclear Weapons Monitoring and Counterterrorism efforts targeted toward independent nuclear monitoring capabilities (including space monitoring, which incubates remote sensing activities to address emerging challenges in the space environment), operational interdiction, and radiological source replacement; and (3) Nonproliferation Enabling Capabilities efforts supporting a broad R&D base to bring new, cross-cutting technologies to multi-use applications across NNSA and the interagency community, including artificial intelligence.

In addition, the PD subprogram has a field experiment and demonstration program and a university nuclear nonproliferation research program. The field demonstration program integrates research and experimental testbed activities to advance technology in support of U.S. nuclear monitoring needs.

As part of DNN R&D's University Consortia for Nuclear Nonproliferation, the PD subprogram supports three consortia which link universities and DOE/NNSA National Laboratories to address basic research requirements in nuclear nonproliferation.

### **Highlights of the FY 2027 Budget Request**

In FY 2027, the PD subprogram will advance U.S. capabilities to detect and characterize foreign nuclear weapons production activities. It will strengthen detection and monitoring of special nuclear material movement and enhance nuclear safeguards, and it will develop and execute national testbeds for validating new sensors, equipment, and monitoring capabilities for nonproliferation efforts. The subprogram will also continue developing U.S. capabilities for independent monitoring of foreign nuclear weapons stockpiles and related activities, including assembly, transportation, storage, dismantlement, and delivery system integration, in support of warfighting, intelligence, and nonproliferation missions targeting vertical proliferation.

The PD subprogram will provide a broad, underlying set of technical capabilities that support nuclear nonproliferation and continue to expand current technical approaches, including efforts to address interagency requirements through cross-cutting research and development leveraging artificial intelligence and data science for the early detection of nuclear proliferation. The subprogram will invest in a robust data management capability and data governance process to enable the development and training of AI models at the DOE/NNSA National Laboratories using the vast amounts of data produced by DNN R&D programs to detect, locate, and characterize foreign nuclear proliferation activities. The subprogram will also continue remote sensing and data science research efforts to address the nuclearization of space in collaboration with the Nuclear Detonation Detection (NDD) subprogram. Finally, the PD subprogram will continue three university-DOE/NNSA National Laboratory consortia to address basic research requirements and provide a pipeline of next-generation nuclear science and engineering experts to the DOE/NNSA National Laboratories.

### **Proliferation Detection (-\$3.83 million)**

No major change.

## **Defense Nuclear Nonproliferation Research and Development Nuclear Detonation Detection**

### **Overview**

The Nuclear Detonation Detection (NDD) subprogram develops and builds space sensors for the United States (U.S.) Government's operational nuclear warfighting, space control, and nuclear test treaty monitoring missions and advances U.S. capabilities to monitor seismic and radionuclide signatures of ground-based nuclear detonations, including low-yield and evasively conducted underground nuclear explosions. The NDD subprogram also conducts research, demonstration, and validation activities in collaboration with the PD subprogram that advances U.S. space monitoring capabilities for independently addressing emerging challenges in the space environment.

### **Highlights of the FY 2027 Budget Request**

In FY 2027, the NDD subprogram will produce nuclear detonation detection satellite payloads in accordance with the negotiated schedule with the U.S. Space Force (USSF). The subprogram will also support the payload-side technical integration, pre-launch, and on-orbit testing activities for previously delivered payloads in accordance with host satellite schedules.

The NDD subprogram will conduct research in seismic and radionuclide detection to support national capability in terrestrial and airborne monitoring and analysis methods and improve the U.S. ability to detect evasive nuclear testing by conducting low-yield explosion monitoring field experiments. As part of this effort, the subprogram will leverage AI models to improve capabilities for rapidly identifying and interpreting events of interest.

Finally, the subprogram will continue research, development, and demonstration activities to advance and validate sensors and systems to enable nuclear monitoring in and from space, in collaboration with the PD subprogram.

### **Nuclear Detonation Detection (+\$9.447 million)**

The increase reflects the acceleration of nuclear test detection activities, including R&D to improve U.S. capabilities to detect and characterize foreign low-yield, evasive nuclear testing.

## **Defense Nuclear Nonproliferation Research and Development Forensics R&D**

### **Overview**

The Forensics R&D subprogram advances technical nuclear forensics analysis capabilities at the DOE/NNSA National Laboratories that can support time-critical decisions in the event of a nuclear or radiological incident and determinations of the origin of interdicted materials or nuclear devices. The subprogram's R&D includes the collection, analysis, and evaluation of pre-detonation and post-detonation nuclear and other radioactive materials, devices, and debris, as well as the immediate effects created by a nuclear detonation. It also sustains subject matter expertise to support exercises, mentoring, training, expert reach-back, and real-world contingency operations.

As part of the DNN R&D program's University Consortia for Nuclear Nonproliferation, the Forensics R&D subprogram supports one consortium, which links universities and DOE/NNSA National Laboratories to address basic research requirements of NNSA's technical nuclear forensics missions.

### **Highlights of the FY 2027 Budget Request**

The Forensics R&D subprogram will develop and maintain advanced technical nuclear forensics pre- and post-detonation analysis capabilities at DOE/NNSA National Laboratories that support United States Government response to a nuclear or radiological event.

Additionally, the subprogram will award a new nuclear forensics R&D university consortium, as part of the DNN R&D program's University Consortia for Nuclear Nonproliferation, to address basic research requirements and provide a pipeline of next-generation nuclear forensics experts to the DOE/NNSA National Laboratories.

### **Forensics R&D (-\$7.759 million)**

The decrease reflects the prioritization of other DNN R&D program activities.



## **Defense Nuclear Nonproliferation Research and Development Nonproliferation Stewardship Program**

### **Overview**

The Nonproliferation Stewardship Program (NSP) subprogram sustains and maintains critical nonproliferation foundational technical competencies at the DOE/NNSA National Laboratories. The NSP subprogram recognizes that the United States (U.S.) nuclear weapons program and domestic nuclear fuel-cycle infrastructure has significantly narrowed or declined since the Cold War era, leaving the Nation without a large cadre of DOE/NNSA National Laboratory personnel with hands-on experience and expertise in sensitive fuel-cycle processes, material handling, and nuclear weapons development and testing. At the same time, advances in manufacturing, computing, and other key areas, combined with easier access to nuclear-related information, represent new and diverse pathways for developing a nuclear weapon, which the U.S. must understand to detect, identify, locate, and characterize foreign activities through the development of advanced sensors and to support relevant missions across the U.S. Government. To ensure the technical capacity and agility needed to support nonproliferation missions and anticipate threats, the NSP subprogram sustains and develops foundational nonproliferation technical competencies by providing critical enabling infrastructure and science and technology (S&T) that targets an expert nonproliferation workforce at the DOE/NNSA National Laboratories and sites.

### **Highlights of the FY 2027 Budget Request**

In FY 2027, the NSP subprogram will develop needed expertise through operational testbeds and S&T laboratories to address immediate, highest-priority capability shortfalls in nonproliferation missions, especially in uranium enrichment, uranium conversion, weaponization, and plutonium sciences. The subprogram will also continue planned infrastructure recapitalization activities ensuring the Nation's capacity to meet future nonproliferation goals and anticipate threats through representative S&T and research environments.

The NSP subprogram will continue development of the Advanced Testbed and Operations Learning Laboratory to grow competencies and workforce expertise in uranium enrichment technologies operated in complex environments. It will also develop, optimize, and validate physics-based predictive models for uranium enrichment systems and facilities and upgrade the classified high-performance computing (HPC) platform at Oak Ridge National Laboratory (ORNL) supporting these models.

In addition, the NSP subprogram will begin operations of representative uranium conversion equipment supporting phase III laboratories of the Uranium Science and Technology Center, which continues establishing a modern laboratory environment to develop technical expertise and includes a pilot approach to knowledge preservation and transfer for uranium conversion before the permanent loss of critical expertise. The subprogram will also continue developing the Uranium Production and Weaponization Testbed to build critical competencies through pilot-scale uranium chemical conversions, separations, and uranium component fabrication. The NSP subprogram will also continue development of infrastructure and S&T activities to build plutonium science expertise, including at the Radiochemical Processing Laboratory (RPL), the Plutonium Science Laboratory, and through the Athena Initiative focusing on plutonium processing. Finally, the subprogram will recruit and onboard the fourth cohort of the Next Generation Leadership Development Program to sustain a targeted talent technical leadership pipeline to DOE/NNSA National Laboratories.

**Nonproliferation Stewardship Program (+\$12.383 million)**

The increase funds upgrades of the classified HPC platform at ORNL supporting ongoing physics-based modeling of uranium gas centrifuge enrichment.

**DNN Research and Development  
Capital Equipment Summary  
(\$K)**

|                                                                                    | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                             |              |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC <\$10M)                                       | N/A          | N/A                    | 86,465                     | 80,922                     | 82,540                     |
| Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL <sup>1</sup> | 15,000       | 6,000                  | 3,000                      | 3,000                      | 3,000                      |
| Dirac HPC, ORNL                                                                    | 25,000       | -                      | -                          | -                          | 25,000                     |
| <b>Total, Capital Equipment</b>                                                    | <b>N/A</b>   | <b>N/A</b>             | <b>89,465</b>              | <b>83,922</b>              | <b>110,540</b>             |

**DNN Research and Development  
Capital Equipment Summary  
Outyears (\$K)**

|                                                                       | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|-----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment (TEC <\$10M)                          | 84,191                     | 85,875                     | 87,592                     | 89,344                     | N/A             |
| Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL | -                          | -                          | -                          | -                          | -               |
| Dirac HPC, ORNL                                                       | -                          | -                          | -                          | -                          | -               |
| <b>Total, Capital Equipment</b>                                       | <b>84,191</b>              | <b>85,875</b>              | <b>87,592</b>              | <b>89,344</b>              | <b>N/A</b>      |

<sup>1</sup> NNSA will utilize lease-to-purchase contracts (also referred to as lease-to-own (LTO)) for High Performance Computing procurements when such contracts are found to be the best programmatic and financial value to the government. SRT&E and a LLNL overhead cost pool fund the remainder of costs for this MIE.

## Nuclear Counterterrorism and Incident Response Program

### Overview

The Department of Energy/National Nuclear Security Administration's (DOE/NNSA) fulfills a unique national security role in delivering technical expertise to inform and execute emergency and continuity planning and operations; countering nuclear terrorism and nuclear proliferation; and responding to nuclear or radiological incidents, accidents, or emergencies worldwide. The Nuclear Counterterrorism and Incident Response (NCTIR) program strengthens strategic deterrence by ensuring that the Department is appropriately postured to provide emergency preparedness and response capabilities to keep America safe and secure. NCTIR is critical to defeating threats against the homeland by providing scientific understanding of nuclear threat devices and maintaining technical nuclear forensics tools and operational capabilities for the attribution of nuclear material found outside of regulatory control or used in a nuclear device. The scientific knowledge of the DOE/NNSA National Laboratories underpins these capabilities, enabling rigorous technical assessments of nuclear and radiological threats that inform domestic and international policies, regulations, contingency planning, training, and preparedness. These activities strengthen national and international counterterrorism, counterproliferation, and incident response.

The NCTIR Program includes the following subprograms:

- The **Emergency Management (EM) subprogram** provides both the structure and processes to administer a comprehensive and integrated approach to emergency management and continuity of operations, thereby enhancing Departmental and national resilience. The EM program coordinates a whole-of-community approach to emergency management for improved readiness and effectiveness of the DOE Comprehensive Emergency Management System on a programmatic and performance level, while promoting unity of effort and a culture of continuous improvement.
- The **Counterterrorism and Counterproliferation (CTCP) subprogram** protects American security and interests by reducing nuclear and radiological threats through specialized emergency preparedness and response operations, capabilities, and expertise. It serves as the technical foundation for nuclear deterrence by denial and attribution, providing innovative scientific and technological assessments that inform decision-making on counterterrorism, counterproliferation, and incident response topics. It maintains unique capabilities, including scientific and operational infrastructure, to avert, respond to, and mitigate the consequences of nuclear and radiological incidents and accidents in the United States (U.S.) and abroad.

**Nuclear Counterterrorism and Incident Response Program  
Funding by Budget Control (\$K)**

|                                                                            | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |             |
|----------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|-------------|
|                                                                            |                    |                    |                    | \$                                    | %           |
| Emergency Management                                                       | 23,847             | 33,122             | 35,045             | +1,923                                | +6%         |
| <i>Nuclear Incident Response/Nuclear<br/>    Emergency Support Team</i>    | 281,704            | 267,991            | 321,361            | +53,370                               | +20%        |
| <i>National Technical Nuclear Forensics</i>                                | 62,900             | 62,900             | 83,265             | +20,365                               | +32%        |
| <i>Nuclear Threat Science</i>                                              | 147,979            | 147,979            | 200,105            | +52,126                               | +35%        |
| <i>Nuclear Incident Preparedness and<br/>    Collaboration</i>             | 14,467             | 14,467             | 19,319             | +4,852                                | +34%        |
| <i>Global Security Recapitalization</i>                                    | -                  | 5,000              | 26,500             | +21,500                               | +430%       |
| Subtotal, Counterterrorism and<br>Counterproliferation                     | 507,050            | 498,337            | 650,550            | +152,213                              | +31%        |
| <b>Total, Nuclear Counterterrorism &amp; Incident<br/>Response Program</b> | <b>530,897</b>     | <b>531,459</b>     | <b>685,595</b>     | <b>+154,136</b>                       | <b>+29%</b> |

**Outyear Funding (\$K)**

|                                                                            | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request |
|----------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Emergency Management                                                       | 35,746             | 36,461             | 37,190             | 37,934             |
| <i>Nuclear Incident Response/Nuclear Emergency<br/>    Support Team</i>    | 327,795            | 334,350            | 341,038            | 347,858            |
| <i>National Technical Nuclear Forensics</i>                                | 84,930             | 86,629             | 88,361             | 90,129             |
| <i>Nuclear Threat Science</i>                                              | 204,107            | 208,189            | 212,353            | 216,600            |
| <i>Nuclear Incident Preparedness and Collaboration</i>                     | 19,699             | 20,093             | 20,495             | 20,905             |
| <i>Global Security Recapitalization</i>                                    | 27,030             | 27,571             | 28,122             | 28,684             |
| Subtotal, Counterterrorism and Counterproliferation                        | 663,561            | 676,832            | 690,369            | 704,176            |
| <b>Total, Nuclear Counterterrorism &amp; Incident Response<br/>Program</b> | <b>699,307</b>     | <b>713,293</b>     | <b>727,559</b>     | <b>742,110</b>     |

## **Nuclear Counterterrorism and Incident Response Program Emergency Management**

### **Overview**

The EM program executes mandated emergency management and continuity functions. The Fiscal Year (FY) 2027 Budget Request focuses on EM activities and resources across three subprogram areas: preparedness, continuity, and emergency operations. The preparedness subprogram promotes a comprehensive approach to mitigate, prepare for, respond to, and recover from incidents impacting the DOE/NNSA mission. This subprogram develops and implements emergency management directives, guidance, and plans; assists Headquarters (HQ), Field Elements, and facility contractors in implementing effective emergency management programs; and leads the exchange of best practices and facilitates collaboration across DOE and NNSA emergency managers. The continuity subprogram executes DOE and NNSA Continuity of Operations Program (COOP), Continuity of Government (COG), and Enduring Constitutional Government (ECG) programs, ensuring the availability and interoperability of continuity communications systems. The subprogram prepares the Department's continuity personnel, sites, senior leadership, and successors. The subprogram also deploys continuity capabilities with interagency partners during both with-notice and no-notice emergencies and National Special Security Event, such as the Presidential Inauguration and State of the Union Address. The emergency operations subprogram operates and maintains the Department's HQ Emergency Operations Center (HQ EOC), including the 24/7/365 Watch Office, which serves as a central point-of-contact during emergencies, periods of heightened international tension, natural disasters, and acts of terrorism. This subprogram ensures DOE/NNSA leadership is informed, unifies emergency management efforts, and staffs EM Specialists for Department-wide support.

### **Highlights of the FY 2027 Budget Request**

The EM program's FY 2027 Budget Request funds program-specific and cross-cutting initiatives. The preparedness subprogram will manage the emergency management Technical Qualification Program; advance data-informed decisions and readiness assurance data collection and analysis; host and lead the annual DOE Emergency Management Symposium; and provide laboratories, plants, and sites technical support and tools. The continuity subprogram will maintain interoperability and availability of continuity facilities, communications systems, and capabilities, to include capabilities with interagency partners, and hardening of identified infrastructure from electromagnetic security threats. The emergency operations subprogram will incorporate information technology tools into operations to improve analytics and dynamic reporting while decreasing human error and enhancing situational awareness. In addition, the EM program will continue renovations to the DOE HQ EOC, maintain 24/7/365 Watch Office, and manage the DOE response framework, to include the Unified Coordination Group (UCG), in support of DOE and NNSA emergency response efforts.

### **Emergency Management (+\$1.923 million)**

The FY 2027 Budget Request funds the hardening of identified infrastructure from electromagnetic security threats.

## **Nuclear Counterterrorism and Incident Response Program Counterterrorism and Counterproliferation**

### **Overview**

The CTCP subprogram protects American security and economic interests by reducing radiological and nuclear (R/N) threats through specialized emergency preparedness and response operations, capabilities, and expertise. The CTCP subprogram focuses on R/N incidents, accidents, and threats, with the core mission to prepare for and respond to such events.

The **Nuclear Incident Response/Nuclear Emergency Support Team (NIR/NEST)** subprogram is the Nation's last line of defense against nuclear or radiological emergencies. It delivers integrated mission support to protect America and Americans, by applying the unique technical capabilities within the DOE/NNSA's Nuclear Security Enterprise (NSE) to prepare for, prevent, respond to, and mitigate the consequences of nuclear or radiological threats, incidents, and accidents worldwide.

The NIR/NEST subprogram works closely with other DOE elements as well as partner federal organizations, including the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), Nuclear Regulatory Commission (NRC), Department of War (DoW), Federal Bureau of Investigation (FBI), and the Intelligence Community. The subprogram responds domestically or abroad to nuclear and radiological emergencies, including terrorist threats involving nuclear materials, to ensure safe incident resolution and the protection of the public and environment, and validates these response capabilities by conducting regular exercises with mission partners. The subprogram accomplishes this by ensuring the appropriate resources (e.g., people, communications, locations, doctrine/training) are in place to provide command, control, coordination, and communications of DOE/NNSA nuclear incident response assets. The subprogram also ensures that the incident response personnel are properly organized, trained, and equipped to rapidly deploy in response to an incident.

The **National Technical Nuclear Forensics (NTNF)** subprogram advances strategic deterrence by maintaining the nuclear forensics technical and operational capabilities that underpin the U.S. Government's core nuclear forensics mission. The NTNF subprogram holds key roles in improvised nuclear device exploitation and disassembly, interdicted nuclear material analysis, post-nuclear detonation ground debris sample collection and in-field sample processing, and post-nuclear detonation device assessment by leveraging U.S. nuclear weapons expertise to reverse engineer the device design. It provides nuclear forensic capabilities to hold adversaries accountable.

The NTNF subprogram sustains mission readiness through training, drills, and exercises for responders; maintenance and development of highly sophisticated equipment, tools, and techniques; and technical integration and maintenance of specialized pre- and post-detonation response teams and facilities. Additionally, continued development of the National Nuclear Materials Archive (NNMA) ensures high-value new and historical nuclear materials are identified, analyzed, and preserved. Comparative analysis of material characteristics significantly aids assessment of interdicted materials and thus enhances technical nuclear forensics capabilities for attribution.

The **Nuclear Incident Preparedness and Collaboration (NIPC)** subprogram strengthens emergency preparedness and response for radiological or nuclear incidents and accidents posing a potential risk to U.S. territory, citizens, or national security and economic interests. This subprogram works with federal, state, and local officials to expand their capabilities to respond to radiological or nuclear incidents, accidents, and terrorism threats. It also provides international partners and nuclear newcomer nations with the knowledge to

develop mature, appropriate, and right-sized emergency preparedness and response mechanisms without the need for direct investment by the U.S. Government.

The NIPC subprogram aims to accelerate the adoption of nuclear energy by partner nations, build confidence in nuclear power as a reliable source of energy, and foster relationships that enable cooperation in other areas of emergency preparedness, incident response, and U.S. national security. Its engagements are part of a robust strategy for U.S. energy dominance that enable international partners and allies to prepare for and address radiological or nuclear incidents in their regions without reliance on the U.S. These shared capabilities reduce risk and alleviate the need for a full U.S. response by minimizing the requirement to deploy U.S. assets to respond to international radiological and nuclear incidents. NIPC funding covers domestic engagements, while the cost of most international engagements is shared with that partner (e.g., Israel, Mexico, Norway, and the Republic of Korea). This strategy keeps costs low while both enhancing U.S. safety and security and reducing nuclear and radiological risks.

The **Nuclear Threat Science (NTS)** subprogram provides the Nation's technical capability to understand and defeat nuclear threat devices, including improvised nuclear devices, radiological dispersal devices, and lost or stolen foreign nuclear weapons. The subprogram delivers rigorous technical assessments that inform U.S. decision making on counterterrorism, counterproliferation, and incident response, including evaluating risks and opportunities associated with emerging technologies from Artificial Intelligence (AI) to advanced nuclear technologies, as well as assessing novel nuclear threats against U.S. strategic interests.

The NTS subprogram maintains and advances its scientific expertise and technical capabilities through partnerships with DOE/NNSA's nuclear weapons design laboratories and production facilities and classified technical and policy exchanges with the United Kingdom and France under respective Mutual Defense Agreements. It delivers classified assessments on nuclear reactors and advance fuel cycles to inform and advance U.S. energy strategy. The subprogram also conducts focused science on explosive and nuclear material behaviors, including performing integrated experiments on materials and threat device designs to validate and advance predictive capabilities for the U.S. Government and its partners. Collectively, this work shapes the U.S. understanding of nuclear terrorism and nuclear proliferation threats, thus advancing U.S. safety and security, and energy dominance.

