## Defense Nuclear Nonproliferation (\$K)

	FY 2024	FY 2025	FY 2026	FY 2026 R FY 2025	•
	Enacted	Enacted	Request	\$	%
Use of Prior Year Balance	(20,000)	0	-39,574	-39,574	0%
Cancellation of Prior Year Balances	0	0	-9,422	-9,422	0%
Defense Nuclear Nonproliferation Appropriation	2.581.000	2.396.000	2.284.600	-111.400	-5%

## **Proposed Appropriation Language**

For Department of Energy (DOE) expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for Defense Nuclear Nonproliferation (DNN) activities, in carrying out the purposes of the DOE 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 \$2,294,022,000 to remain available until expended: *Provided*, That of the unobligated balances from prior year appropriations available under this heading specified as for "Nonproliferation Fuels Development" in the "Final Bill" column in the "Department of Energy" tables included under the heading "Title III-Department of Energy" in the explanatory statements accompanying prior year appropriations Acts, \$9,422,000 is hereby permanently cancelled.

#### **Defense Nuclear Nonproliferation**

#### Overview

The DOE/National Nuclear Security Administration's (DOE/NNSA) nonproliferation, counterproliferation, and counterterrorism activities are critical to U.S. national security and promote United States (U.S.) leadership and influence in these areas. DOE/NNSA's programs protect the U.S. Homeland and core U.S. national interests abroad from nuclear weapons and other nuclear and radiological threats by extending U.S. defenses and preventing threats before they can reach U.S. shores. These programs help prevent adversaries from acquiring nuclear weapons or weapons-usable materials, technology, and expertise; counter adversary efforts to acquire such weapons or materials; and respond to nuclear or radiological threats, incidents, and accidents domestically and abroad. They also promote U.S. industry and the expansion of nuclear power. DOE/NNSA leverages the unique technical and scientific expertise that underpins the NNSA Defense Programs' Stockpile Stewardship Program for a range of nonproliferation, counterproliferation, and counterterrorism missions, from assessing foreign weapons programs and potential terrorist devices to enhancing security and safeguards for civil nuclear applications to help reinvigorate the nuclear industrial base in accordance with the President's Executive Order on Reinvigorating the Nuclear Industrial Base.

The DNN appropriation funds six programs in the Fiscal Year (FY) 2026 Budget Request to reduce the threats of weapons of mass destruction (WMD). These programs: provide technical leadership to prevent or limit the spread of WMD-related materials, technology, and expertise; develop technologies to detect nuclear proliferation; verify international agreements and arrangements; secure or eliminate inventories of nuclear weapons-related materials and infrastructure; ensure nuclear emergency support team (NEST) personnel are trained and equipped to respond to all manner of nuclear and radiological incidents worldwide, including the ability to perform advanced nuclear forensics assessments; and apply a comprehensive and integrated approach to emergency management and continuity of operations to safeguard health and safety, and enhance the resilience of the Department and the Nation.

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; destabilizing proliferation activities by states with emerging or latent capabilities, including Iran and the Democratic People's Republic of Korea (DPRK); 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 and global dispersion 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 – managed by the Office of DNN, the Office of Counterterrorism and Counterproliferation (CTCP), and the Office of Emergency Management (EM) – execute their missions in partnership with other U.S. Government agencies, most notably the Departments of State, Defense, 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 safeguards and setting guidelines for nuclear security.

In carrying out WMD threat reduction activities, the DNN appropriation programs depend on the scientific and technical expertise of the Department and the DOE/NNSA National Laboratories, as well as the capacity for international outreach, engagement, project management, implementation, and programmatic expertise. 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 prevents nuclear terrorism at home and abroad by reducing and, when possible, eliminating weapons-usable nuclear material around the world to achieve permanent threat reduction. The FY 2026 Budget Request supports the conversion or shutdown of research reactors and isotope production facilities that use highly enriched uranium (HEU), the downblending of HEU, the optimization of proliferation resistance in reactor designs, the high-assay low-enriched uranium (HALEU) recovery project, the removal and disposal of weapons-usable nuclear material, and the halting of the Dilute and Dispose program, except with respect to DOE's legal obligations to the State of South Carolina (SC). FY 2026 funding requirements for Plutonium Disposition are contingent upon further analysis of plutonium stocks

**Defense Nuclear Nonproliferation** 

FY 2026 Congressional Justification

held in SC and their potential for economic use by industry as fuel for advanced nuclear technologies. If certain capabilities are no longer necessary, such capabilities will be terminated and funds repurposed for other activities supporting the President's Executive Order.

## 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 makes America safer and stronger by preventing threats before they can reach U.S. borders and advancing U.S. leadership and influence on nuclear security. GMS also makes America more prosperous by protecting U.S. international investments from a costly R/N incident, by supporting the competitiveness and exportability of U.S. advanced reactor technology, and by encouraging deployment of U.S. technologies and security solutions. The FY 2026 Budget Request refocuses GMS activities on those that have the greatest impact in making America safer, stronger, and more prosperous, advancing U.S. leadership and influence on nuclear security, supporting the Administration's energy dominance agenda, and increasing burden sharing with counterparts. This includes prioritizing efforts that provide permanent risk reduction by eliminating radioactive materials and sources, working with the U.S. nuclear industry to export safe, secure, and reliable nuclear facilities in support of unleashing energy dominance, and engaging with law enforcement in high priority regions to counter smuggling of R/N materials, and shifting program models to increase efficiency and burden sharing with domestic and foreign counterparts.

## Nonproliferation and Arms Control (NPAC)

The NPAC program enhances U.S. national security and facilitates peaceful civil nuclear cooperation by reducing global nuclear proliferation threats. The NPAC program protects American international investments and 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. It strengthens America's global leadership in international nuclear safeguards, export control, and nuclear verification, directly supporting U.S. national security by preventing the illegal diversion of dangerous nuclear materials and WMD-related commodities and technologies to prevent threats before they reach the U.S. border. The FY 2026 Budget Request supports IAEA and partner countries' efforts to implement international safeguards obligations while ensuring those countries share the financial burden of supporting international nonproliferation efforts; execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches (Project Carousel); protect America's emerging technologies (i.e., Al, quantum) and associated U.S. industrial base from exploitation from international competitors and would-be proliferators; strengthen 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; 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; and 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 810), including through the development of advanced automation tools.

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

The DNN R&D program directly contributes to national security by developing 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, counterproliferation, and emergency response mission areas. In addition, DNN R&D sustains and develops foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats. DNN R&D leverages the unique facilities and scientific skills of the DOE/NNSA National Laboratories and sites, academia, and U.S. industry to perform research and demonstrate advances in capabilities, develop prototypes, and produce sensors for integration into operational systems. The FY 2026 Budget Request supports planned R&D activities for the early detection of foreign nuclear material production and weapons development activities and continued production of nuclear detonation detection satellite payloads. The request also supports continued efforts to sustain and develop foundational nonproliferation technical capabilities by providing targeted, long-term support for enabling infrastructure, science and technology, and an expert workforce. Additionally, it continues to develop and maintain advanced technical nuclear forensics analysis capabilities at the DOE/NNSA National Laboratories to enable rapid decision-making during nuclear or radiological incidents.

#### Nonproliferation Construction

Nonproliferation Construction funds construction projects whose cost exceeds the minor construction threshold within the DNN appropriation. The Surplus Plutonium Disposition (SPD) project will add three additional gloveboxes and supporting infrastructure at the Savannah River Site (SRS) to help dispose of plutonium that cannot be used for defense **Defense Nuclear Nonproliferation**FY 2026 Congressional Justification

or industry purposes, consistent with legal obligations to the state of SC. The FY 2026 Budget Request supports construction activities to maintain the approved baseline for project completion by April 2031, subject to further analysis of plutonium stocks in the State of SC. If such analysis determines that additional, shielded dilution capacity is not needed, DNN will terminate the project, provide the procured gloveboxes to the Office of Defense Programs, and repurpose funding to support the President's Executive Order.

## **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 2026 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 manner 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. Funding in the FY 2026 Budget Request also provides support for a dedicated CTCP subprogram involving global security infrastructure recapitalization activities. 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 deal with all types of emergencies 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 2026 Budget Request supports the following key priorities:

## **DNN Programs**

- Convert and/or verify the shutdown of one research reactor and isotope production facility.
- Pack and deliver 600 kilograms of scrap material from Y-12 to BWXT and produce limited quantities of HALEU to support advanced reactors.
- Remove excess HEU and plutonium from international partners.
- Complete a large-scale 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 SC.
- Eliminate surplus HEU by downblending it to LEU to reduce operating risk in deteriorating infrastructure.
- Continue the SPD Project until a determination is made as to whether the capabilities are necessary to execute the President's Executive Order on Reinvigorating the Nuclear Industrial Base.
- 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 President's Executive Order on Reinvigorating the Nuclear Industrial Base Executive Order.
- 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 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 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 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 treaty 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 Defense (DoD) and other strategic partnerships to inform national-level planning against emergent and novel nuclear threats.
- Provide sustained funding to the NNSA's National Laboratories, plants, and sites to 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 funding for the Requa settlement reached in 2019 as well as 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 *Requa* lawsuit involved UC employees of LLNL who retired prior to the Laboratory's transition to a new contractor on October 1, 2007. The retirees had been receiving health insurance through a UC health plan but when the LLNL contract transitioned to LLNS, the employees were offered health insurance through the new LLNL contractor, leading the retirees to file a lawsuit seeking reinstatement into the UC health plan. The parties settled the lawsuit in 2019, and a final judgment was issued in April 2020. DOE/NNSA agreed, pursuant to the legacy UC-LLNL Contract, to provide UC a portion of the total costs to settle the lawsuit, over a period of seven years through FY 2026. DOE/NNSA's responsibility for FY 2026 is \$4,000,000.

