Defense Nuclear Nonproliferation

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($K)

FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted
2,396,000	2,367,000	2,389,595	+22,595

Proposed Appropriation Language

For Department of Energy expenses, including the purchase, construction, and acquisition of plant and capital equipment and other incidental expenses necessary for defense nuclear nonproliferation activities, in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion $2,389,595,000, to remain available until expended.

Overview

The Defense Nuclear Nonproliferation (DNN) appropriation funds the nonproliferation, counterproliferation, counterterrorism, and emergency response programs within the Department of Energy's National Nuclear Security Administration (DOE/NNSA). Collectively, these programs are America's shield against nuclear and radiological attack. DOE/NNSA stops threats before they can reach the U.S. Homeland through a multi-layered defense that:

- Denies adversary access to weapons-usable material, technology, and expertise
- Detects nuclear proliferation and breakouts
- Defeats efforts by adversaries to attack or threaten the U.S. homeland with the world's most dangerous weapons

DOE/NNSA's Weapons Activities, Naval Reactors, and DNN appropriations work in concert to deter strategic attacks against the United States and achieve Peace through Atomic Strength. The U.S. nuclear stockpile is a critical element of strategic deterrence but is not enough on its own to protect the Homeland against all threats. The U.S. must also deny, detect, and defeat efforts by rogue states and terrorists to acquire nuclear weapons, as well as efforts by existing nuclear-armed adversaries to improve their arsenals and gain an advantage over the U.S. NNSA achieves its nuclear nonproliferation goals to keep America safe and secure through a variety of work, including global material security, counterterrorism and counterproliferation, emergency preparedness, nuclear emergency response, research and development, material management and minimization, nuclear forensics, export controls, and more.

In executing this mission, DOE/NNSA also advances American Energy Dominance and helps implement President Trump's May 2025 executive orders on nuclear energy. DOE/NNSA partners with industry to advance nonproliferation and commercial goals at every step of the deployment process, from the design of nuclear reactors, to the high-assay low-enriched uranium used to fuel them, to the agreements for nuclear cooperation that enable their export. In turn, a strong and healthy U.S. commercial nuclear industry enhances national security and is a force multiplier for the DNN appropriation's global mission.

The current global threat landscape is characterized by states with existing nuclear weapons capabilities, such as Russia and China, that continue to expand and diversify their arsenals to threaten the U.S.; destabilizing proliferation activities by states with emerging or latent capabilities, including Iran; and the risk of hostile non-state actors gaining access to nuclear or radioactive material that can be used in a terrorist attack against the U.S. or our allies. Additionally, the rapid development of critical emerging technologies (including artificial

intelligence (AI)) could improve U.S. capabilities to detect and respond to proliferation or, alternatively, could be used by adversaries to lower the barriers to proliferation, conceal proliferation efforts, and enable new proliferation pathways.

The DNN appropriation programs execute their missions in partnership with other U.S. Government agencies, most notably the Departments of State, War, Commerce, Justice, and Homeland Security; the Intelligence Community; and the Nuclear Regulatory Commission (NRC). Internationally, the programs have a strong and long-established partnership with the International Atomic Energy Agency (IAEA), which has a critical role in international nuclear safeguards, setting guidelines for nuclear security, and enabling the nuclear renaissance.

In order to deny, detect, and defeat nuclear and radiological threats, the DNN appropriation programs depend on the scientific and technical expertise of the Department and the DOE/NNSA National Laboratories. DNN also relies on competencies of other elements of DOE/NNSA, such as NNSA's Offices of Defense Programs and Infrastructure; and DOE, particularly the Office of Nuclear Energy (DOE-NE), the Office of Environmental Management (DOE-EM), and the Office of Science (DOE-SC).

The major elements of the DNN appropriation account include the following:

Material Management and Minimization (M3)
The M3 program denies terrorists and bad actors the materials needed to produce a nuclear weapon by minimizing the need for and presence of weapons-usable nuclear material around the world. The M3 program makes America safer by partnering with U.S. industry and the National Laboratories to develop innovative technical solutions to advance nonproliferation solutions in nuclear applications. This includes minimizing the use of highly enriched uranium (HEU); removing or eliminating at-risk nuclear material; and disposing of excess nuclear material in the U.S. through multiple pathways.