The **Global Security (GS) Recapitalization** subprogram makes critical investments in CTCP scientific and operational infrastructure. The subprogram coordinates with and complements investments by the Weapons Activities Recapitalization program to address growing and unique GS mission-specific infrastructure requirements. Using innovative acquisition approaches, the GS Recapitalization subprogram delivers critical capabilities for the CTCP mission in a timely, executable, and affordable manner across DOE/NNSA sites. GS Recapitalization underscores the CTCP commitment to sustained operational readiness and scientific excellence.

### **Highlights of the FY 2027 Budget Request**

The CTCP subprogram FY 2027 Budget Request focuses on making America safer and more secure by leveraging unique expertise from the Nuclear Emergency Support Team (NEST) to strengthen U.S. domestic R/N emergency preparedness and response capabilities. It delivers rigorous technical assessments that inform U.S. decision making on counterterrorism, counterproliferation, and incident response; counters adversarial influence; and creates opportunities with nuclear states and newcomers that support American economic interests and energy dominance.



CTCP is executing mission priorities at a heightened operational tempo and leveraging unique technical and operational expertise from within NEST and the NSE to strengthen emergency preparedness and response capabilities. Its efforts protect American citizens and interests overseas, strengthening partner preparedness and mitigating the consequences of overseas emergencies before they can harm the U.S. homeland. The CTCP subprogram mission requires world-class capabilities in science and operations, including strategic infrastructure to support consistent, effective responses.

Funding for NIR/NEST in the FY 2027 Request sustains domestic weapons of mass destruction (WMD) response capabilities developed under the Capability Forward (CF) initiative. CF enables regional FBI counter-WMD teams to take decisive action to secure and defeat WMD devices, thereby accelerating life-saving responses to R/N threats to the homeland. CF training development delivered by NIR/NEST expands and enhance capabilities within all FBI field offices through a standardized curriculum that builds and sustains federal law enforcement mastery of critical emergency response skills. Further, the NIR/NEST subprogram sustains NEST capabilities to respond to WMD incidents, accidents, and threats to protect public health and safety.

The FY 2027 Budget Request for NTNf advances nuclear forensic capabilities, specifically the technical expertise, tools, and techniques that improve attribution timelines for holding adversaries accountable. NTNf strengthens U.S. strategic deterrence by sustaining and improving NNSA's world-class nuclear forensic capabilities and operational readiness posture, including expanded pre-detonation asset maturation and material analysis capabilities, strengthened post-detonation rapid ground debris collection, and fully operationalized post-detonation device assessment. The NTNf subprogram leverages additional operational and scientific expertise throughout the DOE/NNSA National Laboratories to progressively eliminate key technical gaps and streamline roles and responsibilities across the federal government for a more effective response. The NTNf subprogram's work credibly dissuades foreign states from supporting or facilitating non-state actors' acquisition of nuclear materials, either wittingly or unwittingly, and thus complicates any efforts to attempt to conduct a clandestine nuclear attack.

The 2027 Budget Request for NTS will enhance DOE/NNSA National Laboratories' capabilities for rigorous technical nuclear threat assessments of evolving foreign nuclear capabilities. Leveraging classified computing facilities, experimental platforms, and seasoned technical staff, the NTS subprogram will provide the underpinning science that informs high-stakes government policy in support of crisis operations and national level planning efforts. It will arm decisionmakers with knowledge on the potential impacts of open source and proprietary AI, large language models on the nuclear domain, provide classified risk assessments of advanced fuel cycles and reactors that support energy dominance, and execute integrated experiments to validate risk assessments of nuclear materials and threat devices. Notably, the FY2027 Request allows the NTS subprogram—NNSA's lead for understanding how AI is altering the WMD threat landscape—to advance its comprehensive and scalable framework for assessing how fast-moving AI improvements and digital security threats enhance adversary nuclear capabilities.

The FY 2027 Budget Request in NIPC advances collaborative federal, state, local, and international partnerships to strengthen capabilities and address gaps in R/N emergency preparedness and response to foster resilience, and bolster NEST operational capacity to protect public health and safety. Working with first responder entities and coordination authorities, NIPC helps counter adversarial influence and foster American strategic and economic interests by speeding the growth of nuclear energy in foreign and nuclear newcomer nations by building confidence in their emergency preparedness and response mechanisms. It facilitates NEST international engagement coordination for emergency response, with most international work requiring partner cost sharing arrangements so that NIPC remains focused on supporting U.S. subject matter experts. With a

particular focus on strengthening domestic capabilities in FY 2027, the NIPC subprogram's work secures and protects America's citizens and economic and national security interests.

Funding for GS Recapitalization in the FY 2027 Budget Request will complete critical renovations at the NEST Training and Operations Center (NTOC) in Albuquerque, New Mexico, including building its Sensitive Compartmented Information Facility (SCIF) and Special Access Program Facility (SAP-F). NTOC will centralize global NEST home team operations at a resilient facility that was purchased by NNSA in FY 2026 using real estate authorities to achieve a 58 percent lifecycle cost savings compared to traditional federal construction.

## **Explanation of Change**

### **Counterterrorism and Counterproliferation (+\$152.213 million)**

The increase protects American security and economic interests by investing specialized R/N scientific and operational capabilities that deliver effective federal response to accidents, incidents, and threats; timely, actionable technical assessments of nuclear threats from state and non-state actors to U.S. decisionmakers; advance technical and operational collaboration with partners; and world-class nuclear forensic expertise to support strategic deterrence.

CTCP expects to continue to execute an increasing scope of planned and unplanned NEST operations in support of national security and public safety priorities throughout FY 2027.

- **NEST Equipment Recapitalization.** Restores NEST mission equipment recapitalization efforts and unifies the response equipment of the domestic WMD device response architecture via an integrated FBI national and regional response team equipment sustainment.  
**NEST Training.** Accelerates NEST training activities to recover from deferred training in FY 2026 to re-establish full response readiness in mid-FY 2027.
- **Emergency Preparedness and Response.** Expands domestic incident response capabilities at the state and local levels through exercises and new or enhanced curriculum as well as new partnerships with first responder entities to protect the health and safety of American citizens.
- **Accelerated Attribution through Nuclear Forensic Response.** Launches new technology maturation initiatives to transform forensic response capabilities which will address technical gaps for pre- and post-nuclear detonation response requirements. CTCP will adapt lab-based analytical capabilities into fieldable tools that may provide discriminating and actionable information significantly earlier in the post-nuclear detonation response timeline. CTCP will grow the roster of trained, expert responders across the DOE National Laboratories to meet accelerated nuclear forensics response timelines for attribution.
- **Nuclear Forensics for the Emergent Nuclear Fuel Cycle.** Proactively evaluate new and emerging nuclear materials signatures in support of nuclear security and attribution in alignment with the growth of global demand for commercial nuclear energy. This includes advanced and small modular reactors and new fuel forms to populate the NNMA.
- **Nuclear Security Assessments.** Increases capacity to support the deployment of emergent civil nuclear technologies through rigorous analysis and expertise. These investments will allow DOE's Office of Nuclear Energy to expedite reviews of new technologies. Funding also supports increased analytical capabilities to assess AI-enabled tools ability to undermine current information security standards and to develop mitigations for any identified threats (e.g. how AI tools coupled with open-source codes could enhance adversary capabilities within the nuclear security domain).  
**Nuclear Threat Assessment and Characterization Capabilities.** Increase capacity for innovative scientific and technological assessments and predictive models that inform decision making and provide

intelligence informed, vetted, peer-reviewed nuclear weapons expertise and predictive assessments in support of DoW and Intelligence Community national level planning against emergent and novel nuclear threats. Invests across the five National Laboratories that support NTS' technical portfolio on materials, code development, and experimental validation. Funding supports material science experimental validation and material model development on materials not currently in our priority materials roadmap, including mixes of materials. Increased demand and pace of running assessments to inform security plan development for new facilities and risk awareness where required.

- **NTOC.** Builds Phase 1 of 2 of the NTOC Technical Operations Center to include SCIF/SAP-F facilities. This highly specialized facility will enable and enhance the global NEST remote technical reachback and streamline NEST training and operations. Each phase will deliver a unique and independent scope of work, which is complete and useable.

**Nuclear Counterterrorism and Incident Response Program  
Capital Equipment Summary (\$K)**

|                                                 | Total | Prior<br>Years | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request |
|-------------------------------------------------|-------|----------------|--------------------|--------------------|--------------------|
| <b>Capital Equipment (&gt; \$500K)</b>          |       |                |                    |                    |                    |
| Total Non-MIE Capital Equipment (TEC<br><\$10M) | N/A   | N/A            | 8,434              | 8,603              | 8,775              |
| <b>Total, Capital Equipment</b>                 | N/A   | N/A            | <b>8,434</b>       | <b>8,603</b>       | <b>8,775</b>       |

**Nuclear Counterterrorism and Incident Response Program  
Outyear Capital Equipment Summary (\$K)**

|                                                 | FY 2028<br>Request | FY 2029<br>Request | FY 2030<br>Request | FY 2031<br>Request | Outyears   |
|-------------------------------------------------|--------------------|--------------------|--------------------|--------------------|------------|
| <b>Capital Equipment (&gt; \$500K)</b>          |                    |                    |                    |                    |            |
| Total Non-MIE Capital Equipment (TEC<br><\$10M) | 8,950              | 9,129              | 9,312              | 9,498              | N/A        |
| <b>Total, Capital Equipment</b>                 | <b>8,950</b>       | <b>9,129</b>       | <b>9,312</b>       | <b>9,498</b>       | <b>N/A</b> |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                              | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Argonne National Laboratory</b>           |                            |                            |                            |
| Reactor Conversion and Uranium Supply        | 30,280                     | 15,327                     | 17,650                     |
| Nuclear Material Removal and Elimination     | 1,300                      | 800                        | -                          |
| Plutonium Management                         | 565                        | 150                        | 117                        |
| Material Management and Minimization         | 32,145                     | 16,277                     | 17,767                     |
| International Nuclear Security               | 1,673                      | 1,290                      | 628                        |
| Radiological Security                        | 3,241                      | 2,540                      | 2,544                      |
| Nuclear Smuggling Detection and Deterrence   | 1,706                      | 500                        | 985                        |
| Global Material Security                     | 6,620                      | 4,330                      | 4,157                      |
| Nonproliferation & Arms Control              | 13,107                     | 16,030                     | 16,218                     |
| Proliferation Detection                      | 3,436                      | 3,371                      | 3,328                      |
| Forensics R&D                                | 565                        | 565                        | 431                        |
| Nonproliferation Stewardship Program         | 1,000                      | 1,277                      | 1,085                      |
| Defense Nuclear Nonproliferation R&D         | 5,001                      | 5,213                      | 4,844                      |
| Emergency Management                         | 317                        | 250                        | 200                        |
| Counterterrorism and Counterproliferation    | 3,698                      | 3,554                      | 4,355                      |
| Nuclear Counterterrorism & Incident Response | 4,015                      | 3,804                      | 4,555                      |
| <b>Total Argonne National Laboratory</b>     | <b>60,888</b>              | <b>45,654</b>              | <b>47,541</b>              |
| <b>Brookhaven National Laboratory</b>        |                            |                            |                            |
| Reactor Conversion and Uranium Supply        | 300                        | -                          | -                          |
| Material Management and Minimization         | 300                        | -                          | -                          |
| Radiological Security                        | 1,175                      | 354                        | 923                        |
| Nuclear Smuggling Detection and Deterrence   | 100                        | -                          | 292                        |
| Global Material Security                     | 1,275                      | 354                        | 1,215                      |
| Nonproliferation & Arms Control              | 2,310                      | 1,824                      | 1,845                      |
| Proliferation Detection                      | 8,469                      | 8,310                      | 8,204                      |
| Forensics R&D                                | 465                        | 465                        | 355                        |
| Defense Nuclear Nonproliferation R&D         | 8,934                      | 8,775                      | 8,559                      |
| Counterterrorism and Counterproliferation    | 3,082                      | 2,932                      | 3,516                      |
| Nuclear Counterterrorism & Incident Response | 3,082                      | 2,932                      | 3,516                      |
| <b>Total Brookhaven National Laboratory</b>  | <b>15,901</b>              | <b>13,885</b>              | <b>15,135</b>              |
| <b>Carlsbad Area Office</b>                  |                            |                            |                            |
| Radiological Security                        | 250                        | 80                         | 196                        |
| Global Material Security                     | 250                        | 80                         | 196                        |
| <b>Total Carlsbad Area Office</b>            | <b>250</b>                 | <b>80</b>                  | <b>196</b>                 |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                            | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Fermi National Accelerator Laboratory</b>               |                            |                            |                            |
| Radiological Security                                      | 300                        | 111                        | 236                        |
| Global Material Security                                   | 300                        | 111                        | 236                        |
| Proliferation Detection                                    | 750                        | 736                        | 727                        |
| Defense Nuclear Nonproliferation R&D                       | 750                        | 736                        | 727                        |
| <b>Total Fermi National Accelerator Laboratory</b>         | <b>1,050</b>               | <b>847</b>                 | <b>963</b>                 |
| <b>Idaho National Laboratory</b>                           |                            |                            |                            |
| Reactor Conversion and Uranium Supply                      | 44,008                     | 10,369                     | 6,950                      |
| Nuclear Material Removal and Elimination                   | 7,405                      | 7,625                      | 14,175                     |
| Material Management and Minimization                       | 51,413                     | 17,994                     | 21,125                     |
| International Nuclear Security                             | 4,331                      | 4,838                      | 4,319                      |
| Radiological Security                                      | 20,550                     | 8,659                      | 16,129                     |
| Nuclear Smuggling Detection and Deterrence                 | 40                         | 500                        | 1,093                      |
| Global Material Security                                   | 24,921                     | 13,997                     | 21,541                     |
| Nonproliferation & Arms Control                            | 5,147                      | 5,174                      | 5,235                      |
| Proliferation Detection                                    | 12,341                     | 12,110                     | 11,955                     |
| Forensics R&D                                              | 500                        | 500                        | 382                        |
| Nonproliferation Stewardship Program                       | 4,550                      | 4,263                      | 3,623                      |
| Defense Nuclear Nonproliferation R&D                       | 17,391                     | 16,873                     | 15,960                     |
| Counterterrorism and Counterproliferation                  | 7,210                      | 6,936                      | 8,517                      |
| Nuclear Counterterrorism & Incident Response               | 7,210                      | 6,936                      | 8,517                      |
| <b>Total Idaho National Laboratory</b>                     | <b>106,082</b>             | <b>60,974</b>              | <b>72,378</b>              |
| <b>Kansas City National Security Complex (KCNSC)</b>       |                            |                            |                            |
| Plutonium Management                                       | 5,300                      | 9,800                      | 6,736                      |
| Material Management and Minimization                       | 5,300                      | 9,800                      | 6,736                      |
| Nonproliferation & Arms Control                            | 2,439                      | 2,466                      | 2,495                      |
| Proliferation Detection                                    | 1,860                      | 2,281                      | 2,252                      |
| Nonproliferation Stewardship Program                       | 900                        | 2,111                      | 1,361                      |
| Defense Nuclear Nonproliferation R&D                       | 2,760                      | 4,392                      | 3,613                      |
| Counterterrorism and Counterproliferation                  | 36,682                     | 37,520                     | 68,547                     |
| Nuclear Counterterrorism & Incident Response               | 36,682                     | 37,520                     | 68,547                     |
| <b>Total Kansas City National Security Complex (KCNSC)</b> | <b>47,181</b>              | <b>54,178</b>              | <b>81,391</b>              |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

| <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------|----------------------------|----------------------------|
|----------------------------|----------------------------|----------------------------|

**Lawrence Berkeley National Laboratory**

|                                                    |               |               |               |
|----------------------------------------------------|---------------|---------------|---------------|
| Nonproliferation & Arms Control                    | 1,114         | 630           | 637           |
| Proliferation Detection                            | 17,281        | 16,958        | 16,741        |
| Forensics R&D                                      | 100           | 100           | 76            |
| Nonproliferation Stewardship Program               | -             | 4,000         | 5,200         |
| Defense Nuclear Nonproliferation R&D               | 17,381        | 21,058        | 22,017        |
| Counterterrorism and Counterproliferation          | 340           | 323           | 388           |
| Nuclear Counterterrorism & Incident Response       | 340           | 323           | 388           |
| <b>Total Lawrence Berkeley National Laboratory</b> | <b>18,835</b> | <b>22,011</b> | <b>23,042</b> |

**Lawrence Livermore National Laboratory**

|                                                     |                |                |                |
|-----------------------------------------------------|----------------|----------------|----------------|
| Reactor Conversion and Uranium Supply               | 236            | 200            | 200            |
| Nuclear Material Removal and Elimination            | -              | 12             | -              |
| Plutonium Management                                | 100            | -              | -              |
| Material Management and Minimization                | 336            | 212            | 200            |
| International Nuclear Security                      | 6,469          | 5,055          | 4,870          |
| Radiological Security                               | 10,761         | 7,649          | 8,447          |
| Nuclear Smuggling Detection and Deterrence          | 4,288          | 3,000          | 1,513          |
| Global Material Security                            | 21,518         | 15,704         | 14,830         |
| Nonproliferation & Arms Control                     | 31,804         | 34,430         | 34,835         |
| Proliferation Detection                             | 45,505         | 44,264         | 43,699         |
| Nuclear Detonation Detection                        | 29,315         | 29,268         | 31,138         |
| Forensics R&D                                       | 8,280          | 8,280          | 6,319          |
| Nonproliferation Stewardship Program                | 22,240         | 20,200         | 24,200         |
| Defense Nuclear Nonproliferation R&D                | 105,340        | 102,012        | 105,356        |
| Emergency Management                                | 417            | 380            | 380            |
| Counterterrorism and Counterproliferation           | 99,619         | 98,060         | 127,365        |
| Nuclear Counterterrorism & Incident Response        | 100,036        | 98,440         | 127,745        |
| <b>Total Lawrence Livermore National Laboratory</b> | <b>259,034</b> | <b>250,798</b> | <b>282,966</b> |

**Los Alamos National Laboratory**

|                                            |        |        |        |
|--------------------------------------------|--------|--------|--------|
| Reactor Conversion and Uranium Supply      | 423    | 250    | 200    |
| Nuclear Material Removal and Elimination   | 315    | 200    | 200    |
| Plutonium Management                       | 60,608 | 57,558 | 75     |
| Material Management and Minimization       | 61,346 | 58,008 | 475    |
| International Nuclear Security             | 3,905  | 2,672  | 2,776  |
| Radiological Security                      | 25,229 | 21,426 | 19,802 |
| Nuclear Smuggling Detection and Deterrence | 13,085 | 7,000  | 6,670  |
| Global Material Security                   | 42,219 | 31,098 | 29,248 |
| Nonproliferation & Arms Control            | 55,894 | 41,105 | 41,588 |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                              | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------|----------------------------|----------------------------|----------------------------|
| Proliferation Detection                      | 37,913                     | 36,814                     | 36,344                     |
| Nuclear Detonation Detection                 | 108,908                    | 108,736                    | 110,314                    |
| Forensics R&D                                | 9,420                      | 9,420                      | 7,189                      |
| Nonproliferation Stewardship Program         | 3,075                      | 3,150                      | 4,750                      |
| Defense Nuclear Nonproliferation R&D         | 159,316                    | 158,120                    | 158,597                    |
| Counterterrorism and Counterproliferation    | 90,512                     | 89,038                     | 115,507                    |
| Nuclear Counterterrorism & Incident Response | 90,512                     | 89,038                     | 115,507                    |
| <b>Total Los Alamos National Laboratory</b>  | <b>409,287</b>             | <b>377,369</b>             | <b>345,415</b>             |
| <b>National Energy Technology Lab</b>        |                            |                            |                            |
| Nonproliferation & Arms Control              | 175                        | 787                        | 520                        |
| Nonproliferation Stewardship Program         | -                          | 400                        | 400                        |
| Defense Nuclear Nonproliferation R&D         | -                          | 400                        | 400                        |
| <b>Total National Energy Technology Lab</b>  | <b>175</b>                 | <b>1,187</b>               | <b>920</b>                 |
| <b>Nevada Field Office</b>                   |                            |                            |                            |
| Nuclear Detonation Detection                 | 325                        | 324                        | 352                        |
| Defense Nuclear Nonproliferation R&D         | 325                        | 324                        | 352                        |
| Counterterrorism and Counterproliferation    | 90                         | 86                         | 103                        |
| Nuclear Counterterrorism & Incident Response | 90                         | 86                         | 103                        |
| <b>Total Nevada Field Office</b>             | <b>415</b>                 | <b>410</b>                 | <b>455</b>                 |
| <b>Nevada National Security Site</b>         |                            |                            |                            |
| Nuclear Material Removal and Elimination     | 625                        | 200                        | 200                        |
| Material Management and Minimization         | 625                        | 200                        | 200                        |
| Nonproliferation & Arms Control              | 344                        | 29                         | 19                         |
| Proliferation Detection                      | 15,056                     | 14,774                     | 14,585                     |
| Nuclear Detonation Detection                 | 31,531                     | 31,481                     | 34,209                     |
| Forensics R&D                                | 165                        | 165                        | 126                        |
| Defense Nuclear Nonproliferation R&D         | 46,752                     | 46,420                     | 48,920                     |
| Emergency Management                         | 110                        | 160                        | 160                        |
| Counterterrorism and Counterproliferation    | 54,296                     | 52,109                     | 63,776                     |
| Nuclear Counterterrorism & Incident Response | 54,406                     | 52,269                     | 63,936                     |
| <b>Total Nevada National Security Site</b>   | <b>102,127</b>             | <b>98,918</b>              | <b>113,075</b>             |