This budget line also continues to include the DNN share of the DOE's annual reimbursement made to the UC 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. These contracts are paid through the Legacy Contractor Pensions and Settlement Payments line item.

The DNN share of these costs in the FY 2026 Budget is \$20,993,000.

## **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 2026, the DNN appropriation projects providing \$3,800,000 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 2026 is \$4,002,000. 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 Congressional Control (\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request		quest vs FY nacted
	Lilacted	Lilacted	Request	\$	%
Material Management and Minimization <sup>a</sup>					
Reactor Conversion and Uranium Supply	166,675	143,227	63,383	-79,844	-55.7%
Nuclear Material Removal and Elimination	47,100	37,825	61,000	+23,175	+61.3%
Plutonium Disposition	282,250	147,045	150,686	+3,641	+2.5%
Total, Material Management and Minimization	496,025	328,097	275,069	-53,028	-16.2%
Global Material Security					
International Nuclear Security	84,707	64,707	62,865	-1,842	-2.8%
Radiological Security	258,033	246,033	186,406	-59,627	-24.2%
Nuclear Smuggling Detection and Deterrence	181,308	181,308	140,601	-40,707	-22.5%
Total, Global Material Security	524,048	492,048	389,872	-102,176	-20.8%
•		•	-		
Nonproliferation and Arms Control	212,358	227,008	221,008	-6,000	-2.6%
Defence Nuclear Namuraliferation DOD					
Defense Nuclear Nonproliferation R&D Proliferation Detection	200 200	305,728	269,376	26.252	11 00/
Nuclear Detonation Detection	290,388 285,603	305,728	307,435	-36,352 -2,053	-11.9% -0.7%
Nonproliferation Fuels Development	20,000	309,466	307,433	-2,055 +0	+0.0%
Forensics R&D	44,759	37,759	20,460	-17,299	-45.8%
Nonproliferation Stewardship Program	125,000	124,875	149,383	+24,508	+19.6%
Total, Defense Nuclear Nonproliferation R&D	765,750	777,850	746,654	-31,196	-4.0%
		,			
Nonproliferation Construction					
18-D-150 Surplus Plutonium Disposition Project, SRS	77,211	40,000	50,000	+10,000	+25.0%
Total, Nonproliferation Construction	77,211	40,000	50,000	+10,000	+25.0%
Nuclear Counterterrorism Incident Response Program					
Emergency Management	19,123	23,847	33,122	+9,275	+38.9%
Counterterrorism and Counterproliferation	483,898	507,050	596,878	+89,828	+17.7%
Total, Nuclear Counterterrorism Incident Response	503,021	530,897	630,000	+99,103	+18.7%
Program					
Legacy Contractor Pensions	22,587	100	20,993	+20,893	+20893.0%
Subtotal, Defense Nuclear Nonproliferation Appropriation	2,601,000	2,396,000	2,359,596	-62,404	-2.6%
Use of Prior Year Balances	-20,000	0	-39,574	-39,574	+0.0%
Cancellation of Prior Year Balances	0	0	-9,422	-9,422	+0.0%
Total, Defense Nuclear Nonproliferation Appropriation	2,581,000	2,396,000	2,284,600	-111,400	-4.6%

#### **Material Management and Minimization**

#### Overview

The Material Management and Minimization (M3) program mission is to prevent nuclear terrorism at home and abroad by reducing and, when possible, eliminating weapons-usable nuclear materials while reducing risks in the materials that remain. The M3 program makes America safer by partnering with United States (U.S.) industry and the Department of Energy/National Nuclear Security Administration National Laboratories (DOE/NNSA) to develop innovative technical solutions to (1) minimize the availability of highly enriched uranium (HEU) and plutonium for non-peaceful uses, (2) remove or eliminate nuclear materials internationally, permanently reducing the risk that they could be used in an improvised nuclear device and (3) make available excess nuclear material for industry use while continuing to meet DOE's legal obligations to the State of South Carolina (SC).

As part of its work to reduce the global nuclear security threat against the U.S., M3 also advances U.S. energy dominance goals. For example, 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 will make available almost seven MT of HALEU from multiple sources, including from the processing of inventories not usable to NNSA, to support broader U.S. nuclear energy goals while advancing the NNSA/M3 material management and minimization mission. M3 will also help the Department's Office of Nuclear Energy make plutonium available to industry to fuel advanced nuclear technologies.

## Funding (\$K)

	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
	Enacted	Enacted	Request	\$	%
Material Management and Minimization					
Reactor Conversion and Uranium Supply	166,675	143,227	63,383	-79,844	-56%
Nuclear Material Removal and Elimination	47,100	37,825	61,000	+23,175	+61%
Plutonium Disposition	282,250	147,045	150,686	+3,641	+3%
Total, Material Management and Minimization	496,025	328,097	275,069	-53,028	-16%

#### **Reactor Conversion and Uranium Supply**

## Description

The Reactor Conversion and Uranium Supply subprogram, referred to as the Convert subprogram, supports the implementation of key domestic and international nuclear nonproliferation activities addressing HEU and/or plutonium minimization. The Convert subprogram supports the conversion of international civilian research reactors and isotope production facilities to use non-weapons-usable nuclear materials. The subprogram also includes activities to disposition HEU by downblending it and making the resulting low-enriched uranium (LEU) available for tritium production or 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 instead of HEU.

As of the end of FY 2024, the Convert subprogram has converted or verified the shutdown of 109 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 providing technical support to international partners 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 (PRO-X) program, where the subprogram will work with partners in the U.S. and around the world 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.

To support current higher priority national security work in NNSA, M3 will not request new funding in FY 2026 for the conversion of the six U.S. High Performance Research Reactors from HEU to HALEU fuel. Prior-year funding will be used to conduct close-out activities to include concluding active irradiations and documenting data that has been generated over the lifetime of the program.

Prior-year funding will also be used to conclude technical work at the National Laboratories to support domestic Mo-99 production, and to support NNSA's cooperative agreement (CA) with the commercial partner to establish Mo-99 production in the U.S. without the use of HEU.

The Convert subprogram also supports DOE and NNSA's HALEU supply and uranium enrichment and deconversion initiatives and has substantially reduced excess holdings of HEU throughout the DOE/NNSA complex as part of its HALEU supply work. For example, the Convert subprogram identified 2.6 MTs of HALEU scrap material, most of which is located 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 the Y-12 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 also supports the Down-Blending Offering for Tritium (DBOT) contract. Although DBOT primarily is an NNSA Defense Programs contract, the subprogram is responsible for managing and funding a portion to support excess HEU disposition. In addition to the HALEU scrap material detailed above, the subprogram will 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 (A5D), and Building 9212 discards will be completed by the end of FY 2025, with offsite shipments occurring by the end of FY 2026.

## Highlights of the FY 2026 Budget Request

The FY 2026 funding request will support activities to convert or verify the shutdown of research reactors from HEU to HALEU fuel. The Convert subprogram will pack and deliver 600 kilograms (kgs) of scrap material from Y-12 to BWXT and produce limited quantities of HALEU to support advanced reactors. The Convert subprogram will also eliminate hundreds of kgs of surplus HEU by downblending to LEU (for tritium) or HALEU (for sale to research reactors/medical isotope producers). In addition, the Convert subprogram will collaborate with U.S. entities and international partners (e.g., Nigeria, Japan, others) to increase proliferation resistance features in research and advanced/small modular reactor designs.

## Reactor Conversion and Uranium Supply (-\$79.844 million)

Decrease reflects the termination of the program to convert the U.S. high performance research reactors (USHPRR) from HEU to HALEU fuel to support current higher priority national security work in NNSA.

#### **Nuclear Material Removal and Elimination**

## **Description**

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 that is removed from civilian sites worldwide reduces the risk of a terrorist or other malevolent actor acquiring HEU or plutonium for use in an improvised nuclear device. The subprogram directly advances U.S. and global HEU minimization objectives.

This subprogram consists of two primary lines of effort (1) Nuclear Material Removal and Consolidation, and (2) Mobile Packaging. 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, Russian-origin, and other origins, as well as separated plutonium. 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 do not currently 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 in a storage facility or repository outside the U.S.. The subprogram will continue construction of a next-generation modular processing system in FY 2026 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 in eliminating 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 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 for other than high income economy countries 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.

Under Mobile Packaging, the Remove subprogram maintains the capability to promptly respond to enable the safe and secure removal of nuclear material worldwide. This specialized capability focuses on addressing HEU and plutonium inventories using the Mobile Uranium Facility (MUF) and the Mobile Plutonium Facility (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.

## Highlights of the FY 2026 Budget Request

The FY 2026 budget request will permanently reduce risks presented by legacy nuclear materials by eliminating excess HEU and plutonium from foreign research reactors, including removing and/or confirming the disposition of 20 kgs of nuclear material from partner countries. The Remove subprogram will further reduce nuclear security risks by helping partner countries with eliminating sensitive nuclear infrastructure and continuing to expand NITR partnerships. The Remove subprogram will address inventories of weapons-usable nuclear material without a disposition pathway by assisting Norway in planning for the deployment of the MMC system, which Norway will use to downblend its remaining HEU, and advance the construction of a next-generation modular processing system to address additional inventories of excess HEU. The Remove subprogram will also maintain proficiency and readiness to respond to urgent nuclear material removal missions by conducting a large-scale exercise of the MUF and MPF, in addition to completing upgrades and repairs on both the MUF and MPF following international exercises.

## Nuclear Material Removal and Elimination (+\$23.175 million)

The increase supports additional funding for the Mobile Packaging program to complete a large-scale exercise of the MUF and the MPF, in order to maintain proficiency and readiness to respond to urgent nuclear material removal missions. The increase will also support the higher costs to execute nuclear material removals due to increased shipping costs and inflation. The increase is offset by the use of \$19 million in prior year balances, reflected in the Use of Prior Year Balances offset for the appropriation.