Global Material Security (GMS)
The GMS program directly contributes to U.S. national security by securing and preventing the smuggling of radioactive and nuclear (R/N) materials before they can be used in an attack against the U.S., its interests, or allies. GMS denies terrorists and bad actors access to nuclear and radioactive material and detects and defeats their attempts to smuggle such material. GMS makes America safer and stronger by protecting U.S. communities, preventing threats before they can reach U.S. borders, and advancing U.S. leadership and influence on nuclear security. GMS also helps unleash American Energy Dominance by protecting U.S. international investments from a costly R/N incident, by supporting the competitiveness and exportability of U.S. advanced reactor technology through cooperation on "security by design", and by encouraging deployment of U.S. technologies and security solutions. GMS executes its mission through 11 national laboratories and a number of U.S. businesses and industry partners.

Nonproliferation and Arms Control (NPAC)
The NPAC program enhances U.S. national security and unleashes U.S. dominance in the civil nuclear sector by reducing global nuclear proliferation threats. NPAC plays a key role in denying and detecting nuclear proliferation and advancing American Energy Dominance. NPAC applies unique technical and analytic expertise to support U.S. nonproliferation and arms control objectives to deny proliferation, support peaceful nuclear uses, and enable verifiable nuclear reductions. NPAC programs protect American international investments and America's civil nuclear infrastructure and associated, critical supply chains and implement regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. NPAC safeguards America's emerging technologies (e.g. AI, quantum, semiconductors) and the associated U.S. industrial base from exploitation from international competitors and the global influence of malign and adversarial states. NPAC also strengthens America's global leadership in international nuclear safeguards, export control, and nuclear verification, directly supporting U.S.

national security by denying the illegal diversion of dangerous nuclear materials and weapons of mass destruction (WMD) related commodities and technologies to prevent threats before they reach the U.S. border. NPAC plays a leading role in addressing current threats to U.S. national security while also drawing upon its expertise to anticipate emerging nonproliferation challenges and develop technical and analytic approaches and solutions.

Defense Nuclear Nonproliferation Research and Development (DNN R&D)
DNN R&D advances U.S. technical capabilities to detect and characterize foreign nuclear weapons development activities; foreign nuclear warhead stockpiles; the presence, movement, or diversion of special nuclear materials; nuclear threats in the space environment; and nuclear detonations in all environments including in the atmosphere, space, and underground. The program also sustains and develops foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nuclear nonproliferation activities and to anticipate future threats. It develops nuclear forensics technical capabilities for enabling rapid decision-making during and after nuclear or radiological incidents and aid in determining the origin of interdicted materials or nuclear devices. DNN R&D leverages the unique facilities and scientific skills of the National Laboratories and universities to perform research, conduct technology demonstrations, develop prototypes, and produce and deliver sensors for integration into operational systems.

Nonproliferation Construction
The Nonproliferation Construction Program consolidates all construction costs supporting DNN programs. The Surplus Plutonium Disposition (SPD) Project is DNN's only line-item project. DNN partnered with NNSA's Office of Defense Programs (DP) and DOE's Office of Nuclear Energy to assess surplus plutonium material inventories to support implementation of the President's Executive Order (EO) 14302 on Reinvigorating the Nuclear Industrial Base and meet DOE's legal obligations to the State of South Carolina. Once material is officially transferred to support defense or industry purposes, the K-Area Interim Surveillance (KIS) glovebox at Savannah River Site will be sufficient to disposition the remaining material to meet the legal obligations to the State of South Carolina. The SPD Project is being terminated and NNSA is pursuing appropriate DOE O 413.3 approval authority to allow transfer of all equipment, gloveboxes, and support systems from the SPD project, to include management oversight for the termination and closeout activities for the remaining SPD project scope, to the Savannah River Plutonium Processing Facility (SRPPF) project to support DP's pit production mission.