**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                             | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>NNSA Albuquerque Complex</b>                             |                            |                            |                            |
| International Nuclear Security                              | 3,596                      | 460                        | 3,809                      |
| Radiological Security                                       | 18,222                     | 17,370                     | 14,303                     |
| Nuclear Smuggling Detection and Deterrence                  | 54,675                     | 75,104                     | 39,158                     |
| Global Material Security                                    | 76,493                     | 92,934                     | 57,270                     |
| Proliferation Detection                                     | 21,543                     | 21,139                     | 20,869                     |
| Nuclear Detonation Detection                                | 13,703                     | 13,681                     | 14,127                     |
| Forensics R&D                                               | 5,000                      | 5,000                      | 5,000                      |
| Nonproliferation Stewardship Program                        | 8,190                      | 9,000                      | 13,700                     |
| Defense Nuclear Nonproliferation R&D                        | 48,436                     | 48,820                     | 53,696                     |
| Counterterrorism and Counterproliferation                   | 733                        | 697                        | 836                        |
| Nuclear Counterterrorism & Incident Response                | 733                        | 697                        | 836                        |
| Legacy Contractor Pensions and Settlement Payments<br>- DNN | 100                        | 500                        | 14,128                     |
| <b>Total NNSA Albuquerque Complex</b>                       | <b>125,762</b>             | <b>142,951</b>             | <b>125,930</b>             |
| <b>Oak Ridge Institute for Science and Education</b>        |                            |                            |                            |
| Radiological Security                                       | 10                         | -                          | -                          |
| Global Material Security                                    | 10                         | -                          | -                          |
| Counterterrorism and Counterproliferation                   | 3,652                      | 3,495                      | 4,248                      |
| Nuclear Counterterrorism & Incident Response                | 3,652                      | 3,495                      | 4,248                      |
| <b>Total Oak Ridge Institute for Science and Education</b>  | <b>3,662</b>               | <b>3,495</b>               | <b>4,248</b>               |
| <b>Oak Ridge National Laboratory</b>                        |                            |                            |                            |
| Reactor Conversion and Uranium Supply                       | 4,552                      | 4,372                      | 9,000                      |
| Nuclear Material Removal and Elimination                    | 7,295                      | 7,485                      | 11,805                     |
| Plutonium Management                                        | 10,323                     | 3,450                      | 1,852                      |
| Material Management and Minimization                        | 22,170                     | 15,307                     | 22,657                     |
| International Nuclear Security                              | 13,274                     | 6,063                      | 8,241                      |
| Radiological Security                                       | 18,439                     | 16,544                     | 14,473                     |
| Nuclear Smuggling Detection and Deterrence                  | 18,259                     | 14,000                     | 15,149                     |
| Global Material Security                                    | 49,972                     | 36,607                     | 37,863                     |
| Nonproliferation & Arms Control                             | 22,288                     | 24,811                     | 25,103                     |
| Proliferation Detection                                     | 41,410                     | 40,634                     | 40,116                     |
| Forensics R&D                                               | 2,845                      | 2,845                      | 2,171                      |
| Nonproliferation Stewardship Program                        | 43,875                     | 58,867                     | 67,300                     |
| Defense Nuclear Nonproliferation R&D                        | 88,130                     | 102,346                    | 109,587                    |
| Counterterrorism and Counterproliferation                   | 12,110                     | 12,101                     | 16,221                     |
| Nuclear Counterterrorism & Incident Response                | 12,110                     | 12,101                     | 16,221                     |
| <b>Total Oak Ridge National Laboratory</b>                  | <b>194,670</b>             | <b>191,172</b>             | <b>211,431</b>             |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                    | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|----------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Pacific Northwest National Laboratory</b>       |                            |                            |                            |
| Reactor Conversion and Uranium Supply              | 13,715                     | 3,852                      | 3,100                      |
| Nuclear Material Removal and Elimination           | 450                        | 650                        | 200                        |
| Plutonium Management                               | 3,020                      | 2,968                      | 2,500                      |
| Material Management and Minimization               | 17,185                     | 7,470                      | 5,800                      |
| International Nuclear Security                     | 4,747                      | 15,079                     | 12,303                     |
| Radiological Security                              | 84,667                     | 49,680                     | 66,453                     |
| Nuclear Smuggling Detection and Deterrence         | 62,379                     | 18,000                     | 50,675                     |
| Global Material Security                           | 151,793                    | 82,759                     | 129,431                    |
| Nonproliferation & Arms Control                    | 28,686                     | 24,591                     | 24,881                     |
| Proliferation Detection                            | 24,423                     | 23,965                     | 23,659                     |
| Nuclear Detonation Detection                       | 18,863                     | 18,833                     | 20,299                     |
| Forensics R&D                                      | 4,215                      | 4,215                      | 3,217                      |
| Nonproliferation Stewardship Program               | 10,900                     | 19,878                     | 15,071                     |
| Defense Nuclear Nonproliferation R&D               | 58,401                     | 66,891                     | 62,246                     |
| Emergency Management                               | 1,826                      | 2,176                      | 2,176                      |
| Counterterrorism and Counterproliferation          | 11,707                     | 11,374                     | 14,298                     |
| Nuclear Counterterrorism & Incident Response       | 13,533                     | 13,550                     | 16,474                     |
| <b>Total Pacific Northwest National Laboratory</b> | <b>269,598</b>             | <b>195,261</b>             | <b>238,832</b>             |
| <b>Pantex Plant</b>                                |                            |                            |                            |
| Plutonium Management                               | 2,750                      | -                          | -                          |
| Material Management and Minimization               | 2,750                      | -                          | -                          |
| International Nuclear Security                     | 680                        | -                          | -                          |
| Global Material Security                           | 680                        | -                          | -                          |
| Nonproliferation & Arms Control                    | 12,872                     | 9,703                      | 9,817                      |
| Proliferation Detection                            | 275                        | 979                        | 966                        |
| Defense Nuclear Nonproliferation R&D               | 275                        | 979                        | 966                        |
| Counterterrorism and Counterproliferation          | 3,396                      | 3,250                      | 3,945                      |
| Nuclear Counterterrorism & Incident Response       | 3,396                      | 3,250                      | 3,945                      |
| <b>Total Pantex Plant</b>                          | <b>19,973</b>              | <b>13,932</b>              | <b>14,728</b>              |
| <b>Princeton Plasma Physics Laboratory</b>         |                            |                            |                            |
| Nonproliferation & Arms Control                    | -                          | 165                        | 109                        |
| Proliferation Detection                            | 205                        | 201                        | 199                        |
| Defense Nuclear Nonproliferation R&D               | 205                        | 201                        | 199                        |
| <b>Total Princeton Plasma Physics Laboratory</b>   | <b>205</b>                 | <b>366</b>                 | <b>308</b>                 |
| <b>Richland Operations Office</b>                  |                            |                            |                            |
| Counterterrorism and Counterproliferation          | 1,887                      | 1,795                      | 2,153                      |
| Nuclear Counterterrorism & Incident Response       | 1,887                      | 1,795                      | 2,153                      |
| <b>Total Richland Operations Office</b>            | <b>1,887</b>               | <b>1,795</b>               | <b>2,153</b>               |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                 | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Sandia National Laboratories</b>             |                            |                            |                            |
| Reactor Conversion and Uranium Supply           | 902                        | 150                        | 200                        |
| Plutonium Management                            | 1,340                      | 649                        | -                          |
| Material Management and Minimization            | 2,242                      | 799                        | 200                        |
| International Nuclear Security                  | 20,482                     | 13,335                     | 19,427                     |
| Radiological Security                           | 50,879                     | 29,714                     | 39,934                     |
| Nuclear Smuggling Detection and Deterrence      | 20,555                     | 15,000                     | 17,337                     |
| Global Material Security                        | 91,916                     | 58,049                     | 76,698                     |
| Nonproliferation & Arms Control                 | 16,753                     | 24,142                     | 24,426                     |
| Proliferation Detection                         | 36,959                     | 35,879                     | 35,421                     |
| Nuclear Detonation Detection                    | 98,623                     | 98,467                     | 99,817                     |
| Forensics R&D                                   | 1,395                      | 1,395                      | 1,065                      |
| Nonproliferation Stewardship Program            | 250                        | 375                        | 375                        |
| Defense Nuclear Nonproliferation R&D            | 137,227                    | 136,116                    | 136,678                    |
| Counterterrorism and Counterproliferation       | 79,594                     | 77,412                     | 98,129                     |
| Nuclear Counterterrorism & Incident Response    | 79,594                     | 77,412                     | 98,129                     |
| <b>Total Sandia National Laboratories</b>       | <b>327,732</b>             | <b>296,518</b>             | <b>336,131</b>             |
| <b>Savannah River National Laboratory</b>       |                            |                            |                            |
| Reactor Conversion and Uranium Supply           | 2,715                      | 1,900                      | 1,600                      |
| Nuclear Material Removal and Elimination        | 14,702                     | 11,350                     | 17,460                     |
| Plutonium Management                            | 9,688                      | 4,686                      | 763                        |
| Material Management and Minimization            | 27,105                     | 17,936                     | 19,823                     |
| International Nuclear Security                  | 1,242                      | 980                        | 513                        |
| Nuclear Smuggling Detection and Deterrence      | 583                        | 288                        | 513                        |
| Global Material Security                        | 1,825                      | 1,268                      | 1,026                      |
| Nonproliferation & Arms Control                 | 11,540                     | 9,680                      | 9,794                      |
| Proliferation Detection                         | 13,027                     | 12,783                     | 12,620                     |
| Forensics R&D                                   | 1,280                      | 1,280                      | 977                        |
| Nonproliferation Stewardship Program            | 10,200                     | 10,729                     | 9,068                      |
| Defense Nuclear Nonproliferation R&D            | 24,507                     | 24,792                     | 22,665                     |
| Counterterrorism and Counterproliferation       | 2,907                      | 2,775                      | 3,353                      |
| Nuclear Counterterrorism & Incident Response    | 2,907                      | 2,775                      | 3,353                      |
| <b>Total Savannah River National Laboratory</b> | <b>67,884</b>              | <b>56,451</b>              | <b>56,661</b>              |
| <b>Savannah River Operations Office</b>         |                            |                            |                            |
| Nuclear Material Removal and Elimination        | 650                        | 350                        | 570                        |
| Plutonium Management                            | 38,148                     | -                          | 355                        |
| Material Management and Minimization            | 38,798                     | 350                        | 925                        |
| Counterterrorism and Counterproliferation       | 120                        | 114                        | 137                        |
| Nuclear Counterterrorism & Incident Response    | 120                        | 114                        | 137                        |
| <b>Total Savannah River Operations Office</b>   | <b>38,918</b>              | <b>464</b>                 | <b>1,062</b>               |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                             | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Savannah River Site</b>                                  |                            |                            |                            |
| Nuclear Material Removal and Elimination                    | 783                        | 2,390                      | 2,700                      |
| Plutonium Management                                        | 357                        | 23,694                     | 54,728                     |
| Material Management and Minimization                        | 1,140                      | 26,084                     | 57,428                     |
| 18-D-150, Surplus Plutonium Disposition Project,<br>SRS     | 38,000                     | 9,572                      | -                          |
| Nonproliferation Construction                               | 38,000                     | 9,572                      | -                          |
| <b>Total Savannah River Site</b>                            | <b>39,140</b>              | <b>35,656</b>              | <b>57,428</b>              |
| <b>SLAC National Accelerator Laboratory</b>                 |                            |                            |                            |
| Forensics R&D                                               | 275                        | 275                        | 210                        |
| Defense Nuclear Nonproliferation R&D                        | 275                        | 275                        | 210                        |
| <b>Total SLAC National Accelerator Laboratory</b>           | <b>275</b>                 | <b>275</b>                 | <b>210</b>                 |
| <b>Thomas Jefferson National Accelerator Facility</b>       |                            |                            |                            |
| Radiological Security                                       | 211                        | 185                        | 166                        |
| Global Material Security                                    | 211                        | 185                        | 166                        |
| Proliferation Detection                                     | 500                        | 491                        | 484                        |
| Defense Nuclear Nonproliferation R&D                        | 500                        | 491                        | 484                        |
| <b>Total Thomas Jefferson National Accelerator Facility</b> | <b>711</b>                 | <b>676</b>                 | <b>650</b>                 |
| <b>Washington Headquarters</b>                              |                            |                            |                            |
| Reactor Conversion and Uranium Supply                       | 13,592                     | 91,717                     | 38,633                     |
| Nuclear Material Removal and Elimination                    | -                          | 2,288                      | 11,335                     |
| Plutonium Management                                        | 7,409                      | 38,346                     | 3,461                      |
| Material Management and Minimization                        | 21,001                     | 132,351                    | 53,429                     |
| International Nuclear Security                              | 1,343                      | 34,112                     | 1,381                      |
| Radiological Security                                       | 1,446                      | 97,525                     | 1,137                      |
| Nuclear Smuggling Detection and Deterrence                  | 2,217                      | 43,916                     | 1,017                      |
| Global Material Security                                    | 5,006                      | 175,553                    | 3,535                      |
| Nonproliferation & Arms Control                             | 17,096                     | 12,310                     | 12,837                     |
| Proliferation Detection                                     | 23,822                     | 23,376                     | 23,078                     |
| Nuclear Detonation Detection                                | 8,220                      | 8,210                      | 8,191                      |
| Forensics R&D                                               | 2,559                      | 2,559                      | 1,952                      |
| Nonproliferation Stewardship Program                        | 19,695                     | 7,750                      | 8,250                      |
| Defense Nuclear Nonproliferation R&D                        | 54,296                     | 41,895                     | 41,471                     |
| 18-D-150, Surplus Plutonium Disposition Project,<br>SRS     | 2,000                      | 428                        | -                          |
| Nonproliferation Construction                               | 2,000                      | 428                        | -                          |
| Emergency Management                                        | 21,177                     | 30,156                     | 32,129                     |
| Counterterrorism and Counterproliferation                   | 88,988                     | 88,547                     | 107,419                    |
| Nuclear Counterterrorism & Incident Response                | 110,165                    | 118,703                    | 139,548                    |
| <b>Total Washington Headquarters</b>                        | <b>209,564</b>             | <b>481,240</b>             | <b>250,820</b>             |

**DEPARTMENT OF ENERGY**  
**Funding by Site**  
Defense Nuclear Nonproliferation - FY 2027  
(Dollars in Thousands)

|                                                                       | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Waste Isolation Pilot Plant</b>                                    |                            |                            |                            |
| Plutonium Management                                                  | 6,837                      | 5,744                      | 8,452                      |
| Material Management and Minimization                                  | 6,837                      | 5,744                      | 8,452                      |
| Radiological Security                                                 | -                          | 200                        | -                          |
| Global Material Security                                              | -                          | 200                        | -                          |
| Nonproliferation & Arms Control                                       | 250                        | 107                        | 71                         |
| Counterterrorism and Counterproliferation                             | 21                         | 20                         | 24                         |
| Nuclear Counterterrorism & Incident Response                          | 21                         | 20                         | 24                         |
| <b>Total Waste Isolation Pilot Plant</b>                              | <b>7,108</b>               | <b>6,071</b>               | <b>8,547</b>               |
| <b>Y-12 National Security Complex</b>                                 |                            |                            |                            |
| Reactor Conversion and Uranium Supply                                 | 32,504                     | 15,063                     | 40,287                     |
| Nuclear Material Removal and Elimination                              | 4,300                      | 4,375                      | 10,300                     |
| Plutonium Management                                                  | 600                        | -                          | -                          |
| Material Management and Minimization                                  | 37,404                     | 19,438                     | 50,587                     |
| International Nuclear Security                                        | 2,965                      | 2,116                      | 2,746                      |
| Radiological Security                                                 | 10,653                     | 5,963                      | 8,361                      |
| Nuclear Smuggling Detection and Deterrence                            | 3,421                      | 4,000                      | 2,055                      |
| Global Material Security                                              | 17,039                     | 12,079                     | 13,162                     |
| Nonproliferation & Arms Control                                       | 5,189                      | 4,016                      | 4,064                      |
| Proliferation Detection                                               | 953                        | 935                        | 923                        |
| Forensics R&D                                                         | 695                        | 695                        | 530                        |
| Nonproliferation Stewardship Program                                  | -                          | 20,000                     | 20,000                     |
| Defense Nuclear Nonproliferation R&D                                  | 1,648                      | 21,630                     | 21,453                     |
| Counterterrorism and Counterproliferation                             | 6,406                      | 6,199                      | 7,713                      |
| Nuclear Counterterrorism & Incident Response                          | 6,406                      | 6,199                      | 7,713                      |
| <b>Total Y-12 National Security Complex</b>                           | <b>67,686</b>              | <b>63,362</b>              | <b>96,979</b>              |
| <b>Total Funding by Site for Defense<br/>Nuclear Nonproliferation</b> | <b>2,396,000</b>           | <b>2,415,996</b>           | <b>2,389,595</b>           |

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# Naval Reactors

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**Naval Reactors<sup>1</sup>**  
**(\$K)**

| <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> | <b>FY 2027 Request vs<br/>FY 2026 Enacted</b> |
|----------------------------|----------------------------|----------------------------|-----------------------------------------------|
| 1,946,000                  | 2,134,000                  | 2,393,692                  | +259,692                                      |

**Proposed Appropriation Language**

For Department of Energy (DOE) expenses necessary for Naval Reactors' activities to carry out the Department of Energy Organization Act (42 U.S.C. § 7101 et seq.), including the acquisition (by purchase, condemnation, construction, or otherwise) of real property, plant, and capital equipment, facilities, and facility expansion, \$2,393,692,000 to remain available until expended: Provided, that \$71,841,000 shall be available until September 30, 2028, for program direction.

**Mission**

The Naval Reactors Fiscal Year (FY) 2027 request of \$2,393,692,000 advances its core objective to safely and reliably operate the Nation's nuclear fleet, beginning with reactor plant technology development and design, continuing through reactor plant operation and maintenance, and ending with final disposition of naval spent nuclear fuel. The Naval Nuclear Propulsion Program provides a United States (U.S.) Navy fleet that dominates the maritime domain with unmatched power and propulsion by harnessing the atom to safely, reliably, and affordably power a global fleet that enables unrivaled responsiveness, endurance, stealth, and warfighting capability. The Naval Reactors request continues reinvesting in advanced technology development, infrastructure modernization, and environmental liability remediation.

**Overview**

The Naval Reactors appropriation is responsible for the U.S. Navy nuclear propulsion program's lifecycle activities, including reactor plant technology design and development, reactor plant operation and maintenance, and proper final disposition of naval spent nuclear fuel. The Program ensures reactor plants in nuclear-powered submarines and aircraft carriers are safely and reliably operated (constituting over 35 percent of the Navy's major combatants)<sup>2</sup>, and fulfills the Navy's requirements for new nuclear propulsion plants that meet current and future national defense requirements.

The Naval Reactors mission includes ensuring the safety of reactors and associated naval nuclear propulsion plants, and control of radiation and radioactivity associated with naval nuclear propulsion activities, including prescribing and enforcing standards and regulations for these areas, as they affect the environment, safety and health of workers, operators, and the general public. Naval Reactors maintains oversight in areas such as security, nuclear safeguards and transportation, radiological controls, public information, procurement, logistics, and fiscal management.

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<sup>1</sup> Throughout this document, funding tables and in-text amounts do not reflect the mandated transfer of \$92.8 million in FY 2025 and \$96.74 million in FY 2026 to the Office of Nuclear Energy for operation of the Advanced Test Reactor.

<sup>2</sup> Major combatants, in this instance, include aircraft carriers, submarines, and surface combatants based on the "Active in Commission" column from the Naval Vessel Register.

As part of the National Nuclear Security Administration (NNSA), Naval Reactors provides the U.S. Navy with nuclear propulsion plants that are capable of responding to the challenges of the 21<sup>st</sup>-century security environment.

### **Major Outyear Priorities and Assumptions**

The Naval Reactors outyear funding (FY 2028 through FY 2031) request is \$10,093,988,000. Outyear funding supports Naval Reactors' mission goals to provide proper maintenance, safety oversight, and address emergent operational issues and technology obsolescence for 96 reactor plants. This includes 66 submarines, 11 aircraft carriers, and 3 research, development, and training platforms (including the land-based prototype). Outyear funding also supports Naval Reactors' continued support of existing Fleet technologies and development of new technologies and designs, as well as continued achievement of its legacy responsibilities, such as ensuring proper management of naval spent nuclear fuel, prudent recapitalization of aging facilities, and cleanup of environmental liabilities.

### **Department of Energy (DOE) Working Capital Fund (WCF) Support**

The Naval Reactors appropriation's projected contribution to the DOE WCF for FY 2027 is \$3,770,000. This funding covers certain shared enterprise activities including managing enterprise-wide systems and data, telecommunications, and supporting the integrated acquisition environment.

### **Rickover Fellowship Program**

The Naval Reactors appropriation's projected spending to support the Rickover Fellowship Program in FY 2027 is \$1,264,000. The Rickover Fellowship Program attracts and develops technical leaders in the areas of reactor technology and design as it pertains to naval nuclear propulsion.