### **Plutonium Disposition**

## **Description**

The Plutonium Disposition subprogram is responsible for disposing of surplus plutonium in a safe and secure manner, including removing surplus plutonium from the State of SC to meet legal commitments to the State of SC and in compliance with the President's Executive Order on Reinvigorating the Nuclear Industrial Base Executive Order.

NNSA's Office of Defense Nuclear Nonproliferation (DNN) will partner with the Offices of Defense Programs and Nuclear Energy to assess surplus plutonium inventories and determine which materials are suitable for defense or industry purposes and which materials, if any, will need to be dispositioned through the Program to meet legal obligations to the State of South Carolina.

The subprogram also executes pit disassembly and conversion activities using the existing Advanced Recovery and Integrated Extraction System (ARIES) capability at Los Alamos National Laboratory (LANL) to produce plutonium oxide. If subsequent analysis determines that no additional dilution and disposal of plutonium is necessary to meet legal obligations to the State of SC, the subprogram will continue to maintain the ARIES capability in FY 2026, as the capability is necessary to support pit production efforts at LANL.

## Highlights of the FY 2026 Budget Request

The FY 2026 Budget reflects the President's direction to halt the Dilute and Dispose program, except with respect to DOE's legal obligations to the State of SC. The Budget includes funding necessary to maintain existing capabilities to remove plutonium from SC. However, funding requirements are contingent upon further analysis of plutonium stocks held in SC and their potential for economic use by industry as fuel for advanced nuclear technologies. If certain capabilities are no longer necessary, such capabilities will be terminated and funds repurposed for other activities supporting the President's Executive Order.

## Plutonium Disposition (+3.641 million)

Increase supports scope at SRS's K-Area Complex previously funded and executed by DOE EM prior to transition of management of Savannah River Site (SRS) to NNSA.

## DNN Material Management and Minimization Capital Equipment Summary (\$K)

	Total	Prior Years	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	Outyears
Capital Equipment (> \$500K)						
Total Non-MIE Capital Equipment (TEC <\$10M)	N/A	N/A	6	6	6	N/A
Acid Cleaning Line, BWXT <sup>a</sup>	6,125	4,000	0	2,125	0	0
Integrated Data Management System, SRS	18,000	0	18,000	0	0	0
Total, Capital Equipment	N/A	N/A	18,006	2,131	6	N/A

#### **Global Material Security**

#### Overview

Taking into account the significant progress the Office of Global Material Security (GMS) program has made in securing and preventing the smuggling of radioactive and nuclear (R/N) materials, this budget request refocuses GMS activities on those that have the greatest impact in making America safer, stronger, and more prosperous, advancing U.S. leadership and influence, supporting the Administration's energy dominance agenda, and increasing burden sharing with counterparts.

GMS increases the security of the United States (U.S.) Homeland by preventing R/N threats before they reach U.S. shores. A single instance of a radiological dispersal device or an improvised nuclear device detonation 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. GMS' work is critical in addressing several current and evolving risks, including: the increasing amount of R/N materials in use globally, continued attempts at smuggling of R/N materials, increased conflict and terrorist activity globally, and continued state-based actions to disrupt critical infrastructure and undermine security norms.

GMS is prioritizing 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. Leveraging advances in technology and drawing on the success of the Cesium Irradiator Replacement Program, GMS will focus on increased use of non-radioisotopic alternative technologies beyond cesium-137 for applications such as food irradiation, wastewater purification, medical product sterilization, and advanced cancer treatment.

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 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 operating 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 before they are used in acts of terrorism against the U.S., 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 U.S.

Across its three mission areas, 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 of its funding through the DOE/NNSA National Laboratories and U.S. businesses, supporting American prosperity, technical expertise, and export of U.S. manufactured security systems and advanced 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 and funding to key international organizations, such as the International Atomic Energy Agency (IAEA), to support U.S. national security interests, advance continued U.S. leadership at critical technical agencies, reinforce U.S. messaging on the importance of nuclear security, and drive other countries to invest their own resources to secure and stop movement of R/N materials.

# Summary Funding Table by Budget Control<sup>1</sup> Global Material Security Funding (\$K)

	FY 2024 Enacted	FY 2025 <sup>1</sup> Enacted	FY 2026 Request	FY 2026 Request vs FY 2025 Enacted	
	Lilacica	Lilactea	Request	\$	%
Global Material Security					
International Nuclear Security	84,707	64,707	62,865	-1,842	-3%
Radiological Security	258,033	246,033	186,406	-59,627	-24%
Nuclear Smuggling Detection and Deterrence	181,308	181,308	140,601	-40,707	-23%
Total, Global Material Security	524,048	492,048	389,872	-102,176	-21%

<sup>&</sup>lt;sup>1</sup> The FY 2025 Enacted level for International Nuclear Security does not reflect the use of \$20 million in prior year carryover.

#### **International Nuclear Security**

#### Overview

The International Nuclear Security (INS) subprogram leads U.S. international nuclear security efforts, demonstrating U.S. leadership to prevent theft of nuclear material and sabotage of nuclear facilities worldwide, while helping keep the U.S. safe, strong, and prosperous. By working with industry to export safe, secure, and reliable nuclear facilities, while preventing sabotage at operating sites, these efforts support the Administration's focus on the critical role of nuclear power in unleashing energy dominance by reinvigorating the nuclear industrial base.

The INS subprogram increases the security of vulnerable inventories of nuclear materials that could pose direct threats to the safety and prosperity of the American people. U.S. leadership has improved nuclear security around the world substantially, and the subprogram continues to develop new strategic approaches to address evolving adversary capabilities and tactics, threats from state-based actors and regional conflicts, as well as new and evolving technologies that challenge traditional security approaches. 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. In this area, the subprogram will increase efficiency to maximize program resources' impact on U.S. national security by shifting away from providing security upgrades at lower-consequence research reactors and collaborating with more partners regionally instead of bilaterally. The subprogram will prioritize security upgrades to the highest-consequence nuclear materials and require more cost-sharing from partners to reduce dependency on the U.S.

The INS subprogram also leverages the experience and expertise at DOSE/NNSA National Laboratories to support the global expansion of civil nuclear power, 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 American export competitiveness. In parallel, the subprogram works bilaterally and multilaterally to drive demand for the most secure technologies by countries embarking on new or expanded civil nuclear power programs, also helping to counter the influence of China and Russia.

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 impede global nuclear commerce. Furthermore, in close coordination with NNSA's Office of Counterterrorism and Counterproliferation, the INS subprogram is conducting crisis contingency planning related to nuclear security in the event of a natural disaster or military action that could also potentially negatively impact the nuclear energy renaissance.

## Highlights of the FY 2026 Budget Request

In Fiscal Year (FY) 2026, 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 will also provide direct and in-kind partnerships with U.S. industry on security by design for A/SMRs to support U.S. leadership in responsible nuclear power development and deployment globally.

In addition, the subprogram will increase efforts to raise nuclear security awareness and demand for secure and reliable technologies on the part of countries embarking on new or expanding civil nuclear power programs. The subprogram will provide targeted funding to the IAEA Department of Nuclear Energy to engage with these countries and counter Chinese and Russian influence.

Finally, the INS subprogram will expand cooperation with key allies to prevent sabotage at nuclear power plants and engage partner countries on crisis contingency planning related to nuclear security in the event of natural disaster or military action that could have negative implications for a nuclear energy renaissance.

## International Nuclear Security (-\$1.842 million)

The decrease reflects a shift to prioritizing activities that have the most direct impact on U.S. national security, support the U.S. nuclear industry, and reduce foreign dependency on the U.S. The decrease reduces funding for lower-priority activities, including provision of security upgrades for research reactors; indeterminate sustainability support; international training courses; and workforce development.

## **Radiological Security**

## Overview

The Radiological Security (RS) subprogram makes the U.S. safer, stronger, and more prosperous by eliminating the risk of a radiological dispersal device, colloquially known as a dirty bomb, or any other malicious use of radioactive material. Every day in the U.S. 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.

The RS subprogram's top priority is the radioactive material in the U.S. that could be used to threaten American safety, security, and prosperity. It is also necessary to reduce 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.

The RS subprogram 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, if not properly managed this material sits idly, often for years, posing a security risk and burdening industry. Leveraging world-class, one-of-a-kind expertise at the DOE/NNSA National Laboratories, the subprogram helps its partners remove these materials safely and securely, thus eliminating the risk of malicious use at hundreds of locations, mostly in the U.S., 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.

The subprogram is the global leader in promoting the 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 on the market is sourced from Russia and China.

The 2019 National Defense Authorization Act mandated that the RS subprogram eliminate all cesium-based blood irradiators in the U.S. by the end of 2027 to enhance U.S. national security. As of May 1, 2025, the subprogram has eliminated 248 of 315 devices. The subprogram expects to eliminate over 90 percent of the U.S. inventory by the end of 2026. The subprogram intends to eliminate not only the remaining blood irradiators, but also research irradiators. Building from this success and tapping into the Department'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, across a broad spectrum of applications, fostering American ingenuity and securing the U.S.' technological advantage.

Where radioactive material is still needed, the RS subprogram empowers users and law enforcement to respond effectively to attempted theft by equipping them with cutting-edge solutions and knowledge. To maximize resources and reduce dependency, the subprogram generally will cease provision of physical protection upgrades and transition responsibility for maintenance and warranty on previously provided upgrades to partners. The subprogram maintains its extensive network of relationships in the U.S. and abroad through radiological security advisory assessments, technical exchanges, and training. The subprogram 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 2026 Budget Request

In FY 2026, the RS subprogram will make America safer by eliminating unwanted radioactive sources (600 from across the U.S. and 100 from abroad) before they can be used to threaten American security and prosperity. The subprogram will make America more prosperous by facilitating the transition from high-risk radioactive sources to safer, more secure, and more advanced alternatives, including the elimination or replacement of 70 devices (50 domestically and 20

internationally), and developing, promoting, and incentivizing the use of alternatives to cobalt-60 for cancer treatment, medical product sterilization, food irradiation, and agricultural pest management.