Nuclear Counterterrorism and Incident Response (NCTIR) Programs

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

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

The DNN appropriation FY 2027 Budget Request supports the following key priorities:

DNN Programs

- Convert and/or verify the shutdown of research reactors from highly enriched uranium (HEU) to high-assay low-enriched uranium (HALEU).
- Pack and deliver 900 kilograms of scrap material from Y-12 to BWXT and produce up to 1.5 MT of HALEU oxide to support advanced reactors.
- Demonstrate the Modular Reduction Process for HALEU (MORPH) to produce HALEU metal from enriched uranium
- Remove excess HEU and plutonium from international partners.
- Ship the Mobile-Melt and Consolidate System to Norway to downblend Norway's remaining HEU.
- Complete a small-scale international exercise of the Mobile Uranium Facility (MUF) and the Mobile Plutonium Facility (MPF).
- Halt Dilute and Dispose, except with respect to meeting DOE's legal obligations to the State of South Carolina.
- Eliminate surplus HEU by downblending it to LEU to reduce operating risk in deteriorating infrastructure.
- Complete the transfer equipment, gloveboxes, and support systems from the Surplus Plutonium Disposition (SPD) project, to include management oversight for the termination and closeout activities for the remaining SPD project scope, to the Savannah River Pit Production Facility project to support DP's pit production mission.
- Achieve permanent risk reduction by eliminating unwanted radioactive sources in the U.S. and abroad before they can threaten the U.S. Homeland.
- Promote and facilitate the adoption of viable alternative technologies that do not use high-activity radioactive sources with a focus on the replacement of cesium and cobalt devices to provide permanent risk reduction.
- Engage with U.S. industry on deploying advanced and small modular reactors for the responsible development of nuclear power and identify innovative security solutions to both protect nuclear and radioactive materials and support the Energy Dominance agenda.
- Expand cooperation with key allies to prevent sabotage at nuclear power plants in support of energy security.
- Enhance layered defenses to detect, disrupt, and investigate the illicit trafficking of nuclear and radioactive material through critical pathways before those materials reach the U.S. Homeland.
- Provide critical mission support to the IAEA, including strengthening the international nuclear safeguards system and supporting nuclear security activities.
- Execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches (Project Carousel).

- Continue implementation of the Advanced Reactor International Safeguards Engagement (ARISE) program, including working with key stakeholders to incorporate Safeguards-by-Design elements into advanced reactor designs.
- Protect America's emerging technologies (i.e., AI, quantum) and associated U.S. industrial base from exploitation from international competitors and would-be proliferators.
- Strengthen DOE/NNSA National Laboratory capabilities (i.e., equipment and human resources) to enhance the U.S. Government's ability to implement and develop dual-use export controls on semiconductors and associated equipment.
- Facilitate U.S. trade by providing roughly 10,000 technical reviews of U.S. export license applications, and technical support and training to U.S. law enforcement to help prevent the exploitation of the U.S. industrial base.
- Complete significant refurbishment for the Pantex Monitoring and Verification Test Facility (PMVTF) to advance testing, demonstration, and exercising of warhead monitoring and verification capabilities to support future arms control treaties.
- Streamline the regulatory and programmatic process to allow U.S. nuclear industry to engage with foreign partners more efficiently and timely (123 Agreements, 10 CFR Part 810), including through the development of advanced automation tools.
- Provide nonproliferation assessments of emerging nuclear technologies and other emerging strategic risks.
- Sustain and improve U.S. nuclear explosion monitoring capabilities, including delivering the Nation's space-based nuclear detonation detection payloads and related activities that support monitoring and military missions.
- Demonstrate new U.S. capabilities for detecting and characterizing foreign material and weapons production and detecting and monitoring of special nuclear material movement and diversion.
- Sustain and develop long-term, foundational nonproliferation technical capabilities that ensure the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats.
- Advance technical nuclear forensics analysis capabilities that support the U.S. Government's response to a nuclear event, with an emphasis on advancing timelines to support attribution and novel approaches to material provenance.
- Continue to establish research, development, and demonstration activities to advance and validate sensors and systems to enable nuclear monitoring in and from space to address emerging challenges in the space environment.