**Naval Reactors**  
**Funding by Budget Control (\$K)**

|                                                                   | FY 2025<br>Enacted | FY 2026<br>Enacted | FY 2027<br>Request | FY 2027 Request vs<br>FY 2026 Enacted |               |
|-------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------------------------------|---------------|
|                                                                   |                    |                    |                    | \$                                    | %             |
| Naval Reactors Operating <sup>1</sup>                             |                    |                    |                    |                                       |               |
| <i>Research Reactor Facility Operations &amp; Maintenance</i>     | 86,700             | 96,786             | 92,330             | -4,456                                | -4.6%         |
| <i>MARF Defueling and Layup</i>                                   | 70,100             | 32,900             | -                  | -32,900                               | -100.0%       |
| <i>Laboratory Facility Regulation, Compliance, and Protection</i> | 167,080            | 179,460            | 194,620            | 15,160                                | +8.4%         |
| <i>Nuclear Spent Fuel Management</i>                              | 182,500            | 186,485            | 186,992            | 507                                   | +0.3%         |
| <i>Radiological/Environmental Remediation and Demolition</i>      | 159,008            | 130,798            | 86,147             | -44,651                               | -34.1%        |
| <i>Technical Infrastructure Operations Support</i>                | 18,500             | 24,948             | 21,000             | -3,948                                | -15.8%        |
| <i>Capital Equipment</i>                                          | 18,200             | -                  | 15,000             | 15,000                                | +100.0%       |
| <i>Minor Construction</i>                                         | 39,992             | 52,204             | 48,961             | -3,243                                | -6.2%         |
| Total, Naval Reactors Operations and Infrastructure               | 742,080            | 703,581            | 645,050            | -58,531                               | -8.3%         |
| <i>Ship Construction and Maintenance Support</i>                  | 40,400             | 39,800             | 41,910             | 2,110                                 | +5.3%         |
| <i>Nuclear Reactor Technology</i>                                 | 238,712            | 286,626            | 291,074            | 4,448                                 | +1.6%         |
| <i>Reactor Systems and Component Technology</i>                   | 367,160            | 359,663            | 333,638            | -26,025                               | -7.2%         |
| <i>Advanced Test Reactor Operations</i>                           | 92,800             | 96,740             | 98,770             | 2,030                                 | +2.1%         |
| <i>Capital Equipment</i>                                          | 42,728             | 14,250             | 14,832             | 582                                   | +4.1%         |
| <i>Future Advanced Submarine Technology</i>                       | 54,000             | 67,500             | 96,600             | 29,100                                | +43.1%        |
| Total, Naval Reactors Development                                 | 835,800            | 864,579            | 876,824            | 12,245                                | +1.4%         |
| <i>Columbia-Class Reactor Systems Development</i>                 | 45,610             | 35,300             | 29,700             | -5,600                                | -15.9%        |
| <b>Total, Naval Reactors Operating</b>                            | <b>1,623,490</b>   | <b>1,603,460</b>   | <b>1,551,574</b>   | <b>-51,886</b>                        | <b>-3.2%</b>  |
| 26-D-530 KL East Side Office Building                             | -                  | 5,000              | -                  | -5,000                                | -100.0%       |
| 25-D-530 Naval Examination Acquisition Project                    | 20,000             | 40,000             | 80,000             | 40,000                                | +100.0%       |
| 22-D-532 KL Security Upgrades                                     | 41,670             | -                  | -                  | -                                     | -             |
| 14-D-901 Spent Fuel Handling Recapitalization Project NRF         | 199,300            | 424,000            | 691,953            | 267,953                               | +63.2%        |
| <b>Total, Naval Reactors Construction</b>                         | <b>260,970</b>     | <b>469,000</b>     | <b>771,953</b>     | <b>302,953</b>                        | <b>+64.6%</b> |
| Program Direction                                                 | 61,540             | 61,540             | 71,841             | 10,301                                | +16.7%        |
| Use of Prior Year Balances                                        | -                  | -                  | -1,676             | -1,676                                | -             |
| <b>Total, Naval Reactors</b>                                      | <b>1,946,000</b>   | <b>2,134,000</b>   | <b>2,393,692</b>   | <b>259,692</b>                        | <b>+12.2%</b> |

<sup>1</sup> The FY 2027 Budget Request requests a budget structure change to combine Naval Reactors Operations and Infrastructure, Naval Reactors Development, and *Columbia-Class Reactor Systems Development* into one Congressional control, Naval Reactors Operating.

### Outyears Funding by Budget Control (\$K)

|                                                                   | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|-------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Naval Reactors Operating                                          |                            |                            |                            |                            |
| <i>Research Reactor Facility Operations &amp; Maintenance</i>     | 97,757                     | 105,800                    | 147,608                    | 97,700                     |
| <i>MARF Defueling and Layup</i>                                   | -                          | -                          | -                          | -                          |
| <i>Laboratory Facility Regulation, Compliance, and Protection</i> | 191,280                    | 198,400                    | 206,000                    | 201,404                    |
| <i>Nuclear Spent Fuel Management</i>                              | 214,900                    | 212,800                    | 216,600                    | 210,000                    |
| <i>Radiological/Environmental Remediation and Demolition</i>      | 123,900                    | 269,540                    | 223,260                    | 175,175                    |
| <i>Technical Infrastructure Operations Support</i>                | 20,300                     | 18,200                     | 17,000                     | 14,800                     |
| <i>Capital Equipment</i>                                          | 3,900                      | -                          | -                          | -                          |
| <i>Minor Construction</i>                                         | 95,409                     | 222,062                    | 106,959                    | 81,300                     |
| Total, Naval Reactors Operations and Infrastructure               | 747,446                    | 1,026,802                  | 917,427                    | 780,379                    |
| <i>Ship Construction and Maintenance Support</i>                  | 42,700                     | 40,992                     | 44,255                     | 60,000                     |
| <i>Nuclear Reactor Technology</i>                                 | 218,700                    | 235,200                    | 236,987                    | 276,100                    |
| <i>Reactor Systems and Component Technology</i>                   | 330,177                    | 353,910                    | 357,320                    | 386,872                    |
| <i>Advanced Test Reactor Operations</i>                           | 100,840                    | 102,958                    | 105,120                    | 107,328                    |
| <i>Capital Equipment</i>                                          | 13,400                     | 13,100                     | 9,250                      | 16,000                     |
| <i>Future Advanced Submarine Technology</i>                       | 206,000                    | 274,100                    | 303,600                    | 317,600                    |
| Total, Naval Reactors Development                                 | 911,817                    | 1,020,260                  | 1,056,532                  | 1,163,900                  |
| <i>Columbia-Class Reactor Systems Development</i>                 | -                          | -                          | -                          | -                          |
| <b>Total, Naval Reactors Operating</b>                            | <b>1,659,263</b>           | <b>2,047,062</b>           | <b>1,973,959</b>           | <b>1,944,279</b>           |
| 30-D-XXX NRF Backup Power Project                                 | -                          | -                          | 71,000                     | -                          |
| 29-D-XXX KL Central Chiller and Piping                            | -                          | 81,290                     | -                          | -                          |
| 28-D-XXX NRF South and West Boundary Area                         | 61,000                     | -                          | -                          | -                          |
| 26-D-530 KL East Side Office Building                             | -                          | -                          | -                          | -                          |
| 25-D-530 Naval Examination Acquisition Project                    | 130,000                    | 200,000                    | 425,000                    | 575,000                    |
| 22-D-532 KL Security Upgrades                                     | -                          | -                          | -                          | -                          |
| 14-D-901 Spent Fuel Handling Recapitalization Project NRF         | 519,247                    | 90,000                     | -                          | -                          |
| <b>Total, Naval Reactors Construction</b>                         | <b>710,247</b>             | <b>371,290</b>             | <b>496,000</b>             | <b>575,000</b>             |
| Program Direction                                                 | 76,491                     | 79,015                     | 79,853                     | 81,529                     |
| Use of Prior Year Balances                                        | -                          | -                          | -                          | -                          |
| <b>Total, Naval Reactors</b>                                      | <b>2,446,001</b>           | <b>2,497,367</b>           | <b>2,549,812</b>           | <b>2,600,808</b>           |

## **Naval Reactors**

### **Naval Reactors Operations and Infrastructure**

#### **Overview**

Naval Reactors Operations and Infrastructure resources ensure Naval Reactors maintains an integrated and effective enterprise across program sites located in Pennsylvania (PA), New York (NY), and Idaho, to provide safe operation of the nuclear fleet. The Naval Reactors Operations and Infrastructure resources support the operation of one land-based nuclear prototype and the lay-up of one land-based nuclear prototype at the Kesselring Site located in West Milton, NY; two dedicated, government-owned, contractor-operated laboratory facilities, Knolls and Bettis located in Niskayuna, NY and West Mifflin, PA, respectively; and naval spent nuclear fuel handling facilities and operations at the Naval Reactors Facility (NRF) at the Idaho National Laboratory (INL) in Idaho. These resources ensure unique Naval Reactors' infrastructure and advanced naval nuclear capabilities are maintained well into the future. These efforts include:

1. Operation, maintenance, and lay-up of the DOE land-based nuclear prototypes supporting technology development and nuclear operator training.
2. Activities to ensure Naval Reactors program operations meet or exceed applicable federal, state, and local standards and requirements.
3. Disposition of naval spent nuclear fuel from the inactivation and refueling of ships and prototypes.
4. Remediation, dismantlement, and disposal of inactive Naval Reactors program systems, facilities, and areas.
5. Provision of technical infrastructure support at headquarters, the laboratory field office, and laboratory facilities, enabling technical work that supports fleet operations, and design and development efforts.
6. Design and procurement of capital equipment.
7. Design and construction of facilities and infrastructure to provide for capacity, security, safety, environmental, R&D, and obsolescence needs.

#### Research Reactor Facility Operations & Maintenance

This subprogram's mission supports one land-based prototype located at the Kesselring Site in NY through the following work efforts: (1) test and examine reactor materials, components, systems, and new design applications under actual operating conditions; (2) provide a ship-like operating platform to train nuclear operators; (3) support improved design activities for the operating prototype and perform systematic preventive maintenance, corrective maintenance, upgrades, and modifications on the prototype and support equipment; (4) evaluate problems using engineering tests and other troubleshooting techniques; and (5) procure and maintain adequate spare parts, material, specialized tools, and instrumentation for troubleshooting and prototype testing.

#### Modifications and Additions to a Reactor Facility (MARF) Defueling and Layup

This subprogram's mission was to defuel and lay up the MARF prototype, place the plant in a safe and benign condition for eventual dismantlement, and dispose of it off-site.

#### Laboratory Facility Regulation, Compliance & Protection

This subprogram's mission ensures that Naval Reactors operations and design activities meet or exceed applicable federal, state, and local standards and requirements, such as Radiological Controls, Environmental, Safety and Health, Quality Assurance, and Nuclear Materials Management. This compliance is accomplished by: (1) personnel training, instruction, supervision, independent oversight, and formal auditing; (2) extensive personnel and environmental sampling and monitoring programs to ensure operations have no discernible impact on human health or the environment; (3) preparing and issuing numerous reports required by federal, state, and local regulations and requirements; and (4) reviewing of new and existing nuclear plant designs and the related procurement of nuclear fuel and new project equipment. Naval Reactors' workforce is a highly

trained group, capable of responding in the event of an accident, as well as supporting routine operations. Funding also supports integrated contractor services essential to Naval Reactors operations at laboratory facilities, including network infrastructure and auxiliary support maintenance, while contributing to the ongoing development of both Naval Reactors headquarters and field office facilities, in alignment with the broader goals of the Naval Nuclear Propulsion Program.

#### Nuclear Spent Fuel Management

This subprogram's mission fulfills Naval Reactors' cradle-to-grave responsibility for all aspects of naval nuclear propulsion by properly managing naval spent nuclear fuel. Specifically, resources in this subprogram support the safe reception, handling, preparation, packaging, examination, and temporary storage of naval spent nuclear fuel coming from the nuclear-powered fleet and prototypes. This includes fuel handling operations at DOE facilities, mechanically processing naval spent nuclear fuel at the NRF in the State of Idaho, packaging the naval spent nuclear fuel for dry storage in a geologic repository or interim storage facility, and disposing of the radiological waste by-products produced by these processes. The subprogram also supports managing naval spent nuclear fuel shipping container capacity for aircraft carrier and submarine refueling overhauls and defueling inactivation operations; conducts destructive and non-destructive examinations of expended naval cores and irradiated test specimens from the Advanced Test Reactor located at the INL; and supports improvements to the naval spent nuclear fuel receiving, processing, packaging, and disposal efforts, reducing radiological risks at the NRF.

#### Radiological/Environmental Remediation & Demolition

This subprogram's mission remediates, dismantles, and disposes of inactive Naval Reactors systems, facilities, and areas that supported research and development, design, testing, training, and prototype operations. Requirements are prioritized with emphasis on balancing factors such as risk reduction and inactive facility lifecycle costs. This subprogram delivers usable site footprint for future infrastructure.

#### Technical Infrastructure and Operations Support

This subprogram's mission supports laboratory and testing facilities at Naval Nuclear Laboratory (NNL). These facilities enable the technical work supporting the operations of the naval nuclear fleet, as well as engineering and development efforts required to ensure continued performance, safety and reliability, and resolution of emergent fleet problems. This includes the preparation and maintenance of infrastructure at program laboratory sites (e.g., laboratory space/building, test loops, hot cells) to support Program technical work (e.g., testing, engineering and analysis, design, and examinations). The up-front work needed to prepare laboratory facilities is distinct from operating the systems or test programs within such facilities (e.g., actual execution/performance of the test once a test loop has been prepared). Technical infrastructure such as test loops are large and require significant infrastructure (e.g., building dimensions, utilities, and design safety calculations support in order to prepare the tests for safe operations.). The skills required to engineer and maintain technical infrastructure are like the skills used to support general facility infrastructure (e.g., general office buildings), and test engineers work collaboratively with site facilities engineers to maintain safe and reliable test operation.

#### Capital Equipment

This subprogram's mission provides the capital equipment, including Major Items of Equipment (MIE), required to support work efforts within the sub-categories of Naval Reactors Operations and Infrastructure. Capital equipment is defined as non-construction related equipment, computer systems, tooling, and furniture or fixtures having useful life of two or more years and costing greater than \$500,000, or \$750,000 for software.

#### Minor Construction Projects

This subprogram's mission executes construction projects of a general nature, the Total Estimated Costs (TEC) of which do not exceed the established minor construction threshold. These projects provide for design and

construction, additions, and improvements to land, buildings, and utilities necessary for mission accomplishment.

### **Highlights and Major Changes in the FY 2027 Budget Request**

The decrease of \$58,531,000 over FY 2026 Enacted levels reflects the MARF prototype's final defueling and inactivation, progression towards achieving remediation goals in decontamination and decommissioning, continued recapitalization of infrastructure, and preparation for delivery of the Naval Spent Fuel Handling Facility.

## Naval Reactors

### Naval Reactors Development

#### Overview

Naval Reactors Development resources fund work that ensures the current and future fleet is the most advanced, well-maintained, and capable nuclear fleet in the world. This funding supports unique technologies used in naval reactors that are crucial to delivering superior navy fleet operations and dominance in the maritime domain to counter the increasing threats from our adversaries. These efforts include:

1. Supporting naval operations while ensuring reactor safety by providing technical support to the fleet, engineering solutions to emergent reactor plant issues, enabling equipment replacement and maintenance, and tracking reactor performance over time.
2. Validate design assumptions made for operating ships to reduce required conservatism allowing extension of ship lifetimes.
3. Developing and enhancing the fundamental methods, modeling, and materials used in reactor cores and plants, which reduce lifecycle costs and improves performance and reactor safety.
4. Designing and maintaining the major reactor plant components and plant systems required for technologically superior naval nuclear propulsion.
5. Providing funding for the operation of the Advanced Test Reactor (ATR) to DOE Office of Nuclear Energy and performing irradiation testing to support the operating fleet, evaluate new material systems, and develop new core designs to maintain the U.S. advantage over near-peer rivals.
6. Designing and procuring capital equipment in support of the work above.
7. Supporting development of technologies specifically targeted for implementation in the next propulsion plant design and sustainment of associated critical design skills.

#### Ship Construction & Maintenance Support (SCMS)

The mission of this subcategory is to directly support both the operation and new construction of the nuclear-powered fleet. Operating reactors require engineering support throughout their lifetimes to address any issues that arise, incorporate new technology, assess the effect of actual Navy operations compared to assumed operations when the reactors were designed, and to account for new information learned over the decades that ship class will operate. This engineering support is required to ensure safe operation throughout the life of the reactor plant. While overall fleet support efforts are funded across all Naval Reactors Development subprograms, SCMS supports direct efforts. Examples of direct SCMS efforts include analyses to extend the reactor operational life of a ship, reactor servicing technical support, new instrumentation and control system qualification prior to ship installation, emergent problem resolution arising during propulsion plant component manufacturing, installation, testing or operation, and continued technical validation of a ship's reactor performance and safety basis through operational life of the ship. Also, maintenance of the reactor plants involves designing equipment and systems to safely handle new fuel and highly radioactive spent fuel including safely maintaining plant components and resolving obsolescence issues. These efforts are closely associated with the more comprehensive technology efforts that underpin Naval Reactor's fleet support efforts in Nuclear Reactor Technology (NRT) and Reactor Systems & Component Technology (RSCT).

#### Nuclear Reactor Technology

The mission of this subcategory is to develop and deploy reactor core material systems that improve nuclear safety, stealth, tactical ability, and reactor plant capability and performance; and to support the qualification and the manufacture of those systems at the naval nuclear core vendor. The materials testing executed using NRT resources forms the basis for naval nuclear reactor operational capability, which has enabled over 75 years of safe nuclear reactor operations while increasing reactor plant performance and reducing platform lifecycle cost. This research and development capability informs new design decisions and enables timely response to issues

encountered in the operating fleet. Advanced fuel and poison development efforts, including specimen manufacture, irradiation testing, and post irradiation examination, are executed using resources from this subcategory. Lastly, this subcategory supports the examination of expended fuel modules and irradiated core components at the Expended Core Facility located at the NRF, which is part of the INL. This examination capability provides real performance data on hardware to ultimately understand both long-term material behavior and design impacts which are used to inform new design and extend the lifetime of existing platforms.

#### Reactor Systems & Component Technology

The mission of this subcategory is to provide Naval Reactors with the technology for major reactor plant components (e.g., reactors, steam generators, reactor coolant pumps, valves) as well as plant systems (e.g., instrumentation and control). This subcategory provides the support and expertise necessary to ensure the satisfactory operation of reactor plant components in the naval nuclear fleet and prototypes, to design and implement *Virginia*-class, *Ford*-class, *Columbia*-class, and future generation reactor plant components, and to develop higher power density, faster to build, and more affordable components for technology insertion applications in existing ship classes. Funding within this subcategory supports the major objectives of instrumentation and control component and system development to deliver the next generation of instrumentation and control, and electrical equipment for naval nuclear propulsion applications to improve ship mission capabilities, reactor safety, and widen the advanced technology gap over our adversaries. This subcategory also enables the Program's advanced technology incubator effort to accelerate the pace of research and development (R&D) that holds promise for step-change advancements and asymmetrical warfighting advantages for naval nuclear propulsion.

#### Advanced Test Reactor (ATR) Operations

The mission of this subcategory is to provide base operations funding for the ATR. The ATR is the only domestic platform that provides a prototypical thermal irradiation environment for fleet support, core design, manufacturing support, and analytical model development for reactor materials and nuclear fuels. The ATR is located on the INL and is owned by the DOE Office of Nuclear Energy and operated by the INL contractor. Naval Reactors has sole use of six of nine ATR flux traps. This subprogram provides the majority of the ATR's base operations funding.

#### Capital Equipment

This subprogram's mission provides the capital equipment, including MIE, required to support work efforts within the sub-categories of Naval Reactors Development. Capital equipment is defined as non-construction related equipment, computer systems, tooling, and furniture or fixtures having useful life of two or more years and costing greater than \$500,000, or \$750,000 for software.

#### Future Advanced Submarine Technology

The mission of this subcategory is to directly support the technological development and sustainment of associated critical design skills necessary to execute a new propulsion plant design and implement matured technologies. A supplementary data sheet within this document captures information for this subcategory within Naval Reactors Development.

### **Highlights and Major Changes in the FY 2027 Budget Request**

The increase of \$12,245,000 over FY 2026 Enacted levels supports development of the methods, models, materials, components, and systems required for future platforms to achieve enhanced capability, improved affordability, and sustained reliability and provides continuous support to U.S. Navy fleet operations. Over the last decade, the need for generational investment in infrastructure, which is not yet complete, required a reduction in mid- to long- term technology development efforts. During this time, historic technology development efforts were leveraged to support *Columbia*-class design and existing nuclear-powered submarines

and aircraft carriers in the fleet. The increased level of investment in this Future Years Nuclear Security Program (FYNSP) will help address the atrophy of critical skills in the industrial base so that Naval Reactors can accelerate the pace of innovation and compete globally. To meet the growing strategic threat from China and Russia, Naval Reactors is partnering with NNL and industry to identify and develop cutting-edge technologies to aggressively improve propulsion plant capability and reduce design, acquisition, and lifecycle costs and timespans. This investment in R&D will continue critical progress in maintaining the U.S. Navy's dominance in the maritime domain.



## **Naval Reactors Future Advanced Submarine Technology**

### **Overview**

Since the commissioning of USS Nautilus in 1954, Naval Reactors has demonstrated the superior ability to design and deliver militarily effective naval nuclear propulsion plants to counter global threats, maintaining maritime superiority and an undersea advantage over our adversaries. Naval Reactors' investment in technology and critical design expertise for the next generation of submarine designs is essential to ensure maritime superiority is maintained into the future. Sustained investment in reactor plant technologies is required for agile response to Navy demands for increased capabilities as the global threat environment and adversary capabilities evolve. Future Advanced Submarine Technology (FAST) encompasses Naval Reactors' investment in technology and critical design expertise to support design of the propulsion plant for the Navy's next generation attack submarine.

FAST resources directly support the next generation attack submarine propulsion plant design as driven by capability goals set by the Navy. A gap analysis of the current fleet has identified the need for: (1) greater speed; (2) increased payload capacity; (3) improved acoustics; and (4) increased operational availability. In addition, Naval Reactors is working to develop technologies that address current submarine enterprise challenges by evolving propulsion plant designs to be more affordable, easier to sustain, and to take advantage of modern manufacturing techniques. Technology development is required to close these gaps.