In addition, the RS subprogram will drive American innovation by supporting the development of the U.S. accelerator industry as an alternative to cobalt-60 for industrial irradiation applications. 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.

The RS subprogram will fabricate a mobile hot cell for high-activity disused source removals domestically and internationally. The subprogram will make America stronger by giving local law enforcement the tools, knowledge, and awareness it needs to prepare for and respond quickly and safely to suspected thefts of radioactive material, including the deployment of Sentry-SECURE, a system that provides real time knowledge into the hands of law enforcement to four locations in the U.S.

Finally, the RS subprogram will conduct 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. The subprogram 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 and collaborate with industry partners to deploy corporate training programs to enhance security of large sterilization facilities, where transition to alternatives is not yet feasible.

## Radiological Security (-\$59.627 million)

The decrease reflects the shift in program focus to prioritize activities that eliminate radioactive sources and provide permanent risk reduction. As a result, the RS subprogram will generally cease funding for physical protection equipment and transition maintenance and warranty costs to sites. The subprogram will also decrease funding for lower priority projects related to alternative technologies and disused source management.

### **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; the continued dissemination of weapons of mass destruction information in open sources; and advances in technology that may facilitate proliferation or terrorist R/N programs. To address these threats, NSDD provides a combination of proven radiation detection equipment, along with tailored process and procedure development, to enable foreign partners to perform their own detection operations and share information on detections. This approach has driven foreign partners to fund their own counter nuclear smuggling (CNS) operations in support of U.S. national security and has resulted in interdictions of dozens of radioactive sources as well as hundreds of kilograms of nuclear material.

Intelligence trends show that a vast majority of R/N interdictions occur through targeted operations and law enforcement investigations between official border points (e.g., frontier areas) and within the interior of a country. As a result, the NSDD subprogram prioritizes law enforcement collaboration, which may include providing American-made detection equipment to a limited number of priority foreign counterparts, to maximize risk reduction within existing resources. Equipment deployments for frontier and interior operations typically cost up to five times less than radiation portal monitor deployments, which the subprogram deployed historically, and have lower maintenance costs. To further improve efficiency and increase burden sharing, the subprogram is revising its approach with a focus on each partner quickly assuming maintenance responsibility for all systems in addition to the partner assuming all operational responsibilities, which has always been a condition of collaboration. This approach drives foreign partners to support U.S. national security priorities without creating financial dependencies on the U.S.

To assess return on program investments, the NSDD subprogram will continue to evaluate operational capabilities of partners. Assessments verify detection operations, confirm receipt of information on interdictions, and make partners less reliant on U.S. resources. The subprogram cooperates with advanced countries and multilateral partners focused on burden sharing to promote future risk reduction by others outside the U.S. The subprogram will continue to seek burdensharing 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 relies on a backbone of technical and law enforcement expertise within the National Laboratory network and among key U.S. businesses. The subprogram is one of the major market drivers for advancing 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. Equipment provided by China is technologically inferior and poses a substantial national security risk to the U.S. and its allies because of data-sharing requirements and cybersecurity vulnerabilities.

The NSDD subprogram's efforts yield insight and information from partner countries' CNS operations that can be critical to the U.S. understanding of threats that, were they to go unaddressed, would result in catastrophic consequences. The subprogram operates as an early warning on the spectrum of nuclear nonproliferation activities that connects with and may initiate a U.S. counterterrorism (CT) response by the Department of Defense (DoD), the Federal Bureau of Investigation (FBI), and NNSA's Nuclear Emergency Support Team. The subprogram's focused collaboration with members of the CT response community will improve standardization of U.S.-based technology and support seamless information sharing or transition to a response when materials are interdicted.

## Highlights of the FY 2026 Budget Request

In FY 2026, 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, Middle East, Africa, and Latin America.

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 integrating 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, and DoD, 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.

## Nuclear Smuggling Detection and Deterrence (-\$40.707 million)

The decrease reflects a shift to prioritizing activities that have the most direct impact on U.S. national security and reduce foreign dependency on the U.S. The NSDD subprogram will reduce deployment of radiation detection systems to lower-priority regions, decrease funding of maintenance support, and decrease funding for new tools, allowing foreign partners to assume greater responsibility for countering nuclear smuggling.

#### Nonproliferation and Arms Control

#### Overview

The Nonproliferation and Arms Control (NPAC) program strengthens U.S. national security and facilitates peaceful civil nuclear cooperation by reducing global nuclear proliferation threats. The NPAC program prevents 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 also 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.

The NPAC program pursues these objectives through four subprograms: (1) International Nuclear Safeguards; (2) Nuclear Export Controls; (3) Nuclear Verification; and (4) Civil Nuclear Cooperation and Engagement. These offices: strengthen international nuclear safeguards; control the proliferation of nuclear material, equipment, technology, and expertise; verify nuclear reductions and compliance with nonproliferation and arms control treaties and agreements; and develop programs and strategies to anticipate and address nuclear nonproliferation and arms control challenges and opportunities. Across these functions, the program plays 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.

The International Nuclear Safeguards subprogram Provides American leadership at the International Atomic Energy Agency (IAEA) to ensure that partner states implement and meet international safeguards obligations. Strengthens the IAEA's ability to verify Iran's nuclear program and the peaceful use of other nuclear materials in 190 countries. Develops efficient and cost-effective safeguards tools, technologies, and methods, including a uranium enrichment platform to enhance IAEA and U.S. monitoring capabilities. 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.

The **Nuclear Export Controls subprogram** Strengthens domestic and global capacity to detect and prevent diversion of commodities and technologies to adversaries' WMD and military programs. Conduct high-efficiency, technical reviews of thousands of export licenses for nuclear and dual-use commodities. Protects America's emerging technologies (i.e., Artificial Intelligence, quantum technologies) and associated U.S. industrial base from exploitation from international competitors and would-be proliferators.

The **Nuclear Verification subprogram** 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. 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.

The Civil Nuclear Cooperation and Engagement subprogram Implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally to counter Russian and Chinese influence. Implements the President's Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security by streamlining regulatory and programmatic processes to allow U.S. nuclear industry to engage with foreign partners (123 Agreements, 10 CFR 810), including through the development of automation tools. Develops programs and strategies to advance U.S. nuclear energy dominance while supporting nonproliferation objectives.

## Nonproliferation and Arms Control Funding (\$K)

	FY 2024 Enacted		FY 2026 Request		Y 2026 Request vs FY 2025 Enacted	
	Enacted	Enacted	Request	\$	%	
Nonproliferation and Arms Control		1				
International Nuclear Safeguards	76,196	94,241	83,590	-10,651	-11%	
Nuclear Export Controls	44,214	41,749	50,649	+8,900	+21%	
Nuclear Verification	73,605	70,764	65,150	-5,614	-8%	
Civil Nuclear Cooperation and Engagement	18,343	20,254	21,619	+1,365	+7%	
Total, Nonproliferation and Arms Control	212,358	227,008	221,008	-6,000	-3%	

## Highlights of the FY 2026 Budget Request

The NPAC program will execute a wide-ranging set of activities in FY 2026. The program will strengthen the International Atomic Energy Agency's (IAEA) capacity to verify Iran's nuclear program and other 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.

The program will execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches (Project Carousel). Additionally, the program will develop, test, and transfer efficient and cost-effective safeguards tools, technologies, and methods. The program will engage 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.

In the export controls arena, the NPAC program will continue to protect America's emerging technologies (i.e., artificial intelligence, quantum computing) and associated U.S. industrial base from exploitation from international competitors and would-be proliferators. The program will strengthen Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratories' capabilities (i.e., equipment and human resources) that will enhance the U.S. Government's ability to implement and develop dual use export controls on semiconductors and associated equipment. It will also increase resources across DOE/NNSA to identify adversary supply chains and key chokepoints and conduct testing and evaluation on emerging technologies to understand export control implications. Finally, the program will bolster the U.S. Government's and international partners' ability to prevent transfers that would contribute to foreign WMD programs of concern, including China.

Within its monitoring and verification program, the NPAC program will 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, and more broadly, develop, demonstrate, and deploy applied monitoring and verification technologies. The program 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.

The NPAC program will enhance the competitiveness of U.S. nuclear industry by streamlining the regulatory and programmatic process to allow U.S. nuclear industry to engage with foreign partners more efficiently and timely (123 Agreements, 10 CFR 810), including through the development of advanced automation tools and approaches. The program will protect America's civil nuclear infrastructure and associated supply chain.

## Nonproliferation and Arms Control (-\$6 million)

Funding decreases for Project Carousel as facility nears completion, international engagements, training, and nuclear verification exercises offset by increased funding to (1) strengthen DOE/NNSA National Laboratories' capabilities to enhance implementation and development of dual use export controls on semiconductors and identification of adversary supply chains, (2) safeguards and verification technology development, and (3) development of advanced automation tools to improve efficiency in facilitating civil nuclear trade.

### **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, counterproliferation, and emergency response 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, academia, and U.S. industry 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 supports strategic stability and the development of U.S. capabilities to monitor and characterize foreign nuclear programs independently of treaties or agreements. It also advances emergency response and nuclear forensics R&D to enable rapid decision-making during nuclear or radiological incidents and help determine 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.

## Defense Nuclear Nonproliferation Research and Development (DNN R&D) Funding (\$K)

	FY 2024 Enacted		FY 2026	FY 2026 Request vs FY 2025 Enacted	
	Enacted	Enacted	Request	\$	%
Defense Nuclear Nonproliferation R&D					
Proliferation Detection	290,388	305,728	269,376	-36,352	-11.9%
Nuclear Detonation Detection	285,603	309,488	307,435	-2,053	-0.7%
Nonproliferation Fuels Development	20,000	0	0	+0	+0.0%
Forensics R&D	44,759	37,759	20,460	-17,299	-45.8%
Nonproliferation Stewardship Program	125,000	124,875	149,383	+24,508	+19.6%
Total, Defense Nuclear Nonproliferation R&D	765,750	777,850	746,654	-31,196	-4.0%

## Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR):

FY 2024 Enacted: SBIR: \$13,578; STTR: \$0
FY 2025 Enacted: SBIR: \$13,769; STTR: \$0
FY 2026 Request: SBIR: \$12,624; STTR: \$0

#### **Proliferation Detection**

## **Description**

The Proliferation Detection (PD) subprogram develops technologies for detecting and characterizing foreign nuclear weapons programs, establishing independent U.S. capabilities to monitor and characterize foreign development of nuclear weapons irrespective of treaties or agreements and to interdict 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 the 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 2026 Budget Request**

In Fiscal Year (FY) 2026, 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 PD subprogram will also 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 also extend remote sensing and data science research efforts to address the nuclearization of space in collaboration with the Nuclear Detonation Detection (DNN) subprogram.

Finally, the PD subprogram will award one new 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 (-\$36.352 million)

The decrease reflects the reduction or elimination of certain lower-priority activities to provide funds for higher-priority activities within the Nonproliferation Stewardship Program (NSP) and other NNSA programs. These reductions are partially offset by an expansion of early-stage research and development for new space monitoring capabilities in collaboration with the NDD subprogram.

#### **Nuclear Detonation Detection**

## **Description**

The Nuclear Detonation Detection (NDD) subprogram develops and builds space sensors for the U.S. Government's operational nuclear warfighting, space control, and nuclear test treaty monitoring missions and advances U.S. capabilities to understand and monitor seismic and radionuclide signatures of ground-based nuclear detonations, including low-yield and evasively conducted underground nuclear explosions. The NDD subprogram is also continuing to establish a line of 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 and supporting the Outer Space Treaty.

## Highlights of the FY 2026 Budget Request

In FY 2026, 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.

Finally, the subprogram will continue to establish 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 (-\$2.053 million)

The decrease reflects the elimination of funds for geosynchronous space sensors with no current plan for integration onto satellites to provide funds for higher-priority activities within the NSP and other NNSA programs. The decrease is partially offset by an increase in funds for the demonstration and validation of U.S. space monitoring capabilities to address emerging challenges in the space environment.

#### Forensics R&D

## **Description**

The Forensics R&D subprogram supports developing and advancing 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 assist in determining 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 2026 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 U.S. Government response to a nuclear or radiological event.

Additionally, the subprogram will support the 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 (-\$17.299 million)

The decrease reflects the prioritization of operational forensics capabilities within the Nuclear Counterterrorism and Incident Response program.

#### **Nonproliferation Stewardship Program**

## Description

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 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 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, are creating more diverse pathways to developing a nuclear weapon and have reduced and evolved the footprint and associated signatures of those activities. The convergence of these trends coupled with the continued threat of covert proliferation is making the task of nuclear nonproliferation more complex. To ensure the technical agility needed to support nonproliferation missions and anticipate threats, the NSP subprogram sustains and develops foundational nonproliferation technical competencies by providing targeted, long-term support for 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 2026 Budget Request

In FY 2026, the NSP subprogram will support hands-on workforce expertise development activities and operate testbed and S&T laboratories to address immediate 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 (ATOLL) 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.

In addition, the NSP subprogram will procure, install, and test representative uranium conversion equipment supporting the Uranium Science and Technology Center (USTC) phase III laboratories, 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 (UPWT) 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-ELP) and the Plutonium Science Laboratory (PluS-Lab).

Finally, the subprogram will recruit and onboard the third cohort of the Next Generation Leadership Development Program to sustain a targeted talent pipeline to DOE/NNSA National Laboratories.

## Nonproliferation Stewardship Program (+\$24.508 million)

The increase enables development of ATOLL to grow competencies and workforce expertise in uranium enrichment technologies operated in complex environments, and of the UPWT to build critical competencies through pilot scale uranium chemical conversions, separations, and uranium component fabrication.

## DNN Research and Development Capital Equipment Summary (\$K)

## Capital Equipment (> \$500K)

Total Non-MIE Capital Equipment (TEC <\$10M) Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL<sup>1</sup>

## **Total, Capital Equipment**

Total	Prior Years	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	Outyears
N/A	N/A	64,990	66,355	67,748	N/A
15,000	3,000	3,000	3,000	3,000	0
N/A	N/A	67,990	69,355	70,748	N/A

<sup>&</sup>lt;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 funds the remainder of costs for this MIE.

#### **Nonproliferation Construction**

#### Overview

The Nonproliferation Construction Program consolidates The Office of Defense Nuclear Nonproliferation's (DNN) construction projects whose costs exceed the minor construction threshold into a single program. DNN is currently executing one construction project, the Surplus Plutonium Disposition (SPD) Project, which will add three additional gloveboxes and supporting infrastructure at the Savannah River Site to dilute surplus plutonium deemed not usable by industry for advanced nuclear technologies.

#### Description

In the second quarter of FY 2024, a Department of Energy (DOE) team conducted an Independent Cost Estimate (ICE) and an External Independent Review (EIR) on the SPD Project. This review determined that the costs of some of the project activities were underestimated, particularly regarding readiness and escalation. The project incorporated required changes to improve the efficacy of the Performance Measurement Baseline. On June 12, 2024, the M&O contractor submitted for the National Nuclear Security Administration's (NNSA) approval an updated CD-2/3 Performance Baseline Proposal. This updated proposal included a total project cost of \$997.1M and CD-4 completion date of April 2031. The Project Management Executive approved CD-2/3 with this baseline on October 25, 2024.

DNN will partner with NNSA's Office of Defense Programs and DOE's Office Nuclear Energy to assess surplus plutonium material inventories to support implementation of the President's Executive Order on Reinvigorating the Nuclear Industrial Base and meet DOE's legal obligations to the State of South Carolina. This analysis, when completed, will be the basis for determining DNN's future requirements for SPD project capabilities. If such analysis determines that additional, shielded dilution capacity is not needed, DNN will terminate the project, provide the procured gloveboxes to the Office of Defense Programs, and repurpose funding to support the President's Executive Order.

## Other Project Cost (OPC)

This activity supports all other costs related to a project that are not included in the Total Estimated Cost. OPCs include, but are not limited to: research and development; conceptual design and the conceptual design report; cold start-up and commissioning costs; National Environmental Policy Act documentation; project data sheet preparation; siting; and permitting requirements. These costs are part of the approved baseline and the total project cost (TPC) of the project.

## **Total Estimated Costs (TEC)**

This activity supports the design, long-lead equipment procurement, site preparation, and construction of the project.

#### Highlights of the FY 2026 Budget Request

All activities below presume that analysis required by the President's Executive Order determines that additional plutonium must be diluted to meet legal obligations to the State of South Carolina. If such analysis determines that no additional, shielded dilution capacity is needed, DNN will terminate the project and provide procured gloveboxes to the Office of Defense Programs.

- Construct the reinforced concrete interior walls and second floor.
- Construct the High Efficiency Particulate Air (HEPA) building foundation and structure.
- Begin construction of electrical, mechanical, and subcontracted scopes of work.
- Finish receipt and inspection of long-lead equipment and materials.

## Nonproliferation Construction- U.S. Construction (+\$10.0 million)

The increase will, along with planned carryover, allow the project to remain on schedule until the material inventory for the program is completed to implement the President's Executive Order on Reinvigorating the Nuclear Industrial Base Executive Order.

#### **Nuclear Counterterrorism and Incident Response Program**

#### Overview

The Department of Energy/National Nuclear Security Administration's (DOE/NNSA) fulfills a unique national security role upholding the missions to counter nuclear terrorism, counter nuclear proliferation, and respond to nuclear or radiological incidents, accidents, or emergencies worldwide. The Nuclear Counterterrorism and Incident Response (NCTIR) program ensures that the Department is appropriately postured to provide emergency preparedness and response, thus keeping America safe and secure. The scientific knowledge of the DOE/NNSA National Laboratories underpins this capability, enabling requisite technical assessments of nuclear and radiological threats and informing domestic and international policies, regulations, contingency planning, training, preparedness. These activities strengthen national and international counterterrorism, counterproliferation, and incident response capabilities.

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 subprogram 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 and sustained operations during a continuity event.
- The Counterterrorism and Counterproliferation (CTCP) subprogram reduces the threat of nuclear and radiological terrorism and nuclear proliferation through innovative scientific and technological assessments that inform policy solutions. The CTCP subprogram also maintains capabilities to avert, respond to, and mitigate the consequences of nuclear and radiological incidents and accidents in the U.S. and abroad. The subprograms supporting the CTCP mission include Nuclear Incident Response / Nuclear Emergency Support Team (NIR/NEST), National Technical Nuclear Forensics (NTNF), Nuclear Incident Preparedness and Collaboration (NIPC), Nuclear Threat Science (NTS), and Global Security (GS) Recapitalization.