Work within FAST is synchronized with Navy timelines for development of the next generation attack submarine propulsion plant design. The FAST-funded design work includes reactor plant concept and detail design, core concept design, reactor plant instrumentation and control design, reactor plant configuration, reactor coolant pump design, and applications of matured acoustics technology. Naval Reactors requests \$96,600,000 for this effort in FY 2027 to support current Navy timelines.

In addition to preparing for and executing the next generation attack submarine design, FAST resources maintain critical design skills that are not frequently exercised in support of existing ship classes and would be difficult to reconstitute if lost. Historically, these skills, such as core design and reactor plant system design, were exercised and maintained through the relatively frequent design of propulsion plants for new or existing prototypes and ship classes. However, in recent years, these skills have been underutilized due to the 22-year gap between submarine propulsion plant designs (*Columbia*-class and SSN(X)), the longest period between designs in Naval Reactors history. This gap in design work presents a risk that must be carefully managed to ensure design capabilities are not lost. To address this risk, the current budget request is based on defining the trade space for de-risking technology and sustaining critical design skills through insertions of SSN(X) technology into existing ship classes. The primary target for SSN(X) technology insertion will be propulsion plant design improvements for a future block of *Virginia*-class, titled the Improved Performance Machinery Program Phase IV (IPMP IV). Consistent with efforts for past submarine classes, the IPMP IV plant will deliver increased capability to the *Virginia*-class while enabling SSN(X) by preventing the loss of critical design skills and de-risking new technologies. This ensures that the highly specialized design teams at Navy laboratories and nuclear-capable Shipyards are sustained, prepared to execute the SSN(X) and other future designs. Therefore, this budget request accounts for the update to SSN(X) timing in the Navy's FY 2025 Shipbuilding Plan.

In contrast with Naval Reactors' base technology development efforts, FAST contains resources required to design a new propulsion plant and implement matured technologies. After the start of a formal design, this line contains all resources required to execute the anticipated SSN(X) design.

## **Highlights and Major Changes in the FY 2027 Budget Request**

The increase of \$29,100,000 over FY 2026 Enacted levels supports ramp up of conceptual design activities for reactor plant components and systems, prototyping and testing, reactor plant arrangement studies, and technology implementation required to support capabilities identified by the Navy for the next generation attack submarine. This funding maximizes benefit to the fleet in reactor plant components and improvements in reactor equipment, steam generator design, analysis, and processes.

## **Naval Reactors**

### ***Columbia*-Class Reactor Systems Development**

#### **Overview**

*Ohio*-class ballistic missile submarines (SSBNs) have been the backbone of the Nation's sea-based strategic deterrent since the early 1980s. Recapitalization of this strategic asset is required as the *Ohio*-class retires. With the *Columbia*-class, the Navy plans to maintain its sea-based strategic deterrent force with a class of 12 ships, two fewer than today's *Ohio*-class, due in part to a life-of-ship-core. This new life-of-ship core will eliminate the need for mid-life reactor refuelings (mid-life refueling overhauls are an over-three-year evolution during which the ship is unavailable for service). By increasing class operational availability, development of a new reactor plant for the *Columbia*-class will permit 12 *Columbia*-class submarines to do the work of 14 *Ohio*-class submarines—an operational and sustainment savings of over \$40 billion over the life of the class.

Research, development, and design for the *COLUMBIA*-class SSBN began in FY 2010. The new design will leverage *Virginia*-class technology, as well as manufacturing development and demonstration efforts being performed as part of the land-based S8G Prototype Refueling Overhaul program. Naval Reactors must design a new reactor plant to meet the Navy's required capabilities, maximize operational availability, and reduce acquisition and lifecycle costs. The DOE reactor plant design and development work for the *Columbia*-class includes oversight of the manufacture of lead ship reactor plant components including the core and conduct the requisite safety analysis for the lead ship reactor plant.

Work to support the *COLUMBIA*-class SSBN is tightly synchronized with Navy funded propulsion plant work. The DOE funded design work includes reactor plant component design and development, core design analysis and manufacturing development, reactor plant instrumentation and control design and development, reactor plant configuration, reactor systems development and integration, and reactor performance, analysis, and validation. Lead submarine construction began in FY 2021. Naval Reactors requests \$29,700,000 for this effort in FY 2027.

#### **Highlights and Major Changes in the FY 2027 Budget Request**

The decrease of \$5,600,000 over FY 2026 Enacted levels is consistent with the project's planned funding profile enabling 100 percent completion of DOE funded design work in FY 2027 and subsequent ship delivery to the fleet.

## **Naval Reactors Program Direction**

### **Overview**

Due to the essential nature of nuclear reactor work, Naval Reactors provides centrally controlled, technical management of program operations. Federal employees directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories. In addition, these employees' interface with other DOE offices and local, state, and Federal regulatory agencies.

Naval Reactors' federal employees are typically recruited from a community of highly trained military engineers who have completed a rigorous five-year on-the-job training program unique to Naval Reactors. This training program has groomed engineers with skill sets far beyond that of nuclear engineers found in the commercial and federal sectors.

Training funds are essential to maintaining the high level of expertise required for the oversight of facilities worldwide. These resources support comprehensive training programs and in-person workshops designed to continually enhance technical skills, broaden professional knowledge, and reinforce mission-critical competencies. Ongoing investment in training not only ensures employees remain prepared to address evolving challenges, but also safeguards organizational continuity by supporting succession planning and mitigating the impacts of retirements and workforce attrition.

Other Related Expenses fund a wide range of mission-support activities essential to Naval Reactors' operations. These include security, contractor support, travel, equipment purchases, employee incentive awards, and permanent change of station (PCS) costs. Funding also provides for communications, rent and utilities, outreach efforts, postage and courier services, and other contracted services required to sustain daily operations. Collectively, these expenses ensure program continuity, strengthen organizational infrastructure, and provide the flexibility to meet both current and emerging mission demands.

### **Highlights and Major Changes in the FY 2027 Budget Request**

This increase (+16.7%) provides the necessary resources to achieve and maintain approved staffing levels, ensuring continued funding for Naval Reactors' personnel pay and benefits. It also funds Information Technology (IT) and equipment maintenance to uphold technical readiness, strengthens physical security at both Naval Reactors Headquarters and Field Office, continues critical contractor support, and supports efforts to streamline administrative services. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding. The FY 2027 request reflects the total funding requirements, excluding the use of carryover funds. These investments ensure ongoing operational effectiveness and workforce development, enabling the successful execution of the Naval Reactor's mission.

**Program Direction<sup>1</sup>**  
**(\$K)**

|                                                      | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| Salaries and Benefits                                | 37,791                     | 40,231                     | 42,831                     |
| Training                                             | 440                        | 449                        | 1,360                      |
| Other Related Expenses                               | 5,345                      | 3,502                      | 7,401                      |
| <b>Total, Naval Reactors Headquarters</b>            | <b>43,576</b>              | <b>44,183</b>              | <b>51,593</b>              |
| Salaries and Benefits                                | 15,634                     | 15,843                     | 16,867                     |
| Training                                             | 164                        | 167                        | 536                        |
| Other Related Expenses                               | 2,167                      | 1,347                      | 2,846                      |
| <b>Total, Naval Reactors Laboratory Field Office</b> | <b>17,964</b>              | <b>17,357</b>              | <b>20,248</b>              |
| Salaries and Benefits                                | 53,424                     | 56,074                     | 59,698                     |
| Training                                             | 604                        | 617                        | 1,896                      |
| Other Related Expenses                               | 7,512                      | 4,849                      | 10,247                     |
| <b>Total, Program Direction</b>                      | <b>61,540</b>              | <b>61,540</b>              | <b>71,841</b>              |
| <b>Total Federal FTEs</b>                            | <b>230</b>                 | <b>246</b>                 | <b>246</b>                 |

**Program Direction**  
**Outyears (\$K)**

|                                                      | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Salaries and Benefits                                | 44,793                     | 45,506                     | 46,231                     | 47,202                     |
| Training                                             | 1,955                      | 1,995                      | 2,029                      | 2,072                      |
| Other Related Expenses                               | 8,598                      | 9,551                      | 9,292                      | 9,486                      |
| <b>Total, Naval Reactors Headquarters</b>            | <b>55,345</b>              | <b>57,051</b>              | <b>57,552</b>              | <b>58,760</b>              |
| Salaries and Benefits                                | 17,744                     | 18,116                     | 18,495                     | 18,884                     |
| Training                                             | 178                        | 182                        | 186                        | 189                        |
| Other Related Expenses                               | 3,223                      | 3,666                      | 3,620                      | 3,696                      |
| <b>Total, Naval Reactors Laboratory Field Office</b> | <b>21,146</b>              | <b>21,964</b>              | <b>22,301</b>              | <b>22,769</b>              |
| Salaries and Benefits                                | 62,537                     | 63,622                     | 64,726                     | 66,086                     |
| Training                                             | 2,133                      | 2,176                      | 2,215                      | 2,261                      |
| Other Related Expenses                               | 11,821                     | 13,217                     | 12,912                     | 13,181                     |
| <b>Total, Program Direction</b>                      | <b>76,491</b>              | <b>79,015</b>              | <b>79,853</b>              | <b>81,529</b>              |
| <b>Total Federal FTEs</b>                            | <b>252</b>                 | <b>252</b>                 | <b>252</b>                 | <b>252</b>                 |

<sup>1</sup> Totals on this page may not sum due to rounding.

**Program Direction**  
**Activities and Explanation of Changes**  
**(\$K)**

| <b>FY 2026 Enacted</b>                                                                                                                                                                                                                                                                                                | <b>FY 2027 Request</b>                                                                                                                                                                                                                                                                                                 | <b>Explanation of Changes<br/>FY 2027 Request vs FY 2026 Enacted</b>                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Program Direction</b>                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |
| <b>61,540</b>                                                                                                                                                                                                                                                                                                         | <b>71,841</b>                                                                                                                                                                                                                                                                                                          | <b>+10,301</b>                                                                                                                                                                                                                               |
| Salaries and Benefits                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |
| 56,074                                                                                                                                                                                                                                                                                                                | 59,698                                                                                                                                                                                                                                                                                                                 | +3,624                                                                                                                                                                                                                                       |
| Federal salaries and benefits for employees that directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories.                                         | Federal salaries and benefits for employees that directly oversee and set policies and procedures for developing new reactor plants, operating existing reactor plants, facilities supporting these plants, contractors, and the Bettis and Knolls Atomic Power Laboratories.                                          | This funding level supports personnel pay-related costs and provides the resources necessary to restore and sustain staffing to the approved 246 FTE level, compared to the 230 FTE average executed in FY 2025.                             |
| <i>Training</i>                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |
| 617                                                                                                                                                                                                                                                                                                                   | 1,896                                                                                                                                                                                                                                                                                                                  | +1,279                                                                                                                                                                                                                                       |
| Provide training necessary to ensure personnel maintain the technical expertise required to support mission success and operational readiness. Develop and sustain the next generation of the workforce through structured training and professional development to ensure continuity amid retirements and attrition. | Provide training necessary to ensure personnel maintain the technical expertise required to support mission success and operational readiness. Develop and sustain the next generation of the workforce through structured training and professional development to ensure continuity amid retirements and attrition.  | The increase reflects the funding required to support planned training activities. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding.                                                           |
| <i>Other Related Expenses</i>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |
| 4,849                                                                                                                                                                                                                                                                                                                 | 10,247                                                                                                                                                                                                                                                                                                                 | +5,398                                                                                                                                                                                                                                       |
| Maintenance of Naval Reactors' IT hardware, engineering software, and related licenses supporting mission essential technical work. Resources also provide for limited equipment purchases, PCS costs, communications, and other services necessary to maintain core operations.                                      | Funding restores capacity for IT hardware, engineering software, and equipment purchases to meet essential technical requirements. Resources also strengthen security and workforce support costs while continuing to provide for contractor services, communications, and utilities to ensure operational continuity. | The increase reflects the funding required to fully support mission needs, sustain technical readiness, and maintain operational resilience. FY 2026 activities were executed using the enacted funding level and FY 2025 carryover funding. |

**Program Direction<sup>1</sup>**  
**Other Related Expenses**  
**(\$K)**

|                                          | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------|----------------------------|----------------------------|----------------------------|
| Security                                 | 1,036                      | 605                        | 1,571                      |
| Contract Support                         | 1,274                      | 881                        | 1,486                      |
| Travel                                   | 1,677                      | 838                        | 2,043                      |
| Equipment                                | 1,490                      | 215                        | 1,876                      |
| Employee Incentive Awards                | 1,149                      | 1,867                      | 1,826                      |
| PCS                                      | 557                        | 225                        | 910                        |
| Communications, Other Rent and Utilities | 191                        | 127                        | 309                        |
| Outreach                                 | 80                         | 54                         | 133                        |
| Postage and Courier                      | 12                         | 8                          | 19                         |
| Other Services                           | 45                         | 30                         | 74                         |
| <b>Total, Other Related Expenses</b>     | <b>7,512</b>               | <b>4,849</b>               | <b>10,247</b>              |

**Program Direction**  
**Other Related Expenses**  
**Outyears (\$K)**

|                                          | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> |
|------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Security                                 | 1,591                      | 1,767                      | 1,638                      | 1,564                      |
| Contract Support                         | 1,777                      | 1,969                      | 1,890                      | 1,933                      |
| Travel                                   | 2,463                      | 2,751                      | 2,662                      | 2,745                      |
| Equipment                                | 2,106                      | 2,337                      | 2,474                      | 2,564                      |
| Employee Incentive Awards                | 2,198                      | 2,453                      | 2,371                      | 2,442                      |
| PCS                                      | 1,093                      | 1,217                      | 1,174                      | 1,206                      |
| Communications, Other Rent and Utilities | 373                        | 417                        | 403                        | 416                        |
| Outreach                                 | 108                        | 183                        | 179                        | 187                        |
| Postage and Courier                      | 23                         | 25                         | 25                         | 25                         |
| Other Services                           | 89                         | 99                         | 96                         | 99                         |
| <b>Total, Other Related Expenses</b>     | <b>11,821</b>              | <b>13,217</b>              | <b>12,912</b>              | <b>13,181</b>              |

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<sup>1</sup> Totals on this page may not sum due to rounding.

**Naval Reactors  
Capital Equipment Summary  
(\$K)**

|                                                                                                | <b>Total</b> | <b>Prior<br/>Years</b> | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|------------------------------------------------------------------------------------------------|--------------|------------------------|----------------------------|----------------------------|----------------------------|
| <b>Capital Equipment (&gt; \$500K)</b>                                                         |              |                        |                            |                            |                            |
| Total Non-MIE Capital Equipment (TEC<br><\$10M)                                                | N/A          | N/A                    | 48,518                     | 14,250                     | 1,732                      |
| Consolidated Steam Water Test Loops, BL<br>M-140 Cranes, Naval Spent Fuel Handling<br>Facility | 41,015       | 15,505                 | 12,410                     | -                          | 13,100                     |
|                                                                                                | 15,000       | -                      | -                          | -                          | 15,000                     |
| <b>Total, Capital Equipment</b>                                                                | <b>N/A</b>   | <b>N/A</b>             | <b>60,928</b>              | <b>14,250</b>              | <b>29,832</b>              |

**Outyears Capital Equipment Summary  
(\$K)**

|                                                 | <b>FY 2028<br/>Request</b> | <b>FY 2029<br/>Request</b> | <b>FY 2030<br/>Request</b> | <b>FY 2031<br/>Request</b> | <b>Outyears</b> |
|-------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| <b>Capital Equipment (&gt; \$500K)</b>          |                            |                            |                            |                            |                 |
| Total Non-MIE Capital Equipment<br>(TEC <\$10M) | 17,300                     | 13,100                     | 9,250                      | 16,000                     | N/A             |
| <b>Total, Capital Equipment</b>                 | <b>17,300</b>              | <b>13,100</b>              | <b>9,250</b>               | <b>16,000</b>              | <b>N/A</b>      |



**25-D-530, Naval Examination Acquisition Project  
Naval Reactors Facility, Idaho Falls, Idaho  
Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The FY 2027 request for 25-D-530, Naval Examination Acquisition Project (NEAP), is \$80,000,000 to progress the detailed (preliminary & final) design. Critical Decision (CD)-0, *Approve Mission Need*, was approved on January 3, 2018, and CD-1, *Approve Alternative Selection and Cost Range*, was approved on May 23, 2025, with a preferred alternative to build a new facility and with an estimated CD-4 date of 4Q FY 2036. The cost range approved with CD-1 is \$1,630,000,000 to \$5,000,000,000 (then-year dollars). The point estimate associated with the current stage of the project is \$3,228,500,000 (then-year dollars). The management reserve and government contingency included in the cost estimate provides approximately 80% confidence in the project cost. The cost and schedule will be baselined with CD-2/3, *Performance Baseline and Start of Construction*. A Federal Project Manager (FPM) has been assigned to this project and has approved this construction project data sheet (CPDS). Other Project Costs (OPCs) are funded out of the Naval Reactors Operating program.

**Significant Changes**

This CPDS is an update of the FY 2026 CPDS and does not include a new start for the budget year. The Project has not experienced significant changes since approval of CD-1, which was reflected in the FY 2026 CPDS. This CPDS includes detail on outyear funding by fiscal year through the FYNSP.

**Critical Milestone History**

The schedule below represents an estimate and not a performance baseline, which will be developed in support of CD-2/3.

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1       | CD-3A      | Final Design Complete | CD-2/3     | D&D Complete <sup>1</sup> | CD-4       |
|-------------|------------|----------------------------|------------|------------|-----------------------|------------|---------------------------|------------|
| FY 2025     | 01/03/2018 | 2Q FY 2024                 | 2Q FY 2025 | 3Q FY 2028 | 4Q FY 2029            | 2Q FY 2030 | N/A                       | 4Q FY 2035 |
| FY 2026     | 01/03/2018 | 09/30/2024                 | 5/23/2025  | 3Q FY 2028 | 4Q FY 2029            | 2Q FY 2030 | N/A                       | 4Q FY 2036 |
| FY 2027     | 01/03/2018 | 09/30/2024                 | 5/23/2025  | 3Q FY 2028 | 4Q FY 2029            | 2Q FY 2030 | N/A                       | 4Q FY 2036 |

**CD-0** – Approve Mission Need for a construction project with a conceptual scope and cost range

**Conceptual Design Complete** – Actual date the conceptual design was completed

**CD-1** – Approve Alternate Selection and Cost Range

**CD-3A** – Approve Long Lead Procurement and Site Preparation

**Final Design Complete** – Actual date the facility design was completed

**CD-2/3** – Approve Performance Baseline and Start of Construction

**D&D Complete** – Completion of D&D work

**CD-4** – Approve Project Completion

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<sup>1</sup> D&D of the Expended Core Facility is not within the scope of this project.

## **Project Cost History (\$K)**

| <b>Fiscal Year</b> | <b>TEC, Design</b> | <b>TEC, Construction</b> | <b>TEC, Total</b> | <b>OPC, Except D&amp;D</b> | <b>OPC, D&amp;D</b> | <b>OPC, Total</b> | <b>TPC</b> |
|--------------------|--------------------|--------------------------|-------------------|----------------------------|---------------------|-------------------|------------|
| <b>FY 2025</b>     | 524,200            | 2,351,160                | 2,875,360         | 143,500                    | N/A                 | 143,500           | 3,018,860  |
| <b>FY 2026</b>     | 520,562            | 2,564,752                | 3,085,314         | 143,186                    | N/A                 | 143,186           | 3,228,500  |
| <b>FY 2027</b>     | 515,651            | 2,564,752                | 3,080,403         | 148,097                    | N/A                 | 148,097           | 3,228,500  |

## **2. Project Scope and Justification**

### **Scope**

The NEAP is a facility design and construction project. The project will recapitalize the capabilities for examining spent nuclear fuel that currently exists in the Expended Core Facility and its support facilities. The Project considered alternatives, including constructing a new facility on the Idaho National Laboratory and refurbishing the existing Naval Reactors examination infrastructure at the Expended Core Facility. The preferred alternative selected with CD-1 is to construct a new facility.

The following represents the general scope of the NEAP:

- Design and construct a facility and facility systems to examine naval spent nuclear fuel, poison, and structural materials, including the capability to receive, unload, prepare, and package examination specimens.
- Design and construct infrastructure needed to support examination of naval spent nuclear fuel, poison, and structural material.
- Design and procure equipment to make the facility ready for use to receive, unload, prepare, and package examination specimens of naval spent nuclear fuel, poison, and structural material.
- Prepare testing, operating, and preventive maintenance procedures and drawings, where appropriate, for the naval spent nuclear fuel examination process systems, equipment, facilities, and facility systems.
- Develop training programs and conduct personnel training, where appropriate.
- Develop project management procedures and manage Project activities.
- Provide support services needed for the Project.
- Manage subcontracts supporting the design and construction or refurbishment.
- Prepare an Environmental Assessment in accordance with the National Environmental Policy Act.

### **Justification**

Naval Reactors is responsible for providing the Nation with safe, effective, and affordable naval nuclear propulsion plants and ensuring their continued safe and reliable operation through lifetime support, research and development, design, construction, specification, certification, testing, maintenance, and disposal. Naval Reactors maintains total responsibility for all aspects of the U.S. Navy's nuclear propulsion systems. To support the continued operation of nuclear-powered vessels, it is critical that Naval Reactors maintain the capability to demonstrate acceptable operation of existing core designs, as well as to investigate and analyze unexpected conditions found during ship operation or upon refueling or defueling nuclear-powered vessels. To deliver cores with the capability required to support new weapons systems and operational capabilities in naval combatants, Naval Reactors must continue to design new and more capable reactors using the data obtained from examinations.