## Nuclear Counterterrorism and Incident Response Program Funding (\$K)

		FY 2026 Request	FY 2026 Request vs FY 2025 Enacted		
	Enacted	Enacted	Request	\$	%
Nuclear Counterterrorism & Incident Response					<u>,                                      </u>
Program					
Emergency Management	19,123	23,847	33,122	+9,275	+39%
Counterterrorism and Counterproliferation	483,898	507,050	596,878	+89,828	+18%
Nuclear Incident Response / Nuclear Emergency					+8%
Support Team	259,566	281,704	303,362	+21,658	+0/0
National Technical Nuclear Forensics	61,363	62,900	74,265	+11,365	+18%
Nuclear Threat Science	147,660	147,979	190,542	+42,563	+29%
Nuclear Incident Preparedness and Collaboration	15,309	14,467	19,209	+4,742	+33%
Global Security Recapitalization	0	0	9,500	+9,500	-%
Subtotal, Counterterrorism and Counterproliferation	483,898	507,050	596,878	+89,828	+18%
Total, Nuclear Counterterrorism & Incident			•	<u>-</u>	
Response Program	503,021	530,897	630,000	+99,103	+19%

#### **Emergency Management**

## Description

As the DOE's Office of Primary Responsibility, the EM subprogram executes mandated emergency management and continuity functions. The Fiscal Year (FY) 2026 Budget Request focuses on Headquarters (HQ) EM activities and resources across three program areas: preparedness, continuity, and emergency operations. The preparedness subprogram promotes a comprehensive approach to mitigate, prevent, 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 HQ, Field Elements, and facility contractors in implementing effective emergency management programs; and leads the exchange of Management and Operating (M&O) best practices via the Emergency Management Issues Special Interest Group (EMI-SIG). The subprogram also implements and manages a readiness assurance program, develops and evaluates national level exercises, provides technical support and tools, performs oversight functions, and facilitates collaboration via the Emergency Management Advisory Committee (EMAC). 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 NSSEs, including events like 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, 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 departmentwide support.

## Highlights of the FY 2026 Budget Request

The EM subprogram's FY 2026 Budget Request focuses on mandated, program-specific and cross-programmatic initiatives. The preparedness subprogram will manage the emergency management Technical Qualification Program; implement, manage, and coordinate emergency management readiness assurance program analysis and reporting; and host and lead the annual EM Symposium. The continuity subprogram will improve and enhance interoperability of emergency communications systems across DOE, NNSA, and interagency partners. The emergency operations subprogram will advance situational awareness products through technology, including unclassified and classified Geospatial Information Systems (GIS), notification and alert software, and information management systems; and improve the DOE Unified Coordination Group (UCG) structure in support of DOE and NNSA emergency response efforts.

## **Emergency Management (+\$9.275 million)**

The FY 2026 Budget Request reflects the need for additional continuity and emergency operations resources. The additional funding will expand support to DOE and NNSA Senior Leadership for continuity program activities; replace end-of-life mission critical systems and hardware; initiate key additional operational capabilities outside the National Capital Region. In addition, the increase will address a gap in funding for a support services contract recompete to maintain current levels of operations.

#### **Counterterrorism and Counterproliferation**

## Description

The CTCP subprogram provides technical expertise, practical tools, and scientifically informed recommendations to advance U.S. nuclear counterterrorism and counterproliferation objectives and policies. The CTCP subprogram focuses on nuclear and radiological incidents and accidents, with the core mission to prepare for and respond to such events.

The Nuclear Incident Response/Nuclear Emergency Support Team (NIR/NEST) subprogram serves as the Nation's last line of defense against nuclear or radiological emergencies. Its mission is to apply 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 events 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 Defense (DoD), Federal Bureau of Investigation (FBI), and the Intelligence Community. The subprogram provides technical assistance to respond domestically or abroad to nuclear and radiological emergencies, including terrorist threats involving nuclear materials, as well as to conduct exercises and provide support to the NEST capabilities to ensure safe incident resolution and the protection of public safety and the environment. The subprogram accomplishes this mission by ensuring the appropriate resources (people, communications, locations, doctrine/training, etc.) 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 maintains the nuclear forensics technical and operational capabilities that underpin the core U.S. Government's 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 leveraging U.S. nuclear weapons expertise to reverse engineer the device design.

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 domestically with federal, state, and local officials to expand their capabilities to respond to radiological or nuclear incidents and accidents. As part of a robust strategy to protect the U.S. from potential radiological or nuclear threats, this subprogram also cooperates with key international partners and allies to strengthen their ability to effectively address radiological or nuclear incidents in their regions—with or without U.S. involvement—as far from U.S. territory as possible. NIPC funding covers domestics engagements while the majority of international engagements are cost-shared with the partner. While NIPC funds the subject matter experts and content, the international partner provides the venue, logistical arrangements, and participant time/salary. These engagements benefit U.S. national security by providing insight into partner programs and capabilities, partnerships with competent authorities and their emergency operations centers enabling effective coordination during a response, early notification/trusted information during an incident, and increased confidence in the partner country's ability to mitigate the consequences of an incident, thereby lessening potential impact on the US homeland. Partners include Israel, Mexico, France, the United Kingdom, Kazakhstan, Morocco, Ukraine, Romania, Norway, and the Republic of Korea. This strategy enhances U.S. safety and security while keeping costs low.

The FY 2026 Budget Request will increase domestic emergency preparedness and response capabilities at the federal, state, and local levels; strengthen preparedness and response capabilities with targeted international partners; and support absorption of select Ukraine Task Force capacity building and remote sensing activities.

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 or novel nuclear threats against U.S. strategic interests. The NTS subprogram maintains and advances this technical capability through partnerships with DOE/NNSA's nuclear weapons design laboratories and production facilities, and through technical and policy exchanges with the United Kingdom and France. The subprogram also conducts focused science on explosive and nuclear material behaviors. In particular, the subprogram performs integrated experiments as part of risk assessments of nuclear materials and nuclear threat devices in support of interagency and international partners. Collectively, this work shapes the U.S. understanding of nuclear terrorism and nuclear proliferation threats, thus advancing U.S. safety and security.

The **Global Security (GS) Recapitalization** subprogram complements investments made under the Weapons Activities Recapitalization program to address growing and unique GS mission-specific infrastructure requirements. This subprogram dedicates investments to the critical infrastructure paramount to CTCP missions and will deliver critical capabilities in a timely, executable, and affordable manner across DOE/NNSA sites.

#### Highlights of the FY 2026 Budget Request

The CTCP subprogram FY 2026 Budget Request focuses on executing mission priorities at a heightened operational tempo for national nuclear security, nuclear risk reduction, critical energy infrastructure, and emergency preparedness and response. CTCP subprogram priorities make the American people safer, more secure, and more prosperous by leveraging unique technical and operational expertise from within NEST to strengthen partners' emergency preparedness and response capabilities for radiological or nuclear emergencies, effectively helping protect American citizens and interests overseas, to mitigate consequences ideally before such emergencies can directly impact the U.S. homeland. CTCP subprogram mission priorities require world-class capabilities in science and operations, both with increased demand.

Funding for NIR/NEST in the FY 2026 Request implements the second phase of the Capability Forward (CF2) initiative, enabling regional FBI counter-weapons of mass destruction (WMD) teams to take decisive action against a WMD device, thereby accelerating life-saving responses to nuclear and radiological threats. CF2 training development capabilities will expand and enhance capabilities within all FBI field offices to secure and defeat WMD devices. The CTCP subprogram will deliver a curriculum in a standardized manner that builds and sustains the mastery of skills critical for effective emergency response. The NIR/NEST subprogram will invest in NEST consequence management capabilities to streamline and speed the development of actionable assessments following a major radiological emergency for the purpose of protecting public health and safety.

Funding for GS Recapitalization in the FY 2026 Budget Request will address unique requirements for CTCP subprograms including the NEST Training and Operations Center (NTOC) renovations, second floor occupancy, the outfitting of two high bays, and the design for future Sensitive Compartmented Information Facility (SCIF) construction in Albuquerque, New Mexico; the relocation of CTCP's Aerial Measuring System fleet to Joint Base Andrews Hanger-18 and critical renovations; and the complete outfitting of the Googin Facility in Oak Ridge, Tennessee, to support the NEST Radiological Assistance Program (RAP). Additionally, funding will support the the NEST RAP Acquisition Strategy pilot business case analysis to evaluate the cost, schedule, and risks of multiple strategies for NEST/RAP regional operation centers.

The FY 2026 Budget Request for NTNF strengthens a rapid NNSA ground collection response for domestic post nuclear detonation events, invests in the operational response teams for nuclear detonation assessment, and improves operational capability and readiness through increased training and exercising. It also enables enhanced material analysis capabilities and capacity. The NTNF subprogram will leverage additional operational and scientific expertise at the DOE/NNSA National Laboratories that constitute an essential element of the Nation's nuclear deterrence strategy. This work 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 FY 2026 Budget Request in NIPC expands critical partnerships and capacity building for radiological and nuclear incident emergency preparedness and response to ensure that these activities protect public health and safety. With a particular focus on strengthening domestic capabilities, this work secures and protects America's economic and national security interests.

This 2026 Budget Request for NTS will enhance DOE/NNSA National Laboratories' capabilities for highly specialized nuclear threat science assessments, while improving predictive capabilities in support of crisis operations and national level planning efforts. The NTS subprogram will conduct scientific studies, including integrated experiments, perform technical assessments in support of the Design Basis Threat, and provide technical input for international nuclear security engagements. The subprogram will perform core material science to improve predictive simulation capability used to assess counter terrorism and counterproliferation risks and enable science-informed policy across DOE and interagency equities in global and domestic nuclear threat domains. The NTS subprogram leads NNSA's capability to better understand how Artificial Intelligence (AI), and large language models in particular, alter the WMD threat landscape. The FY 2026 Request allows the NTS subprogram to maintain a comprehensive, scalable, and repeatable framework for assessing how AI could advance an adversary's nuclear capability and how it impacts information security threats.