The Naval Reactors Facility, located on the Idaho National Laboratory, serves as the Naval Reactors focal point for the evaluation, preparation, and shipment of naval spent nuclear fuel. Operations in the Expended Core Facility include processing of highly radioactive naval spent nuclear fuel in water pools and non-destructive and destructive examinations of naval spent nuclear fuel samples in hot cells. Although the existing Expended Core Facility continues to be maintained and operated in a safe and environmentally responsible manner, the infrastructure is over 60 years old, does not meet current standards (i.e., requirements that were not applicable at the time of construction such as modern structural and seismic codes) and requires recapitalization.

The existing Expended Core Facility at the Naval Reactors Facility in Idaho is a single facility that is approximately 197,000 square feet. The Expended Core Facility has three major capabilities: (1) to receive, unload, prepare for packaging, and package naval spent nuclear fuel, (2) to prepare for examination and examine naval spent nuclear fuel, and (3) to prepare and examine irradiation test specimens from the Advanced Test Reactor. To cease operations in the aging Expended Core Facility, a three-part exit strategy is required to recapitalize the three distinct missions provided by the facility today. First, the Spent Fuel Handling Recapitalization Project (14-D-901) is constructing the Naval Spent Fuel Handling Facility to recapitalize the capabilities to receive, unload, prepare, and package naval spent nuclear fuel. Second, the Naval Examination Acquisition Project (25-D-530) is recapitalizing the capabilities to examine naval spent nuclear fuel. Lastly, the capability to prepare and examine irradiation test specimens will be recapitalized by separate efforts.

The NEAP plans to conduct an Environmental Assessment to consider the environmental impacts of the proposed alternative in accordance with the National Environmental Policy Act. The NEAP environmental analysis will rely on analysis from the Final EIS for Recapitalization of Infrastructure Supporting Naval Spent Nuclear Fuel Handling at the Idaho National Laboratory to the extent the previous analysis remains current and is applicable to NEAP construction and operations.

Naval Reactors has an equivalency to the project management requirements in DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*. The NEAP is being conducted in accordance with the Naval Reactors Implementation Bulletin for DOE O 413.3, and appropriate project management requirements have been met.

#### **Key Performance Parameters (KPPs)**

KPPs will be established as part of Critical Decision – 2/3, *Performance Baseline and Start of Construction*.

### 3. Financial Schedule (\$K) <sup>12</sup>

|                                   | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|-----------------------------------|--------------------------------------|------------------|------------------|
| <b>Total Estimated Cost (TEC)</b> |                                      |                  |                  |
| <b>Design</b>                     |                                      |                  |                  |
| FY 2025                           | 20,000                               | 20,000           | 6,448            |
| FY 2026                           | 40,000                               | 40,000           | 40,318           |
| FY 2027                           | 80,000                               | 80,000           | 77,611           |
| FY 2028                           | 115,000                              | 115,000          | 83,855           |
| FY 2029                           | 80,000                               | 80,000           | 70,401           |
| FY 2030                           | 75,000                               | 75,000           | 61,163           |
| FY 2031                           | 40,000                               | 40,000           | 48,762           |
| Outyears                          | 65,651                               | 65,651           | 127,094          |
| <b>Total Design</b>               | <b>515,651</b>                       | <b>515,651</b>   | <b>515,651</b>   |
| <b>Construction</b>               |                                      |                  |                  |
| FY 2025                           | -                                    | -                | -                |
| FY 2026                           | -                                    | -                | -                |
| FY 2027                           | -                                    | -                | -                |
| FY 2028                           | 15,000                               | 15,000           | 10,083           |
| FY 2029                           | 120,000                              | 120,000          | 29,480           |
| FY 2030                           | 350,000                              | 250,000          | 130,594          |
| FY 2031                           | 535,000                              | 435,000          | 306,010          |
| Outyears                          | 1,544,752                            | 1,444,752        | 1,788,585        |
| <b>Total Construction</b>         | <b>2,564,752</b>                     | <b>2,264,752</b> | <b>2,264,752</b> |
| <b>TEC</b>                        |                                      |                  |                  |
| FY 2025                           | 20,000                               | 20,000           | 6,448            |
| FY 2026                           | 40,000                               | 40,000           | 40,318           |
| FY 2027                           | 80,000                               | 80,000           | 77,611           |
| FY 2028                           | 130,000                              | 130,000          | 93,938           |
| FY 2029                           | 200,000                              | 200,000          | 99,881           |
| FY 2030                           | 425,000                              | 325,000          | 191,757          |
| FY 2031                           | 575,000                              | 475,000          | 354,772          |
| Outyears                          | 1,610,403                            | 1,510,403        | 1,915,679        |
| <b>Total TEC</b>                  | <b>3,080,403</b>                     | <b>2,780,403</b> | <b>2,780,403</b> |
| <b>Other Project Costs (OPC)</b>  |                                      |                  |                  |
| Prior Years                       | 90,541                               | 90,541           | 90,541           |
| FY 2025                           | 15,059                               | 15,059           | 15,059           |
| FY 2026                           | 1,659                                | 1,659            | 1,659            |
| FY 2027                           | 610                                  | 610              | 610              |

<sup>1</sup>Totals may not add due to rounding.

<sup>2</sup> Planned Obligations and Costs do not include \$300M in Government Contingency in Outyears

|                                  | Budget Authority<br>(Appropriations) | Obligations      | Costs            |
|----------------------------------|--------------------------------------|------------------|------------------|
| FY 2028                          | 613                                  | 613              | 613              |
| FY 2029                          | 1,014                                | 1,014            | 1,014            |
| FY 2030                          | 1,064                                | 1,064            | 1,064            |
| FY 2031                          | 4,291                                | 4,291            | 4,291            |
| Outyears                         | 33,246                               | 33,246           | 33,246           |
| <b>Total, OPC</b>                | <b>148,097</b>                       | <b>148,097</b>   | <b>148,097</b>   |
| <b>Total Project Costs (TPC)</b> |                                      |                  |                  |
| Prior Years                      | 90,541                               | 90,541           | 90,541           |
| FY 2025                          | 35,059                               | 35,059           | 21,507           |
| FY 2026                          | 41,659                               | 41,659           | 41,977           |
| FY 2027                          | 80,610                               | 80,610           | 78,221           |
| FY 2028                          | 130,613                              | 130,613          | 94,551           |
| FY 2029                          | 201,014                              | 201,014          | 100,895          |
| FY 2030                          | 426,064                              | 326,064          | 192,821          |
| FY 2031                          | 579,291                              | 479,291          | 359,063          |
| Outyears                         | 1,643,649                            | 1,543,649        | 1,948,925        |
| <b>Total TPC</b>                 | <b>3,228,500</b>                     | <b>2,928,500</b> | <b>2,928,500</b> |

#### 4. Details of Project Cost Estimate (\$K)

|                                                             |                        | Current<br>Total<br>Estimate | Previous<br>Total<br>Estimate <sup>1</sup> | Previous<br>Validated<br>Baseline |
|-------------------------------------------------------------|------------------------|------------------------------|--------------------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>                           |                        |                              |                                            |                                   |
| <b>Design</b>                                               |                        |                              |                                            |                                   |
|                                                             | Design                 | 388,989                      | 393,900                                    | N/A                               |
|                                                             | Management Reserve     | 126,662                      | 126,661                                    | N/A                               |
| <b>Total Design</b>                                         |                        | <b>515,651</b>               | <b>520,562</b>                             | <b>N/A</b>                        |
| <b>Construction</b>                                         |                        |                              |                                            |                                   |
|                                                             | Site Work              | 50,685                       | 50,685                                     | N/A                               |
|                                                             | Equipment              | 217,624                      | 217,624                                    | N/A                               |
|                                                             | Facility Construction  | 1,346,816                    | 1,346,816                                  | N/A                               |
|                                                             | Safety                 | 12,337                       | 12,337                                     | N/A                               |
|                                                             | Management Reserve     | 637,289                      | 637,289                                    | N/A                               |
|                                                             | Government Contingency | 300,000                      | 300,000                                    | N/A                               |
| <b>Total Construction</b>                                   |                        | <b>2,564,752</b>             | <b>2,564,752</b>                           | <b>N/A</b>                        |
| <b>Total Estimated Cost (TEC)</b>                           |                        | <b>3,080,403</b>             | <b>3,085,314</b>                           | <b>N/A</b>                        |
| <i>Management Reserve &amp; Contingency, TEC</i>            |                        | <i>1,063,951</i>             | <i>1,063,951</i>                           | <i>N/A</i>                        |
| <b>Other Project Costs (OPC)</b>                            |                        |                              |                                            |                                   |
| OPC except D&D                                              |                        |                              |                                            |                                   |
|                                                             | Conceptual Design      | 99,100                       | 95,133                                     | N/A                               |
|                                                             | NEPA                   | 7,834                        | 7,834                                      | N/A                               |
|                                                             | Start-up               | 28,410                       | 28,410                                     | N/A                               |
|                                                             | Closeout               | 4,092                        | 4,092                                      | N/A                               |
|                                                             | Management Reserve     | 8,660                        | 7,717                                      | N/A                               |
| <b>Total OPC</b>                                            |                        | <b>148,097</b>               | <b>143,186</b>                             | <b>N/A</b>                        |
| <i>Management Reserve, OPC</i>                              |                        | <i>7,717</i>                 | <i>7,717</i>                               | <i>N/A</i>                        |
| <b>Total Project Cost</b>                                   |                        | <b>3,228,500</b>             | <b>3,228,500</b>                           | <b>N/A</b>                        |
| <b>Total Management Reserve &amp; Contingency (TEC+OPC)</b> |                        | <b>1,071,668</b>             | <b>1,071,667</b>                           | <b>N/A</b>                        |

<sup>1</sup> Totals may not add due to rounding.

## 5. Schedule of Appropriation Requests (\$K)

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Out Years | Total     |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|
| FY 2025      | TEC  | -           | 45,000  | 90,000  | 110,000 | 125,000 | 200,000 | 585,000 | 630,000 | 1,090,360 | 2,875,360 |
|              | OPC  | 90,800      | 12,700  | 1,400   | 900     | 1,100   | 600     | 4,500   | 7,500   | 24,000    | 143,500   |
|              | TPC  | 90,800      | 57,700  | 91,400  | 110,900 | 126,100 | 200,600 | 589,500 | 637,500 | 1,114,360 | 3,018,860 |
| FY 2026      | TEC  | -           | 20,000  | 60,000  | -       | -       | -       | -       | -       | 3,005,314 | 3,085,314 |
|              | OPC  | 90,541      | 11,092  | 1,659   | -       | -       | -       | -       | -       | 39,895    | 143,186   |
|              | TPC  | 90,541      | 31,092  | 61,659  | -       | -       | -       | -       | -       | 3,045,209 | 3,228,500 |
| FY 2027      | TEC  | -           | 20,000  | 40,000  | 80,000  | 130,000 | 200,000 | 425,000 | 575,000 | 1,610,403 | 3,080,403 |
|              | OPC  | 90,541      | 15,059  | 1,659   | 610     | 613     | 1,014   | 1,064   | 4,291   | 33,246    | 148,097   |
|              | TPC  | 90,541      | 35,059  | 41,659  | 80,610  | 130,613 | 201,014 | 426,064 | 579,291 | 1,643,649 | 3,228,500 |

## 6. Related Operations and Maintenance Funding Requirements

|                                            |            |
|--------------------------------------------|------------|
| Start of Operation of Beneficial Occupancy | 1Q FY 2037 |
| Expected Useful Life                       | 40 years   |
| Expected Future Start of D&D               | 1Q FY 2077 |

### Related Funding Requirements (\$M)

| Funding Requirements                   | Annual Costs (FY37 \$) |                  | Life Cycle Costs (then-year \$) |                  |
|----------------------------------------|------------------------|------------------|---------------------------------|------------------|
| Estimate Totals                        | Previous Estimate      | Current Estimate | Previous Estimate               | Current Estimate |
| Operations and Maintenance             | 45.6                   | 45.6             | 3,397.3                         | 3,397.3          |
| Future Installations and Refurbishment | N/A                    | N/A              | 1,021.6                         | 1,021.6          |

## 7. D&D Information

The new area being constructed in this project is replacing existing facility capabilities. However, preparation and examination of irradiation test specimens in the existing Expended Core Facility will continue until that capability is recapitalized; therefore, the costs associated with D&D of the Expended Core Facility are not included in the costs cited for the NEAP. The new area being constructed by this Project at the Naval Reactors Facility is 94,800 ft<sup>2</sup>.

|                                                                                                                                | Square Feet |
|--------------------------------------------------------------------------------------------------------------------------------|-------------|
| New area being constructed by this Project at the Naval Reactors Facility                                                      | 94,800      |
| Area of D&D in this Project at the Naval Reactors Facility                                                                     | -           |
| Area at the Naval Reactors Facility to be transferred, sold, and/or D&D outside the project including area previously “banked” | -           |
| Area of D&D in this Project at other sites                                                                                     | -           |
| Area at other sites to be transferred, sold, and/or D&D outside the Project including area previously “banked”                 | -           |
| Total area eliminated                                                                                                          | -           |

## 8. Acquisition Approach

The integrated Management & Operating (M&O) prime partners will plan and execute the NEAP in accordance with requirements. Naval spent nuclear fuel examination equipment will be procured through the procurement M&O partners as appropriate. An Architecture / Engineering firm was selected as the subcontracting strategy for development of a conceptual design. The M&O prime contractor will subcontract detailed design with an Architecture / Engineering firm and will subcontract construction to a construction manager via a Construction Manager at Risk arrangement.



**14-D-901, Spent Fuel Handling Recapitalization Project**  
**Naval Reactors Facility, Idaho**  
**Project is for Design and Construction**

**1. Summary, Significant Changes, and Schedule and Cost History**

**Summary**

The Fiscal Year (FY) 2027 Request for 14-D-901, Spent Fuel Handling Recapitalization Project (SFHP) is \$691,953,000. The FY 2027 budget request will enable the project to continue permanent construction activities such as installation of the main process building siding and roofing, installation of the process and utility systems, and completion of the spent fuel pools. Critical Decision (CD)-2/3, *Performance Baseline and Start of Permanent Construction*, was approved on September 24, 2018, with a Total Project Cost (TPC) of \$1,686,500,000 and a CD-4 of 3Q FY 2025. On May 7, 2025, a fourth revision to the Performance Baseline was approved with a TPC of \$4,532,898,000 and a CD-4 date of 4Q FY 2031. The Performance Baseline revision provides an 80 percent confidence level the project can be completed within the TPC.

Funding within the project's line-item is controlled at the TPC level; funds are available to perform both Total Estimated Cost (TEC) -type and Other Project Cost (OPC)-type activities.

**Significant Changes**

This Construction Project Data Sheet (CPDS) is an update of the FY 2026 CPDS and does not include a new start for the budget year. The FY 2027 request of \$691,953,000 supports Project execution in accordance with the Performance Baseline revision approved by Naval Reactors on May 7, 2025. The majority of the request is necessary to fund the peak year of the Project's largest construction contract, which will outfit the facility with the process and utility systems required for operations. This contract was awarded in May 2025.

**Critical Milestone History**

| Fiscal Year | CD-0       | Conceptual Design Complete | CD-1       | CD-2       | Final Design Complete | CD-3       | D&D Complete | CD-4     |
|-------------|------------|----------------------------|------------|------------|-----------------------|------------|--------------|----------|
| FY 2014     | 03/29/2008 |                            | 1QFY2014   | 3QFY2015   | 4QFY2016              | 4QFY2016   | N/A          | 4QFY2022 |
| FY 2015     | 03/29/2008 |                            | 1QFY2014   | 3QFY2015   | 4QFY2016              | 4Q FY 2016 | N/A          | 4QFY2022 |
| FY 2015 Rev | 03/29/2008 |                            | 1QFY2015   | 3QFY2017   | 4QFY2018              | 1Q FY 2018 | N/A          | 4QFY2024 |
| FY 2016     | 03/29/2008 |                            | 2QFY2015   | 1QFY2018   | 4QFY2019              | 4QFY2018   | N/A          | 3QFY2025 |
| FY 2017     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 1QFY2018   | 3QFY2020              | 4QFY2018   | N/A          | 3QFY2025 |
| FY 2018     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 4QFY2018   | 3QFY2020              | 4QFY2018   | N/A          | 3QFY2025 |
| FY 2019     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 4QFY2018   | 3QFY2020              | 4QFY2018   | N/A          | 3QFY2025 |
| FY 2020     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 3QFY2020              | 09/24/2018 | N/A          | 3QFY2025 |
| FY 2021     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 2QFY2021              | 09/24/2018 | N/A          | 3QFY2026 |
| FY 2022     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 3QFY2026 |
| FY 2023     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 3QFY2026 |
| FY 2024     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 4QFY2028 |
| FY 2025     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 4QFY2029 |
| FY 2026     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 4QFY2031 |
| FY 2027     | 03/29/2008 | 03/19/2015                 | 03/19/2015 | 09/24/2018 | 03/04/2021            | 09/24/2018 | N/A          | 4QFY2031 |

**CD-0** – Approve Mission Need

**Conceptual Design Complete** – Actual date the conceptual design was completed

**CD-1** – Approve Alternate Selection and Cost Range

**CD-2** – Approve Performance Baseline

**Final Design Complete** – Actual date the facility design was completed

**CD-3** – Approve Start of Construction/Execution

**D&D Complete** – Completion of D&D work (see Section 5)

**CD-4** – Approve Start of Operations or Project Completion

| Fiscal Year | CD-3A     | CD-3B     | CD-4A    |
|-------------|-----------|-----------|----------|
| FY 2017     | 2QFY2017  | 1QFY2018  | 3QFY2024 |
| FY 2018     | 12/7/2016 | 4QFY2017  | 3QFY2024 |
| FY 2019     | 12/7/2016 | 6/14/2017 | 3QFY2024 |
| FY 2020     | 12/7/2016 | 6/14/2017 | 3QFY2024 |
| FY 2021     | 12/7/2016 | 6/14/2017 | 3QFY2025 |
| FY 2022     | 12/7/2016 | 6/14/2017 | 3QFY2025 |
| FY 2023     | 12/7/2016 | 6/14/2017 | 3QFY2025 |
| FY 2024     | 12/7/2016 | 6/14/2017 | 2QFY2027 |
| FY 2025     | 12/7/2016 | 6/14/2017 | 2QFY2028 |
| FY 2026     | 12/7/2016 | 6/14/2017 | 4QFY2030 |
| FY 2027     | 12/7/2016 | 6/14/2017 | 4QFY2030 |

**CD-3A** – Start of Long Lead Material Procurement

**CD-3B** – Start of Early Site Preparation

**CD-4A** – Start of M-290 Shipping Container Unloading Operations

### **Project Cost History (\$K)**

| Fiscal Year | TEC,<br>Design | TEC,<br>Construction | TEC,<br>Total | OPC,<br>Except<br>D&D | OPC,<br>D&D | OPC,<br>Total | TPC       |
|-------------|----------------|----------------------|---------------|-----------------------|-------------|---------------|-----------|
| FY 2014     | 369,400        | 917,100              | 1,286,500     | 165,000               | N/A         | 165,000       | 1,451,500 |
| FY 2015     | 369,400        | 917,100              | 1,286,500     | 165,000               | N/A         | 165,000       | 1,451,500 |
| FY 2015 Rev | 263,000        | 1,144,900            | 1,407,900     | 178,200               | N/A         | 178,200       | 1,586,200 |
| FY 2016     | 268,800        | 1,182,100            | 1,450,900     | 195,600               | N/A         | 195,600       | 1,646,500 |
| FY 2017     | 239,800        | 1,232,600            | 1,472,400     | 174,100               | N/A         | 174,100       | 1,646,500 |
| FY 2018     | 239,800        | 1,232,600            | 1,472,400     | 174,100               | N/A         | 174,100       | 1,646,500 |
| FY 2019     | 306,982        | 1,165,418            | 1,472,400     | 174,100               | N/A         | 174,100       | 1,646,500 |
| FY 2020     | 302,489        | 1,169,911            | 1,472,400     | 174,100               | N/A         | 174,100       | 1,686,500 |
| FY 2021     | 278,860        | 1,607,140            | 1,886,000     | 174,000               | N/A         | 174,000       | 2,060,000 |
| FY 2022     | 276,896        | 1,609,104            | 1,886,000     | 174,000               | N/A         | 174,000       | 2,060,000 |
| FY 2023     | 332,288        | 1,826,712            | 2,159,000     | 174,000               | N/A         | 174,000       | 2,333,000 |
| FY 2024     | 332,288        | 2,491,339            | 2,823,627     | 176,373               | N/A         | 176,373       | 3,000,000 |
| FY 2025     | 332,288        | 2,491,339            | 2,823,627     | 176,373               | N/A         | 176,373       | 3,000,000 |
| FY 2026     | 332,288        | 4,013,854            | 4,346,143     | 186,755               | N/A         | 186,857       | 4,533,000 |
| FY 2027     | 332,288        | 4,013,742            | 4,346,031     | 186,867               | N/A         | 186,867       | 4,532,898 |

## **2. Project Scope and Justification**

### **Scope**

The SFHP will design and construct a new facility, the Naval Spent Fuel Handling Facility, to incorporate the capabilities for naval spent nuclear fuel handling that currently exist in the Expended Core Facility and its support facilities. Additionally, a major portion of this new facility is required to support additional capability, which does not exist in the Expended Core Facility, to handle full-length aircraft carrier naval spent nuclear fuel received in M-290 shipping containers. The Naval Spent Fuel Handling Facility footprint will be approximately 213,000 square feet. Of this, approximately 121,000 square feet is required for spent fuel shipping container and dry storage operations, which includes approximately 17,000 square feet for water pool spent fuel preparation and in-process storage. The remainder of the facility, approximately 92,000 square feet, is required for waste management, facility systems operations, staging, and administrative office space. The SFHP has completed final design and site preparation and is in the construction phase.

The following represents the general scope of the SFHP :

- Design and construct a facility and facility systems for naval spent nuclear fuel handling, including the capability to receive, unload, prepare, and package naval spent nuclear fuel.
- Design and construct infrastructure needed to support naval spent nuclear fuel handling operations.
- Design and procure equipment to make the facility ready for use to receive, unload, prepare, and package naval spent nuclear fuel, where appropriate.
- Provide the new capability to unload M-290 spent fuel shipping containers.
- Prepare testing, operating, and preventive maintenance procedures and drawings, where appropriate, for the naval spent nuclear fuel handling process systems, equipment, facilities, and facility systems.
- Develop training programs and conduct personnel training, where appropriate.
- Develop project management procedures and manage Project activities.
- Provide support services needed for the Project.
- Manage subcontracts supporting the design and construction.
- Prepare an Environmental Impact Statement in accordance with the National Environmental Policy Act.

### **Justification**

The mission of Naval Reactors is to provide the nation with militarily effective nuclear propulsion plants and to ensure their safe, reliable, long-lived, and affordable operation. Naval Reactors maintains total responsibility for all aspects of the United States (U.S.) Navy's nuclear propulsion systems, including research, design, construction, testing, operation, maintenance, and disposal. At the end of reactor service life, Naval Reactors transports naval spent nuclear fuel from its origin (e.g., servicing shipyards and naval training platforms) to the Naval Reactors Facility at the Idaho National Laboratory (INL).

The Expended Core Facility, located at the Naval Reactors Facility in Idaho, is the only facility with the capabilities to receive naval spent nuclear fuel shipping containers and process naval spent nuclear fuel. Although the existing Expended Core Facility continues to be maintained and operated in a safe and environmentally responsible manner, the infrastructure is over 60 years old, does not meet current standards (i.e., requirements that were not applicable at the time of construction), and requires recapitalization. The Expended Core Facility is also incapable of receiving full-length aircraft carrier naval spent nuclear fuel, which is required to support aircraft carrier refuelings. The magnitude of required sustainment efforts and incremental infrastructure upgrades within the Expended Core Facility pose substantial risk to the continued preparation of naval spent nuclear fuel for long term storage. Specifically, sustainment efforts could require delays to naval spent nuclear fuel shipping container unloading operations, which would interrupt refueling and defueling schedules for nuclear-powered vessels and would adversely affect the operational availability of the nuclear fleet. If this interruption were to extend over long periods of time, the ability to sustain fleet operations would

be impacted, resulting ultimately in a significant decrement to the Navy's responsiveness and agility to fulfill military missions worldwide.

The existing Expended Core Facility at the Naval Reactors Facility in Idaho is a single facility that is approximately 197,000 square feet. The Expended Core Facility has three major capabilities: (1) to receive, unload, prepare for packaging, and package naval spent nuclear fuel, (2) to prepare for examination and examine naval spent nuclear fuel, and (3) to prepare and examine irradiation test specimens from the Advanced Test Reactor. To cease operations in the aging Expended Core Facility, a three-part exit strategy is required to recapitalize the three distinct missions provided by the facility today. First, the SFHP (14-D-901) is constructing the Naval Spent Fuel Handling Facility to recapitalize the capabilities to receive, unload, prepare, and package naval spent nuclear fuel. Second, the Naval Examination Acquisition Project (25-D-530) is recapitalizing the capabilities to examine naval spent nuclear fuel. Lastly, the capability to prepare and examine irradiation test specimens will be recapitalized by separate efforts.

Actions necessary to continue Naval Reactors' ability to support naval spent nuclear fuel handling were the subject of an Environmental Impact Statement. The Final Environmental Impact Statement for recapitalization of the infrastructure supporting naval spent nuclear fuel was published on September 30, 2016, and included an assessment of the environmental impacts associated with handling of naval spent nuclear fuel for the following alternatives:

- (1) No Action Alternative – Maintain the naval spent nuclear fuel handling capabilities of the existing Expended Core Facility by continuing to use the existing infrastructure while performing corrective maintenance and repairs.
- (2) Overhaul Alternative – Recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility by overhauling the existing facility with major refurbishment projects for the infrastructure and water pools.
- (3) New Facility Alternative, including the SFHP – Recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility by constructing and operating a new facility at one of two potential locations at the Naval Reactors Facility in Idaho.

The National Environmental Policy Act Record of Decision, which identified the New Facility Alternative as the preferred method to recapitalize the naval spent nuclear fuel handling capabilities of the Expended Core Facility, was published on December 5, 2016.

Naval Reactors has an equivalency to the project management requirements in DOE Order 413.3, *Program and Project Management for the Acquisition of Capital Assets*. The Project is being conducted in accordance with the Naval Reactors Implementation Bulletin for DOE Order 413.3, and appropriate project management requirements have been met.

Prior to CD-2/3 approval, an independent cost estimate was completed by the Department of Defense Office of Cost Assessment and Program Evaluation.

#### **Key Performance Parameters (KPPs)**

The Threshold KPPs represent the minimum acceptable performance that the project must achieve. Achievement of the Threshold KPPs will be a prerequisite for approval of CD-4, Project Completion. The KPPs were formally established as part of the Performance Baseline and approval of CD-2/3. The current SFHP Performance Baseline supports exceeding the Threshold KPPs.

| <b>Performance Measure</b>                                                                                                                          | <b>Threshold</b>                                                                                                | <b>Objective</b>                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Provide the facility (infrastructure) to receive, unload, prepare, and package full-length aircraft carrier and submarine naval spent nuclear fuel. | An approximately 185,000 square foot facility, which includes an approximate 15,000 square foot water pool.     | An approximately 245,000 square foot facility, which includes an approximate 20,000 square foot water pool.         |
| Provide equipment to receive and unload naval spent nuclear fuel.                                                                                   | Receive and unload 7 M-290 shipping containers per year.                                                        | Receive and unload 9 M-290 and 12 M-140 shipping containers per year.                                               |
| Provide equipment to initially inspect and prepare naval spent nuclear fuel for ultimate disposal.                                                  | Initially inspect and prepare 62 full-length NIMITZ Class aircraft carrier spent nuclear fuel modules per year. | Initially inspect and prepare 96 full-length aircraft carrier and 64 submarine spent nuclear fuel modules per year. |
| Provide equipment to package naval spent nuclear fuel into canisters for dry storage.                                                               | Package 6 naval spent fuel canisters per year.                                                                  | Package 10 naval spent fuel canisters per year.                                                                     |
| Provide equipment to temporarily store naval spent nuclear fuel in the water pool.                                                                  | Storage for 126 full-length NIMITZ Class aircraft carrier spent nuclear fuel modules.                           | Storage for 408 aircraft carrier and submarine spent nuclear fuel modules.                                          |
| Provide equipment to manage remote-handled low-level waste generated from receiving, unloading, preparing, and packaging spent nuclear fuel.        | Package and ship 9 remote-handled low level waste canisters per year.                                           | Package and ship 20 remote-handled low level waste canisters per year.                                              |

### 3. Financial Schedule (\$K)<sup>123</sup>

|                                    | Budget Authority<br>(Appropriations) | Obligations | Costs            |
|------------------------------------|--------------------------------------|-------------|------------------|
| <b>Total Estimated Cost (TEC)</b>  |                                      |             |                  |
| <b>Design</b>                      |                                      |             |                  |
| Prior Years                        | N/A                                  | N/A         | 332,288          |
| <b>Total, Design</b>               | <b>N/A</b>                           | <b>N/A</b>  | <b>332,288</b>   |
| <b>Construction</b>                |                                      |             |                  |
| Prior Years                        | N/A                                  | N/A         | 1,084,924        |
| FY 2025                            | N/A                                  | N/A         | 474,878          |
| FY 2026                            | N/A                                  | N/A         | 614,229          |
| FY 2027                            | N/A                                  | N/A         | 1,033,568        |
| FY 2028                            | N/A                                  | N/A         | 506,339          |
| FY 2029                            | N/A                                  | N/A         | 166,166          |
| FY 2030                            | N/A                                  | N/A         | 31,638           |
| <b>Total, Construction</b>         | <b>N/A</b>                           | <b>N/A</b>  | <b>3,911,742</b> |
| <b>Total Estimated Costs (TEC)</b> |                                      |             |                  |
| Prior Years                        | N/A                                  | N/A         | 1,417,212        |
| FY 2025                            | N/A                                  | N/A         | 474,878          |
| FY 2026                            | N/A                                  | N/A         | 614,229          |
| FY 2027                            | N/A                                  | N/A         | 1,033,568        |
| FY 2028                            | N/A                                  | N/A         | 506,339          |
| FY 2029                            | N/A                                  | N/A         | 166,166          |
| FY 2030                            | N/A                                  | N/A         | 31,638           |
| <b>Total, TEC</b>                  | <b>N/A</b>                           | <b>N/A</b>  | <b>4,244,031</b> |
| <b>Other Project Cost (OPC)</b>    |                                      |             |                  |
| Prior Years                        | N/A                                  | N/A         | 151,774          |
| FY 2025                            | N/A                                  | N/A         | 2,914            |
| FY 2026                            | N/A                                  | N/A         | 4,474            |
| FY 2027                            | N/A                                  | N/A         | 4,360            |
| FY 2028                            | N/A                                  | N/A         | 9,407            |
| FY 2029                            | N/A                                  | N/A         | 4,303            |
| FY 2030                            | N/A                                  | N/A         | 5,662            |
| FY 2031                            | N/A                                  | N/A         | 3,973            |
| <b>Total, OPC</b>                  | <b>N/A</b>                           | <b>N/A</b>  | <b>186,867</b>   |

<sup>1</sup> Due to the Consolidated and Further Continuing Appropriations Act, 2015, the TEC and OPC appropriations/obligations for FY 2015 and beyond are combined into the TPC appropriations/obligations.

<sup>2</sup> Totals may not add due to rounding.

<sup>3</sup> FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

|                                  | <b>Budget Authority<br/>(Appropriations)</b> | <b>Obligations</b> | <b>Costs</b>     |
|----------------------------------|----------------------------------------------|--------------------|------------------|
| <b>Total Project Costs (TPC)</b> |                                              |                    |                  |
| Prior Years                      | 2,506,398                                    | 2,506,398          | 1,568,986        |
| FY 2025                          | 199,300                                      | 199,300            | 477,792          |
| FY 2026                          | 424,000                                      | 424,000            | 618,703          |
| FY 2027                          | 691,953                                      | 691,953            | 1,037,928        |
| FY 2028                          | 519,247                                      | 519,247            | 515,746          |
| FY 2029                          | 90,000                                       | 90,000             | 170,469          |
| FY 2030                          | -                                            | -                  | 37,303           |
| FY 2031                          | -                                            | -                  | 3,973            |
| <b>Total, TPC<sup>3</sup></b>    | <b>4,430,898</b>                             | <b>4,430,898</b>   | <b>4,430,898</b> |

<sup>3</sup> FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

#### 4. Details of Project Cost Estimate (\$K)<sup>1</sup>

|                                            | Current<br>Total<br>Estimate <sup>1</sup> | Previous<br>Total<br>Estimate <sup>1</sup> | Original<br>Validated<br>Baseline |
|--------------------------------------------|-------------------------------------------|--------------------------------------------|-----------------------------------|
| <b>Total Estimated Cost (TEC)</b>          |                                           |                                            |                                   |
| <b>Design</b>                              |                                           |                                            |                                   |
| Design                                     | 332,289                                   | 332,288                                    | 300,789                           |
| Contingency                                | -                                         | -                                          | 1,700                             |
| <b>Total, Design</b>                       | <b>332,289</b>                            | <b>332,288</b>                             | <b>302,489</b>                    |
| <b>Construction</b>                        |                                           |                                            |                                   |
| Long Lead Material and Site<br>Preparation | 57,010                                    | 57,010                                     | 41,148                            |
| Spent Fuel Handling Equipment              | 289,437                                   | 288,599                                    | 215,454                           |
| Facility Construction                      | 3,364,033                                 | 3,385,539                                  | 845,841                           |
| Contingency                                | 303,262                                   | 282,707                                    | 107,468                           |
| <b>Total, Construction<sup>1</sup></b>     | <b>4,013,742</b>                          | <b>4,013,854</b>                           | <b>1,209,911</b>                  |
| <b>Total Estimated Cost</b>                | <b>4,346,031</b>                          | <b>4,346,143</b>                           | <b>1,512,400</b>                  |
| <i>Contingency, TEC</i>                    | 303,262                                   | 282,707                                    | 109,168                           |
| <b>Other Project Cost (OPC)</b>            |                                           |                                            |                                   |
| Conceptual Planning                        | 37,540                                    | 37,540                                     | 37,540                            |
| Conceptual Design                          | 99,427                                    | 99,427                                     | 99,427                            |
| Start-up                                   | 28,516                                    | 28,445                                     | 26,273                            |
| Other (e.g., EIS, Project Reviews)         | 18,383                                    | 17,445                                     | 7,301                             |
| Contingency                                | 3,000                                     | 4,000                                      | 3,559                             |
| <b>Total, OPC</b>                          | <b>186,867</b>                            | <b>186,857</b>                             | <b>174,100</b>                    |
| <i>Contingency, OPC</i>                    | 3,000                                     | 4,000                                      | 3,559                             |
| <b>Total Project Cost</b>                  | <b>4,532,898</b>                          | <b>4,533,000</b>                           | <b>1,686,500</b>                  |
| <b>Total, Contingency (TEC+OPC)</b>        | <b>306,262</b>                            | <b>286,707</b>                             | <b>112,727</b>                    |

<sup>1</sup> Totals may not add due to rounding.



### 5. Schedule of Appropriation Requests (\$K)<sup>12</sup>

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears | Total     |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|
| FY 2014      | TEC  | 1,286,500   | -       | -       | -       | -       | -       | -       | -       | -        | 1,286,500 |
|              | OPC  | 165,000     | -       | -       | -       | -       | -       | -       | -       | -        | 165,000   |
|              | TPC  | 1,451,500   | -       | -       | -       | -       | -       | -       | -       | -        | 1,451,500 |
| FY 2015      | TEC  | 1,286,500   | -       | -       | -       | -       | -       | -       | -       | -        | 1,286,500 |
|              | OPC  | 165,000     | -       | -       | -       | -       | -       | -       | -       | -        | 165,000   |
|              | TPC  | 1,451,500   | -       | -       | -       | -       | -       | -       | -       | -        | 1,451,500 |
| FY 2015 Rev  | TEC  | 1,407,900   | -       | -       | -       | -       | -       | -       | -       | -        | 1,407,900 |
|              | OPC  | 174,600     | 3,600   | -       | -       | -       | -       | -       | -       | -        | 178,200   |
|              | TPC  | 1,582,500   | 3,600   | -       | -       | -       | -       | -       | -       | -        | 1,586,100 |
| FY 2016      | TEC  | 1,431,200   | 19,700  | -       | -       | -       | -       | -       | -       | -        | 1,450,900 |
|              | OPC  | 181,300     | 10,300  | 4,000   | -       | -       | -       | -       | -       | -        | 195,600   |
|              | TPC  | 1,612,500   | 30,000  | 4,000   | -       | -       | -       | -       | -       | -        | 1,646,500 |
| FY 2017      | TEC  | 1,448,800   | 23,600  | -       | -       | -       | -       | -       | -       | -        | 1,472,400 |
|              | OPC  | 164,100     | 6,200   | 3,800   | -       | -       | -       | -       | -       | -        | 174,100   |
|              | TPC  | 1,612,900   | 29,800  | 3,800   | -       | -       | -       | -       | -       | -        | 1,646,500 |
| FY 2018      | TEC  | 1,448,800   | 23,600  | -       | -       | -       | -       | -       | -       | -        | 1,472,400 |
|              | OPC  | 164,100     | 6,200   | 3,800   | -       | -       | -       | -       | -       | -        | 174,100   |
|              | TPC  | 1,612,900   | 29,800  | 3,800   | -       | -       | -       | -       | -       | -        | 1,646,500 |
| FY 2019      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 1,472,400 |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 174,100   |
|              | TPC  | 1,612,900   | 29,800  | 3,800   | -       | -       | -       | -       | -       | -        | 1,646,500 |
| FY 2020      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 1,472,400 |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 174,100   |
|              | TPC  | 1,612,900   | 29,800  | 3,800   | -       | -       | -       | -       | -       | -        | 1,646,500 |
| FY 2021      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 1,886,000 |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A      | 174,000   |
|              | TPC  | 1,720,600   | 13,100  | 3,800   | -       | -       | -       | -       | -       | -        | 2,060,000 |

| Request Year | Type | Prior Years | FY 2025 | FY 2026 | FY 2027 | FY 2028 | FY 2029 | FY 2030 | FY 2031 | Outyears  | Total                  |
|--------------|------|-------------|---------|---------|---------|---------|---------|---------|---------|-----------|------------------------|
| FY 2022      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 1,886,000              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 174,000                |
|              | TPC  | 2,043,100   | 16,900  | -       | -       | -       | -       | -       | -       | -         | 2,060,000              |
| FY 2023      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 2,159,000              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 174,000                |
|              | TPC  | 2,367,395   | 16,900  | -       | -       | -       | -       | -       | -       | -         | 2,333,000              |
| FY 2024      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 2,823,627              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 176,373                |
|              | TPC  | 2,506,398   | 292,002 | 176,000 | 25,600  | -       | -       | -       | -       | -         | 3,000,000              |
| FY 2025      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 2,823,627              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 176,373                |
|              | TPC  | 2,506,398   | 292,002 | 280,968 | 219,479 | 213,197 | -       | -       | -       | -         | 3,000,000 <sup>1</sup> |
| FY 2026      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 4,346,143              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 186,857                |
|              | TPC  | 2,506,398   | 199,300 | 526,000 | -       | -       | -       | -       | -       | 1,301,200 | 4,533,000              |
| FY 2027      | TEC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 4,244,031              |
|              | OPC  | N/A         | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A     | N/A       | 186,867                |
|              | TPC  | 2,506,398   | 199,300 | 424,000 | 691,953 | 519,247 | 90,000  | -       | -       | -         | 4,430,898 <sup>2</sup> |

<sup>1</sup> Outyears included preliminary budget increases in anticipation of Performance Baseline Revision 4, but the TPC remained at \$3B. Accordingly, the FY totals do not sum to the TPC.

<sup>2</sup> FY 2026 enacted appropriations provided less funding for the project than assumed as part of the funding profile supporting Performance Baseline Revision 4. As such, the FYNSP does not fund the project to the baselined TPC.

## 6. Related Operations and Maintenance Funding Requirements

|                                            |          |
|--------------------------------------------|----------|
| Start of Operation of Beneficial Occupancy | 1QFY2031 |
| Expected Useful Life                       | 40 years |
| Expected Future Start of D&D               | 1QFY2071 |

### Related Funding Requirements (Budget Authority in \$K)

|                                                  | Annual Costs (FY31 \$K) |                        | Life Cycle Costs (then-year \$K) |                        |
|--------------------------------------------------|-------------------------|------------------------|----------------------------------|------------------------|
|                                                  | Previous Total Estimate | Current Total Estimate | Previous Total Estimate          | Current Total Estimate |
| Operations and Maintenance                       | 114,642                 | 114,642                | 4,585,687                        | 4,585,687              |
| Transition to Operations and Future Installation | n/a                     | n/a                    | 532,038                          | 532,038                |

The Operations and Maintenance costs include the recurring costs to operate the Naval Spent Fuel Handling Facility, including the costs to receive, unload, prepare, and package naval spent nuclear fuel and the costs to maintain and refurbish facility systems. The Transition to Operations and Future Installation costs include one-time costs to expand the capabilities of the facility and to transition the facility to a fully operational status including checkout, training, and qualification of work teams.

## 7. D&D Information

The new area being constructed in this project is replacing existing facilities. However, spent fuel handling operations in the existing Expended Core Facility will overlap with operations in the new Naval Spent Fuel Handling Facility for a period of 5 to 12 years, and examination operations in the existing Expended Core Facility will continue for the foreseeable future; therefore, the costs associated with D&D of the Expended Core Facility are not included in the costs cited for the SFHP.

|                                                                                                                                | Square Feet |
|--------------------------------------------------------------------------------------------------------------------------------|-------------|
| New area being constructed by this Project at the Naval Reactors Facility                                                      | 213,000     |
| Area of D&D in this Project at the Naval Reactors Facility                                                                     | -           |
| Area at the Naval Reactors Facility to be transferred, sold, and/or D&D outside the project including area previously "banked" | -           |
| Area of D&D in this Project at other sites                                                                                     | -           |
| Area at other sites to be transferred, sold, and/or D&D outside the Project including area previously "banked"                 | -           |
| Total area eliminated                                                                                                          | -           |

## **8. Acquisition Approach**

The integrated Management & Operating (M&O) prime partners will plan and execute the SFHP in accordance with requirements. Naval spent nuclear fuel handling equipment will be procured through the procurement M&O partners. An Engineering, Procurement, and Construction Management (EPCM) firm was selected as the subcontracting strategy for design and construction management of the facility and facility systems. A 2019 amendment to the EPCM's contract changed the contract type from cost plus fixed fee to cost plus fixed fee—completion, reflecting the maturing design and the improved certainty in Project costs and schedules. Long-lead materials were purchased, and site preparation work was performed ahead of CD-2/3.