## Counterterrorism and Counterproliferation (+\$89.828 million)

The increase centers on making America safer and more secure by synthesizing classified technical threat information with specialized radiological and nuclear expertise to deliver actionable assessments and enable effective federal response to radiological and nuclear threats, accidents, and incidents through NEST. In a time of growing geopolitical instability, rising nuclear threats, and the expansion of nuclear energy, the subprogram stands ready to maintain American leadership in R/N emergency preparedness and response while enhancing strategic deterrence. CTCP will ensure NEST is prepared to respond to R/N incidents and accidents with highly trained and equipped personnel while executing the CF2 initiative. NEST will focus on adapting radiological consequence management capabilities to deliver timely and actionable decision support assessments to public health and safety authorities at the state and local level, incorporating major lessons learned from recent full-scale exercise experience. CTCP will develop universal technical training for NEST and its interagency partners, and maintain and improve NEST capabilities through planned and emergent training, exercises, and response operations. The subprogram will conduct in-person, hybrid, and virtual trainings, technical exchanges, workshops, scenario-based policy discussions, and exercises with domestic and foreign partners and international organizations to improve global capacity to respond to nuclear and radiological events, regardless of their cause. Furthermore, the subprogram will provide security and assessment capabilities for nuclear threat device designs across the entire counterterrorism and counterproliferation mission space by evaluating device concepts and materials, developing and maintaining predictive modeling capabilities, and executing selected focused and integrated experiments. NTS will stand up a new program to provide intelligence informed, vetted, peer-reviewed nuclear weapons expertise and predictive assessments in support of DoD and Intelligence Community national level planning against emergent and novel nuclear threats. CTCP will maintain preeminence and operational readiness in technical and operational nuclear forensics capabilities, serving as the technical lead for government-wide NTNF efforts, addressing technical gaps to meet post detonation nuclear forensic timelines, while increasing participation in nationallevel and interagency exercises and international technical exchanges with select U.S. partners. NTNF will invest more in technology maturation at the DOE/NNSA sites to advance its NEST forensic asset capabilities and to offset DNN R&D forensics reductions. CTCP will begin to address infrastructure expansion and recapitalization demands across DOE/NNSA sites by providing dedicated funding to support mission requirements while coordinating with NNSA's Office of Infrastructure to manage risks to the CTCP GS mission against the breadth of demands to NNSA's aging infrastructure to include reaching consensus on priorities for delivering CTCP infrastructure.

# Nuclear Counterterrorism and Incident Response Program Capital Equipment Summary

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	Total	Prior Years	FY 2024 Enacted	FY 2025 Enacted	FY 2026 Request	Outyears Total
Capital Equipment (> \$500K)						
Total Non-MIE Capital Equipment (TEC <\$10M)	N/A	N/A	15,227	15,547	15,873	N/A
Total, Capital Equipment	N/A	N/A	15,227	15,547	15,873	N/A

# 18-D-150 Surplus Plutonium Disposition (SPD) Savannah River Site, Aiken, South Carolina Project is for Design and Construction

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

<u>Summary:</u> The FY 2026 Request for the Surplus Plutonium Disposition (SPD) project is \$50,000,000. The project achieved Critical Decision (CD)-2/3 on October 25, 2024, with a Total Project Cost (TPC) of \$997,084,485 and CD-4 of April 2031. A Federal Project Director Level III has been assigned to this project and has approved this Construction Project Data Sheet (CPDS). Funding for this project is controlled at the Total Project Cost (TPC) level. Appropriations may be used for design, construction, or other project costs (OPC).

## **Significant Changes**

DOE/NNSA initiated this project in FY 2018. The most recent DOE-approved CD for the project is CD-2/3, Approve Performance Baseline/ Approve Start of Construction, which was approved on October 25, 2024.

To implement the President's Executive Order on Reinvigorating the Nuclear Industrial Base Executive Order (EO), which halted the Dilute and Dispose program except with respect to DOE's legal obligations to the State of South Carolina, the Program will partner with the Offices of Defense Programs and Nuclear Energy to assess surplus plutonium inventories and determine which materials are suitable for defense or industry purposes and which materials, if any, will need to be dispositioned. If that analysis determines that additional, shielded dilution capacity is not needed, DNN will terminate the project, provide the procured gloveboxes to the Office of Defense Programs, and repurpose funding to support the President's Executive Order.

The high end of the cost range approved at Critical Decision (CD)-1 was \$620,092,000. The FY 2025 CPDS reflected an increase to the TPC of \$155 million which correspondingly increased the high-end of the cost range to \$775 million and extended the CD-4 completion date to 4Q FY 2030. In preparation for CD-2/3, the project developed a Class 1 bottom-up estimate with a TPC of \$997.1M and CD-4 of April 2031. The increases in cost and schedule are necessary to account for: design, safety basis, and construction complexities of integrating the new capabilities into the existing facility and operations; technical complexity of the fire protection and ventilation system; escalation rates for labor and material being experienced by NNSA and projected by multiple authoritative sources; difficulty finding sufficient, skilled staffing for a complex nuclear project, a challenge encountered across multiple NNSA projects; internal competition for skilled professional and craft labor that will occur at the Savannah River Site when this project is under construction; and additional costs for operator training and sequential readiness reviews.

During the process of reconciling the CD-2/3 baseline, a discrepancy between the CPDS and Project records was discovered for prior year funding. The discrepancy was determined to be in FY 2018 and FY 2019 OPC appropriations and obligations. These discrepancies were due to mistakenly reporting only the contractor OPC appropriations, not the total OPC appropriated, and additional program funding provided to the project. Previous funding has been reconciled resulting in a total increase of \$5.768M in appropriations and obligations for prior years.

## In FY 2024, the project:

- Completed field work for the CD-3C, Additional Early Site Preparation, scope.
- Supported a DOE-PM Independent Cost Estimate (ICE) and an External Independent Review (EIR) necessary for establishing the Performance Measurement Baseline (PMB).
- Supported an Office of Cost Estimating and Program Evaluation (CEPE) ICE in support of CD-1R.
- Completed Annual Project Review (APR) and closed all recommendations.
- Completed Safety Basis Strategy and Preliminary Documented Safety Analysis (PDSA)
- Received Chief of Defense Nuclear Safety Advice Memo accepting SPD safety analysis.
- Completed environmental documents and permits, and fire protection documents.
- Received Record of Decision on Final Environmental Impact Statement for project
- Completed Final Design Review.
- Received closure of Technical Independent Project Review (TIPR) and APR necessary for CD-2/3 approval.
- Completed fabrication of CD-3B gloveboxes and initiated assembly of the gloveboxes. Progressed fabrication of standby diesel generator and associated equipment. Delivery of the CD-3B components is expected to occur in FY 2025.

In the second quarter of FY 2024, a DOE team conducted an Independent Cost Estimate (ICE) and an External Independent Review (EIR). The review determined there were activities underestimated particularly regarding readiness and escalation. The project incorporated required changes to improve the efficacy of the Performance Measurement Baseline. On June 12, 2024, the M&O contractor submitted for NNSA's approval an updated CD-2/3 Performance Baseline Proposal. This new proposal resolved all NNSA and DOE-PM comments with a total project cost of \$997.1M and CD-4 completion date of April 2031. The Project Management Executive (PME) approved CD-2/3 on October 25, 2024.

The TPC and funding profile was formally established when the project was baselined at CD-2/3 per DOE O 413.3B. Funding changes are reflected in the Financial Schedule (Section 3), Details of Project Cost Estimate (Section 4), and Schedule of Appropriation Request (Section 5).

Depending on the outcome of the material inventory assessment that might impact project Requirements, in FY 2025, the project will:

- Receive all the gloveboxes and the Diesel Generator from the CD-3B, Long Lead Equipment, scope.
- Continue progress towards Earned Value Management System (EVMS) certification.
- Begin construction of the reinforced concrete interior walls and second floor.
- Begin construction of the High Efficiency Particulate Air (HEPA) building foundation and structure.

Depending on the outcome of the material inventory assessment that might impact project Requirements, In FY 2026, the project will:

- Continue construction of the reinforced concrete interior walls and second floor.
- Continue construction of the High Efficiency Particulate Air (HEPA) building foundation and structure.
- Begin construction on electrical, mechanical, and subcontracted scopes.
- Finish receipt and inspection of long lead equipment and materials.
- Obtain Earned Value Management System (EVMS) certification.

## **Critical Milestone History**

Fiscal Quarter or Date

Fiscal Year	CD-0	Conceptua I Design Complete	CD-1	CD-2	Final Design Complete	CD-3	D&D Complete	CD-4
FY 2018	10/31/1997	2/2/2017	3Q FY 2018	1Q FY 2022	4Q FY 2021	1Q FY 2022	N/A	4Q FY 2027
FY 2019	10/31/1997	2/2/2017	4Q FY 2018	4Q FY 2022	4Q FY 2021	4Q FY 2022	N/A	4Q FY 2027
FY 2020	10/31/1997	2/2/2017	1Q FY 2020	4Q FY 2022	4Q FY 2021	4Q FY 2022	N/A	4Q FY 2028
FY 2021	10/31/1997	9/30/2019	12/19/2019	4Q FY 2022	4Q FY 2021	4Q FY 2022	N/A	2Q FY 2028
FY 2022	10/31/1997	9/30/2019	12/19/2019	4Q FY 2022	2Q FY 2022	4Q FY 2022	N/A	2Q FY 2028
FY 2023	10/31/1997	9/30/2019	12/19/2019	4Q FY 2023	2Q FY 2023	4Q FY 2023	N/A	2Q FY 2028
FY 2024	10/31/1997	9/30/2019	12/19/2019	3Q FY 2024	3Q FY 2023	3Q FY 2024	N/A	4Q FY 2030
FY 2025	10/31/1997	9/30/2019	12/19/2019	4Q FY 2024	12/14/2023	4Q FY 2024	N/A	4Q FY 2030
FY 2026	10/31/1997	9/30/2019	12/19/2019	10/25/2024	12/14/2023	10/25/2024	N/A	3Q FY 2031

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

Fiscal Quarter or Date

Fiscal Year	Performance Baseline Validation	CD-3A	CD-3B	CD-3C	CD-3E
FY 2018	1Q FY 2022	1Q FY 2020	N/A	N/A	N/A
FY 2019	4Q FY 2022	4Q FY 2019	N/A	N/A	N/A
FY 2020	4Q FY 2022	2Q FY 2020	N/A	N/A	N/A
FY 2021	4Q FY 2022	2Q FY 2020	N/A	N/A	N/A
FY 2022	4Q FY 2022	02/13/2020	N/A	N/A	N/A
FY 2023	4Q FY 2023	02/13/2020	12/21/2020	4Q FY 2022	N/A
FY 2024	3Q FY 2024	02/13/2020	12/21/2020	08/23/2022	N/A
FY 2025	4Q FY 2024	02/13/2020	12/21/2020	08/23/2022	12/06/2023
FY 2026	10/25/2024	02/13/2020	12/21/2020	08/23/2022	12/06/2023

- CD-3A Early Site Preparations: cutting concrete openings, security modifications & targeted demolition and removal.
- CD-3B Long Lead Procurements: HEPA filter housings, Gloveboxes, & Diesel Generator.
- CD-3C Additional Early Site Preparations: Concrete demolition and removal, establish fire and security barriers, additional demolition and removal, & construction housing.
- CD-3E Additional Long Lead Procurements: procurements for initial six months of construction & with lead time greater than 20 weeks.

## **Project Cost History**

## Fiscal Quarter or Date

Fiscal Year	TEC, Design	TEC, Construction	TEC, Total	OPC, Except D&D	OPC, D&D	OPC, Total	TPC
FY 2018	165,000	255,000	420,000	80,000	N/A	80,000	500,000
FY 2019	154,820	261,780	416,600	83,400	N/A	83,400	500,000
FY 2020	71,044	365,440	436,484	152,319	N/A	152,319	588,803
FY 2021	89,189	385,521	474,710	145,382	N/A	145,382	620,092
FY 2022	89,189	385,521	474,710	145,382	N/A	145,382	620,092
FY 2023	187,106	287,604	474,710	145,382	N/A	145,382	620,092
FY 2024	217,757	391,851	609,608	165,392	N/A	165,392	775,000
FY 2025	217,757	391,851	609,608	165,392	N/A	165,392	775,000
FY 2026	217,757	555,346	773,103	223,981	N/A	223,981	997,084

#### 2. Project Scope and Justification

#### Scope

Approximately 15,000 ft² of processing space in the existing Hazard Category 2 K-Area Facility will be utilized for the project, which will provide the site with dilution capabilities that may be necessary to meet DOE's legal obligations to South Carolina, subject to the outcome of the material inventory assessment. In addition, a 10,000 ft² support building will be located adjacent to the existing structure. If executed as baselined, the project will install gloveboxes, equipment, and support systems (i.e., glovebox ventilation, fire suppression, glovebox rooms with airlocks, material control and accountability equipment, monitoring equipment, lag storage, etc.) in the existing K-Area Facility.

## **Justification**

To implement the President's Executive Order on Reinvigorating the Nuclear Industrial Base Executive Order (EO), which halted the Dilute and Dispose program except with respect to DOE's legal obligations to the State of South Carolina, the Program will partner with the Offices of Defense Programs and Nuclear Energy to assess surplus plutonium inventories and determine which materials are suitable for defense or industry purposes and which materials, if any, will need to be dispositioned. If certain material in South Carolina is deemed to be unusable by industry for advanced nuclear technologies but requires shielded glovebox capabilities, the SPD project will provide such capabilities. If analysis determines that additional capacity or capabilities are not needed, DNN will terminate the project, provide the procured gloveboxes to the Office of Defense Programs, and repurpose funding to support the President's Executive Order.

The SPD 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 and has met all appropriate project management requirements to date.

## 3. Financial Schedule (\$K)

	Budget Authority (Appropriations)	Obligations	Costs
Total Estimated Cost (TEC)			
Design			
Prior-FY 2023	207,757	207,757	169,867
FY 2024	10,000	10,000	47,890
Total Design	217,757	217,757	217,757
Construction			
Prior-FY 2023	176,791	176,791	46,970
FY 2024	44,465	44,465	7,967
FY 2025	38,000	38,000	95,363
FY 2026	50,000	50,000	158,077
Outyears	246,090	246,090	246,969
Total Construction	555,346	555,346	555,346
TEC			
Prior-FY 2023	384,548	384,548	216,837
FY 2024	54,465	54,465	55,857
FY 2025	38,000	38,000	95,363
FY 2026	50,000	50,000	158,077
Outyears	246,090	246,090	246,969
Total TEC	773,103	773,103	773,103
Other Project Costs (OPC)			
Prior-FY 2023	114,055	113,868	91,645
FY 2024	22,746	22,710	10,004
FY 2025	2,000	2,000	10,365
FY 2026	0	0	10,473
Outyears	85,180	85,403	101,494
Total, OPC	223,981	223,981	223,981
Total Project Costs (TPC)			
Prior-FY 2023	498,603	498,416	308,482
FY 2024	77,211	77,175	65,861
FY 2025	40,000	40,000	105,728
FY 2026	50,000	50,000	168,550
Outyears	331,270	331,493	348,463
Total TPC <sup>d</sup>	997,084	997,084	997,084

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

		Current Total Estimate	Previous Total Estimate	Original Validated Baseline
<b>Total Estimated Co</b>	st (TEC)			
Design				
	Design	217,757	211,236	217,757
	Contingency	0	6,521	0
Total Design		217,757	217,757	217,757
Construction				
	Site Work	53,128	53,128	53,128
	Long Lead Equipment	71,303	79,996	71,303
	Equipment	41,275	21,737	41,275
	Other Construction	302,657	194,939	302,657
	Contingency	86,983	42,051	86,983
<b>Total Construction</b>		555,346	391,851	555,346
Total Estimated Co	st (TEC)	773,103	609,608	773,103
Contingency, TEC		86,983	48,572	86,983
Other Project Cost	s (OPC)	·	<del>,</del>	
OPC except D&D			-	
	Conceptual Planning	2,340	2,340	2,340
	Conceptual Design	25,905	25,905	25,905
	NNSA Other Direct Costs	47,100	24,610	47,100
	Execution/Start-up Phase	31,374	16,139	31,374
	Startup and Training	28,111	28,111	28,111
	CD-3A Phase-Support	7,430	7,430	7,430
	CD-3A Phase Design OPC Support	6,452	6,452	6,452
	Preliminary / Final Design Phase OPC Support	50,681	43,659	50,681
	Contingency	24,588	10,746	24,588
Total OPC		223,981	165,392	223,981
Contingency, OPC		24,588	10,746	24,588
Total Project Cost		997,084	775,000	997,084
Total Contingency	(TEC+OPC)	111,571	59,318	111,571

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

Request Year	Туре	Prior-FY2023	FY 2024	FY 2025	FY2026	Outyears	Total
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2018	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	311,000	69,000	59,000	38,000	23,000	500,000
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2019	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	328,500	60,000	59,000	35,000	17,500	500,000
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2020	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	318,232	62,000	183,000	16,000	9,571	588,803
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2021	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	482,555	101,192	36,345	0	0	620,092
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2022	OPC	TBD	TBD	TBD	N/A	N/A	0
	TPC	421,071	TBD	TBD	199,021	0	620,092
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2023	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	492,835	92,257	35,000	N/A	N/A	620,092
	TEC	N/A	N/A	N/A	N/A	N/A	0
FY 2024 <sup>1</sup>	OPC	N/A	N/A	N/A	N/A	N/A	0
	TPC	492,835	77,211	53,080	65,000	86,874	775,000
	TEC	N/A	N/A	N/A	N/A	N/A	
FY 2025 <sup>1</sup>	OPC	N/A	N/A	N/A	N/A	N/A	
	TPC	492,835	77,211	40,000	50,980	113,974	775,000
	TEC	384,548	54,465	38,000	50,000	246,090	773,103
FY 2026 <sup>2</sup>	OPC	114,055	22,746	2,000	0	85,180	223,981
	TPC	498,603	77,211	40,000	50,000	331,270	997,084

 $<sup>^{\</sup>rm 1}\, \rm TPC$  increase to support anticipated future project growth.  $^{\rm 2}\, \rm TPC$  increase to support the approved baseline.

## 6. Related Operations and Maintenance Funding Requirements

Start of Operation or Beneficial Occupancy (fiscal quarter or date) Expected Useful Life (number of years) Expected Future Start of D&D of this capital asset (fiscal quarter) 3Q FY 2031 32 years 3Q FY 2063

Related Funding Requirements (Budget Authority in Millions of Dollars) The estimate below was indexed to FY 2024 dollars.

	Annual	Costs	Life Cycle Costs		
	Previous Total Current Total Estimate Estimate		Previous Total Estimate	Current Total Estimate	
Operations and Maintenance	58.3	TBD	1,166	TBD	

The current estimate is listed as TBD pending the material inventory assessment.

## 7. D&D Information

Approximately 15,000 ft<sup>2</sup> of processing space in the existing Hazard Category 2 K-Area Facility will be required for the project. In addition, a 10,000 ft<sup>-2</sup> new support building will be located adjacent to the existing structure. The new square footage is reported below. Buildings demolished as part of the terminated Mixed Oxide Fuel Fabrication Facility project serve as the project's offset.

	Square Feet
New area being constructed by this project at Savannah River Site (K-Area).	10,000
Area of D&D in this project at Savannah River Site (K-Area).	N/A
Area at Savannah River Site (K-Area) to be transferred, sold, and/or D&D outside the project, including area previously "banked"	N/A
Area of D&D in this project at other sites	N/A
Area at other sites to be transferred, sold, and/or D&D outside the project, including area previously "banked"	15,798
Total area eliminated	N/A

## 8. Acquisition Approach

The acquisition strategy, which is dependent on the material inventory assessment and was developed as part of the CD-1 package and updated with Project Execution Plan (PEP), is to utilize the M&O contractor for the design and construction of the SPD Project. The M&O contractor will employ other design and construction subcontractors as may be deemed of best value to the project.