**DEPARTMENT OF ENERGY****Funding by Site Detail**

Naval Reactors - FY 2027

(Dollars in Thousands)

|                                                               | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|---------------------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Bettis Atomic Power Laboratory</b>                         |                            |                            |                            |
| Naval Reactors Development                                    | 419,005                    | 436,321                    | 438,392                    |
| Columbia-Class Reactor Systems Development                    | 10,774                     | 8,339                      | 7,016                      |
| Naval Reactors Operations and Infrastructure                  | 166,054                    | 163,169                    | 141,192                    |
| 14-D-901 Spent Fuel Handling Recapitalization<br>Project, NRF | 7,211                      | 15,341                     | 25,036                     |
| Naval Reactors Construction                                   | 7,211                      | 15,341                     | 25,036                     |
| <b>Total Bettis Atomic Power Laboratory</b>                   | <b>603,044</b>             | <b>623,170</b>             | <b>611,636</b>             |
| <b>Idaho National Laboratory</b>                              |                            |                            |                            |
| Naval Reactors Development                                    | 92,800                     | 96,740                     | 98,770                     |
| <b>Total Idaho National Laboratory</b>                        | <b>92,800</b>              | <b>96,740</b>              | <b>98,770</b>              |
| <b>Knolls Atomic Power Laboratory</b>                         |                            |                            |                            |
| Naval Reactors Development                                    | 304,830                    | 313,845                    | 318,934                    |
| Columbia-Class Reactor Systems Development                    | 34,836                     | 26,961                     | 22,684                     |
| Naval Reactors Operations and Infrastructure                  | 350,816                    | 305,270                    | 287,494                    |
| 26-D-530 East Side Office Building                            | -                          | 5,000                      | -                          |
| 22-D-532 KL Security Upgrades                                 | 41,670                     | -                          | -                          |
| 14-D-901 Spent Fuel Handling Recapitalization<br>Project, NRF | 455                        | 967                        | 1,578                      |
| Naval Reactors Construction                                   | 42,125                     | 5,967                      | 1,578                      |
| <b>Total Knolls Atomic Power Laboratory</b>                   | <b>732,607</b>             | <b>652,043</b>             | <b>630,690</b>             |
| <b>Naval Reactors Facility</b>                                |                            |                            |                            |
| Naval Reactors Development                                    | 17,505                     | 15,310                     | 18,315                     |
| Naval Reactors Operations and Infrastructure                  | 214,632                    | 214,216                    | 194,068                    |
| 25-D-530 Naval Examination Acquisition Project                | 20,000                     | 40,000                     | 80,000                     |
| 14-D-901 Spent Fuel Handling Recapitalization<br>Project, NRF | 191,634                    | 407,692                    | 665,339                    |
| Naval Reactors Construction                                   | 211,634                    | 447,692                    | 745,339                    |
| <b>Total Naval Reactors Facility</b>                          | <b>443,771</b>             | <b>677,218</b>             | <b>957,722</b>             |
| <b>Naval Reactors Laboratory Field Office</b>                 |                            |                            |                            |
| Program Direction - Naval Reactors                            | 17,460                     | 17,460                     | 20,383                     |
| <b>Total Naval Reactors Laboratory Field Office</b>           | <b>17,460</b>              | <b>17,460</b>              | <b>20,383</b>              |

**DEPARTMENT OF ENERGY**

**Funding by Site Detail**  
Naval Reactors - FY 2027  
(Dollars in Thousands)

|                                                 | <b>FY 2025<br/>Enacted</b> | <b>FY 2026<br/>Enacted</b> | <b>FY 2027<br/>Request</b> |
|-------------------------------------------------|----------------------------|----------------------------|----------------------------|
| <b>Washington Headquarters</b>                  |                            |                            |                            |
| Naval Reactors Development                      | 1,660                      | 2,363                      | 2,413                      |
| Naval Reactors Operations and Infrastructure    | 10,578                     | 20,926                     | 22,296                     |
| Program Direction - Naval Reactors              | 44,080                     | 44,080                     | 51,458                     |
| <b>Total Washington Headquarters</b>            | <b>56,318</b>              | <b>67,369</b>              | <b>76,167</b>              |
| <b>Total Funding by Site for Naval Reactors</b> | <b>1,946,000</b>           | <b>2,134,000</b>           | <b>2,395,368</b>           |

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# General Provisions

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**General Provisions - Department of Energy**  
**(Including transfers of funds)**

SEC. 301.

(a)

(1) Unless the Secretary of Energy notifies the Committees on Appropriations of both Houses of Congress at least 3 full business days in advance, none of the funds made available in this title may be used to—

(A) make a grant allocation or discretionary grant award totaling \$10,000,000 or more;

(B) make a discretionary contract award or Other Transaction Agreement totaling \$10,000,000 or more, including a contract covered by the Federal Acquisition Regulation;

(C) issue a letter of intent to make an allocation, award, or Agreement in excess of the limits in subparagraph (A) or (B); or

(D) announce publicly the intention to make an allocation, award, or Agreement in excess of the limits in subparagraph (A) or (B).

(2) The Secretary of Energy shall submit to the Committees on Appropriations of both Houses of Congress within 15 days of the conclusion of each quarter a report detailing each grant allocation or discretionary grant award totaling less than \$10,000,000 provided during the previous quarter.

(3) The notification required by paragraph (1) and the report required by paragraph (2) shall include the recipient of the award, the amount of the award, the fiscal year for which the funds for the award were appropriated, the account and program, project, or activity from which the funds are being drawn, the title of the award, and a brief description of the activity for which the award is made.

(b) The Department of Energy may not, with respect to any program, project, or activity that uses budget authority made available in this title under the heading "Department of Energy—Energy Programs", enter into a multiyear contract, award a multiyear grant, or enter into a multiyear cooperative agreement unless—

(1) the contract, grant, or cooperative agreement is funded for the full period of performance as anticipated at the time of award; or

(2) the contract, grant, or cooperative agreement includes a clause conditioning the Federal Government's obligation on the availability of future year budget authority and the Secretary notifies the Committees on Appropriations of both Houses of Congress at least 3 days in advance.

(c) The amounts made available by this title may be reprogrammed for any program, project, or activity, and the Department shall notify the Committees on Appropriations of both Houses of Congress at least 30 days prior to the use of any proposed reprogramming that would cause any program, project, or activity funding level to increase or decrease by more than \$25,000,000 or 25 percent, whichever is less, during the time period covered by this Act.



(d)

- (1) The Secretary of Energy may waive any requirement or restriction in this section that applies to the use of funds made available for the Department of Energy if compliance with such requirement or restriction would pose a substantial risk to human health, the environment, welfare, or national security.
- (2) The Secretary of Energy shall notify the Committees on Appropriations of both Houses of Congress of any waiver under paragraph (1) as soon as practicable, but not later than 3 days after the date of the activity to which a requirement or restriction would otherwise have applied. Such notice shall include an explanation of the substantial risk under paragraph (1) that permitted such waiver.

(e) The unexpended balances of prior appropriations provided for activities in this Act may be available to the same appropriation accounts for such activities established pursuant to this title. Available balances may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

(f) Subsection (c) shall not apply to funds made available in this Act for applied energy research, development, demonstration, and commercial application that are utilized pursuant to section 9 of the Small Business Act (15 U.S.C. 638) and section 1001(e) of the Energy Policy Act of 2005 (42 U.S.C. 16391). Administration and selection of awards pursuant to such section will be in coordination with the offices that oversee the appropriations accounts to which the relevant funding was originally appropriated.

SEC. 302. None of the funds made available in this title shall be used for the construction of facilities classified as high-hazard nuclear facilities under 10 CFR Part 830 unless independent oversight is conducted by the Office of Enterprise Assessments to ensure the project is in compliance with nuclear safety requirements.

SEC. 303. None of the funds made available in this title may be used to approve critical decision–2 or critical decision–3 under Department of Energy Order 413.3B, or any successive departmental guidance, for construction projects where the total project cost exceeds \$100,000,000, until a separate independent cost estimate has been developed for the project for that critical decision.

SEC. 304. None of the funds made available in this title may be used to support a grant allocation award, discretionary grant award, or cooperative agreement that exceeds \$100,000,000 in Federal funding unless the project is carried out through internal independent project management procedures.

SEC. 305. No funds shall be transferred directly from "Department of Energy—Power Marketing Administration—Colorado River Basins Power Marketing Fund, Western Area Power Administration" to the general fund of the Treasury in the current fiscal year.

SEC. 306. Title III of division B of Public Law 112–74 is amended by striking section 304.

SEC. 307. Title VI of Public Law 95–619 is amended by striking Part 3.

SEC. 308. Of the funds appropriated to the Department of Energy by the Infrastructure Investment and Jobs Act (the Act; Public Law 117–58), the following are hereby permanently cancelled from the following accounts and programs in the specified amounts:

- (1) \$593,940,994 from unobligated balances made available for fiscal years 2022 through 2026 in the "Electricity" account provided for Preventing Outages and Enhancing the Resilience of the Electric Grid, as authorized under section 40101 of division D of such Act.
- (2) \$118,682,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Office of Clean Energy Demonstrations" account provided for grants for the Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency, as authorized under section 40103(b) of division D of such Act.
- (3) \$338,729,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Office of Clean Energy Demonstrations" account provided for the Energy Improvement in Rural and Remote Areas Program, as authorized under section 40103(c) of division D of such Act.
- (4) \$40,501,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Electricity" account provided for the Transmission Facilitation Program, as authorized under section 40106 of division D of such Act.
- (5) \$52,558,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Electricity" account provided for the Smart Grid Investment Matching Program, as authorized under section 40107 of division D of such Act.
- (6) \$58,821,468 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the State Energy Program, as authorized under section 40109 of division D of such Act.
- (7) \$127,623,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Cybersecurity, Energy Security, and Emergency Response" account provided for the Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program, as authorized under section 40124 of division D of such Act.
- (8) \$40,515,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Cybersecurity, Energy Security, and Emergency Response" account provided for the Cybersecurity For the Energy Sector Research, Development, and Demonstration Program, as authorized under section 40125(b) of division D of such Act.
- (9) \$21,504,092 from unobligated balances in the "Electricity" account provided to carry out an advanced energy security program to secure energy networks, as authorized under section 40125(d) of division D of such Act.
- (10) \$355,619,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for Battery Material Processing Grants, as authorized under section 40207(b) of division D of such Act.
- (11) \$390,000,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for Battery Manufacturing and Recycling Grants, as authorized under section 40207(c) of division D of such Act.

- (12) \$600,000 from unobligated balances available in the "Energy Efficiency and Renewable Energy" account provided for the Lithium-Ion Battery Recycling Prize Competition, as authorized under section 40207(e) of division D of such Act.
- (13) \$30,400,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided to carry out activities authorized under section 40207(f) of division D of such Act.
- (14) \$124,947,981 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Electric Drive Vehicle Battery Recycling and Second-Life Applications Program, as authorized under subsection (k) of section 641 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17231), as amended by section 40208(1) of division D of the Act.
- (15) \$48,570,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for the Advanced Energy Manufacturing and Recycling Grant Program, as authorized under section 40209 of division D of such Act.
- (16) \$281,878,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Fossil Energy and Carbon Management" account provided for the Carbon Utilization Program, as authorized under section 40302 of division D of the Act.
- (17) \$80,710,941 from unobligated balances made available for fiscal years 2022 through 2026 in the "Fossil Energy and Carbon Management" account provided for the Front-End Engineering and Design, Carbon Capture Technology Program, as authorized under section 962 of the Energy Policy Act of 2005 (42 U.S.C. 16292), as amended by section 40303 of division D of the Act.
- (18) \$588,000,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Carbon Dioxide Transportation Infrastructure Finance and Innovation Program Account" provided for the Carbon Dioxide Transportation Infrastructure Finance and Innovation Program, as authorized by subtitle J of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16181 et seq.), as amended by section 40304 of division D of the Act.
- (19) \$1,738,998,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Fossil Energy and Carbon Management" account provided for Carbon Storage Validation and Testing, as authorized under section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293), as amended by section 40305 of division D of the Act.
- (20) \$2,265,677,055 from unobligated balances made available for fiscal years 2022 through 2026 in the "Fossil Energy and Carbon Management" account provided for Regional Direct Air Capture Hubs, as authorized under section 969D of the Energy Policy Act of 2005 (42 U.S.C. 16298d), as amended by section 40308 of division D of the Act.
- (21) \$3,080,175,143 from unobligated balances made available for fiscal years 2022 through 2026 in the "Office of Clean Energy Demonstrations" account provided for Regional Clean Hydrogen Hubs, as authorized under section 813 of the Energy Policy Act of 2005 (42 U.S.C. 16151 et seq.), as amended by section 40314 of division D of the Act.

- (22) \$91,726,546 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for the Clean Hydrogen Technology Recycling Research, Development, and Demonstration Program, as authorized under section 815 of the Energy Policy Act of 2005 (42 U.S.C. 16151 et seq.), as amended by section 40314 of division D of the Act.
- (23) \$80,869,157 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for activities for the Clean Hydrogen Electrolysis Program, as authorized under section 816 of the Energy Policy Act of 2005 (42 U.S.C. 16151 et seq.), as amended by section 40314 of division D of the Act.
- (24) \$76,161,628 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities under section 242 of the Energy Policy Act of 2005 (42 U.S.C. 15881), as amended by section 40331 of division D of the Act.
- (25) \$13,081,316 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities under section 243 of the Energy Policy Act of 2005 (42 U.S.C. 15882), as amended by section 40332 of division D of the Act.
- (26) \$494,078,894 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for activities for Hydroelectric Incentives, as authorized under section 247 of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 674), as amended by section 40333 of division D of the Act.
- (27) \$1,304,400 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for activities for the Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative, as authorized under section 3201 of the Energy Policy Act of 2020 (42 U.S.C. 17232), as amended by section 40334 of division D of the Act.
- (28) \$140,373,775 from unobligated balances made available for fiscal years 2022 through 2026 in the "Office of Clean Energy Demonstrations" account provided for the Clean Energy Demonstration Program on Current and Former Mine Land, as authorized under section 40342 of division D of such Act.
- (29) \$39,966,440 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Energy Efficiency Revolving Loan Fund Capitalization Grant Program, as authorized under section 40502 of division D of such Act.
- (30) \$31,220,931 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Energy Auditor Training Grant Program, as authorized under section 40503 of division D of such Act.
- (31) \$54,139,207 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for grants for implementing of updated building energy codes, as authorized under section 309 of the Energy Conservation and Production Act (42 U.S.C. 6831 et seq.), as amended by section 40511(a) of division D of the Act.
- (32) \$560,111 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for Building, Training, and Assessment Centers, as authorized under section 40512 of division D of such Act.

- (33) \$1,204,985 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for Career Skills Training, as authorized under section 40513 of division D of such Act.
- (34) \$10,000,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for Industrial Research and Assessment Centers, as authorized under section 40521(b) of division D of the Act.
- (35) \$230,730,000 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for Industrial Research and Assessment Center Implementation Grants, as authorized under section 457(i) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111 et seq.), as amended by section 40521(b) of division D of the Act.
- (36) \$3,663,411 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Manufacturing Leadership program, as authorized under section 40534 of division D of the Act.
- (37) \$199,580,583 from unobligated balances made available for fiscal years 2022 through 2026 in the "Energy Efficiency and Renewable Energy" account provided for Grants for Energy Efficiency Improvements and Renewable Improvements at Public School Facilities, as authorized under section 40541 of division D of the Act.
- (38) \$2,765,221 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Energy Efficiency Materials Pilot Program, as authorized under section 40542 of division D of the Act.
- (39) \$191,168,495 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities for the Weatherization Assistance Program, as authorized under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).
- (40) \$269,983,000 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities for the Energy Efficiency and Conservation Block Grant Program, as authorized under section 542(a) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17152(a)), as amended by section 40552 of division D of the Act.
- (41) \$183,168,742 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Assisting Federal Facilities with Energy Conservation Technology Grant Program, as authorized under section 546(b) of the National Energy Conservation Policy Act (42 U.S.C. 8256(b)).
- (42) \$8,481,918 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for Extended Product System Rebates, as authorized under section 1005 of the Energy Act of 2020 (42 U.S.C. 6311 note; Public Law 116–260).
- (43) \$9,017,411 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for Energy Efficient Transformer Rebates, as authorized under section 1006 of the Energy Act of 2020 (42 U.S.C. 6317 note; Public Law 116–260).

- (44) \$12,455,768 from unobligated balances in the "Fossil Energy and Carbon Management" account provided for Orphaned, Abandoned, or Idled Wells on Federal Land Activities, as authorized in section 349(b)(2) of the Energy Policy Act of 2005 (42 U.S.C. 15907(b)(2)), as amended by section 40601 of division D of the Act.
- (45) \$133,938,332 from unobligated balances in the "Office of Clean Energy Demonstrations" account provided to carry out the Energy Storage Demonstration Projects Pilot Grant Program, as authorized under section 3201(c) of the Energy Act of 2020 (42 U.S.C. 17232(c)).
- (46) \$51,228,570 from unobligated balances in the "Office of Clean Energy Demonstrations" account provided to carry out the Long-Duration Demonstration Initiative and Joint Program, as authorized under section 3201(d) of the Energy Act of 2020 (42 U.S.C. 17232(d)).
- (47) \$503,913,000 from unobligated balances made available for fiscal years 2022 through 2023 in the "Fossil Energy and Carbon Management" account provided for Critical Material Supply Chain Research Facility, as authorized under section 7002(h) of the Energy Act of 2020 (30 U.S.C. 1606(h)).
- (48) \$396,400,521 from unobligated balances in the "Office of Clean Energy Demonstrations" account provided to carry out the Carbon Capture Large-Scale Pilot Projects, as authorized under section 962(b)(2)(B) of the Energy Policy Act of 2005 (42 U.S.C. 16292(b)(2)(B)).
- (49) \$1,463,529,736 from unobligated balances in the "Office of Clean Energy Demonstrations" account provided for the Carbon Capture Demonstration Projects Program, as authorized under section 962(b)(2)(C) of the Energy Policy Act of 2005 (42 U.S.C. 16292(b)(2)(C)).
- (50) \$6,621,362 from unobligated balances in the "Fossil Energy and Carbon Management" account provided for Precommercial Direct Air Capture Technologies Prize Competitions, as authorized under section 969D(e)(2)(A) of the Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(A)).
- (51) \$66,675,237 from unobligated balances in the "Fossil Energy and Carbon Management" account provided for Commercial Direct Air Capture Technologies Prize Competitions, as authorized under section 969D(e)(2)(B) of the Energy Policy Act of 2005 (42 U.S.C. 16298d(e)(2)(B)).
- (52) \$3,691,973 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities as authorized under section 634 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17213).
- (53) \$6,320,729 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities as authorized under section 635 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17214).
- (54) \$2,218,846 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities for the National Marine Energy Centers, as authorized under section 636 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17215).
- (55) \$25,117,220 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities authorized under section 615(d) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17194(d)).

- (56) \$16,020,974 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities for the Wind Energy Technology Program, as authorized under section 3003(b)(2) of the Energy Act of 2020 (42 U.S.C. 16237(b)(2)).
- (57) \$27,894,813 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Wind Energy Technology Recycling Research, Development, and Demonstration Program, as authorized under section 3003(b)(4) of the Energy Act of 2020 (42 U.S.C. 16237(b)(4)).
- (58) \$2,857,115 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities authorized under section 3004(b)(2) of the Energy Act of 2020 (42 U.S.C. 16238(b)(2)).
- (59) \$3,504,000 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for carrying out activities authorized under section 3004(b)(3) of the Energy Act of 2020 (42 U.S.C. 16238(b)(3)).
- (60) \$4,224,609 from unobligated balances in the "Energy Efficiency and Renewable Energy" account provided for the Solar Energy Technology Recycling Research, Development, and Demonstration Program, as authorized under section 3004(b)(4) of the Energy Act of 2020 (42 U.S.C. 16238(b)(4)).
- (61) \$8,768,979 from unobligated balances made available for fiscal years 2022 through 2025 in the "Office of Clean Energy Demonstrations" account provided for Industrial Emission Demonstration Projects, as authorized under section 454(d)(3) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17113(d)(3)).

#### SEC. 309.

- (a) None of the funds made available by this Act may be used by the Secretary of Energy to award any grant, contract, cooperative agreement, or loan of \$10,000,000 or greater to an entity of concern as defined in section 10114 of division B of Public Law 117–167.
- (b) The Secretary shall implement the requirements under subsection (a) using a risk-based approach and analytical tools to aggregate, link, analyze, and maintain information reported by an entity seeking or receiving such funds made available by this Act.
- (c) This section shall be applied in a manner consistent with the obligations of the United States under applicable international agreements.
- (d) The Secretary shall have the authority to require the submission to the agency, by an entity seeking or receiving such funds made available by this Act, documentation necessary to implement the requirements under subsection (a).
- (e) Chapter 35 of title 44, United States Code (commonly known as the "Paperwork Reduction Act"), shall not apply to the implementation of the requirements under this section.
- (f) The Secretary and other Federal agencies shall coordinate to share relevant information necessary to implement the requirements under subsection (a).

SEC. 310.

- (a) Subject to subsection (b), none of the funds made available to the Department of Energy in this or any other Act, including prior Acts and Acts other than appropriations Acts, may be used to pay the salaries and expenses of any contractor detailed to a Congressional Committee or Member Office or to the Executive Branch for longer than a 24-month period, to perform a scope of work, or participate in any matter, with the intent to influence decisions or determinations regarding a Department of Energy National Laboratory, or participate in any matter that may have a direct and predictable effect on the contractor's employer or personal financial interest: Provided, That with respect to contractors detailed to a Congressional Committee or Member Office or to the Executive Branch as of the date of enactment of this Act, the initial 24-month period described in this subsection shall be deemed to have begun on the later of the date on which such contractor was detailed or the date that is 12 months before the date of enactment of this Act.
- (b) For the purposes of this section, the term "contractor" is defined to mean any contracted employee of a Department of Energy National Laboratory, as defined by section 2 (3) of the Energy Policy Act of 2005 (42 U.S.C. 15801).



## **Title V - General Provisions**

SEC. 501. None of the funds appropriated by this Act may be used in any way, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913.

SEC. 502.

- (a) None of the funds made available in this Act may be used to maintain or establish a computer network unless such network blocks the viewing, downloading, and exchanging of pornography.
- (b) Nothing in subsection (a) shall limit the use of funds necessary for any Federal, State, Tribal, or local law enforcement agency or any other entity carrying out criminal investigations, prosecution, or adjudication activities.