NCTIR Programs

Counterterrorism and Counterproliferation (CTCP)

- Ensure NEST remains prepared to respond to radiological/nuclear incidents and accidents with highly trained and appropriately equipped personnel.
- Enhance capabilities to counter nuclear and radiological threats including improved tools to locate, characterize, defeat, and conduct forensics on these threats.
- Develop universal technical training for NEST and its interagency partners, focused on actions to Secure and Defeat WMD Devices.
- Enhance NEST consequence management capabilities based on lessons learned from recent major exercises and adopt a more agile and streamlined initial response to protect public health and safety following a major radiological emergency.
- Detect, measure, and track radioactive material in an emergency to determine contamination levels through the Aerial Measuring System.

- Provide security and assessment capabilities for non-stockpile nuclear threat device designs, including INDs.
- Increase capacity to perform assessments of nuclear threat device designs and materials in support of Department of War (DoW) and other strategic partnerships to inform national-level planning against emergent and novel nuclear threats.
- Develop and maintain a core set of expertise addressing critical gaps in nuclear counterproliferation, as well as develop and assess technologies for U.S. Government nuclear counterproliferation mission partners.
- Develop nuclear forensics capabilities to accelerate attribution timelines.
- Develop and retain experts whose authoritative understanding of nuclear science can be applied to the AI domain, enabling timely evaluations of the R/N knowledge, capabilities, and implications of frontier AI models at appropriate classification levels.
- Strengthen federal, state, local, and international emergency preparedness and response through targeted nuclear counterterrorism and incident response training, exercises, and technical exchanges leveraging best practices and lessons learned from NEST Federal expertise and capabilities.
- Coordinate with NNSA's Office of Infrastructure to manage risks to the global security mission from competing demands on NNSA's aging infrastructure across the nuclear security enterprise, to include reaching consensus on a prioritized plan for delivering the CTCP infrastructure needs and capabilities.

Emergency Management (EM)

- Advance emergency preparedness programs and serve as the Departmental lead for emergency management and continuity programs.
- Leveraging a risk-based approach for the Department to plan and prepare for the most likely incidents with the potential for the greatest impact, deliver emergency management training, exercise support, consequence modeling, and readiness assurance programs.
- Lead, manage, and operate the DOE/NNSA Headquarters 24/7/365 Emergency Operations Center (EOC), providing situational awareness and decision-making support to Departmental leadership.
- Operate and maintain facilities, capabilities, and teams to deliver a robust continuity and devolution capability for the Department.
- Ensure interoperability and availability of continuity communications systems across DOE/NNSA and with interagency partners.

Legacy Contractor Pensions and Settlement Payments

This budget line includes the Defense Nuclear Nonproliferation share of funding for DOE's annual reimbursement made to the University of California (UC) Retirement Plan (UCRP) for former UC employees and annuitants who worked at the Lawrence Livermore National Laboratory (LLNL) and Los Alamos National Laboratory (LANL). The annual reimbursement is based on the actuarial valuation report and an annual assessment provided by UC and is covered by the terms described in the contracts. These contracts are paid through the Legacy Contractor Pensions and Settlement Payments budget line. The DNN share of these costs in the FY 2027 Budget is $14,128,000.

Entry Level Hires

DOE/NNSA supports a variety of programs to help train and recruit the next generation of leaders in managing the nuclear stockpile, nonproliferation, nuclear security, and international security, including the NNSA Graduate Fellowship Program (NGFP). These programs foster the pipeline of qualified professionals who will sustain expertise in these areas through future employment within the nuclear security enterprise. In FY 2027, the DNN appropriation projects providing $4,500,000 for NGFP support and development activities.

DOE Working Capital Fund (WCF) Support

The DOE/NNSA DNN appropriation projected contribution to the DOE WCF for FY 2027 is $4,216,000. This funding covers shared enterprise activities including managing enterprise-wide systems and data, telecommunications, and supporting the integrated acquisition environment.

Defense Nuclear Nonproliferation
Funding by Budget Control ($K)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				$	%
Reactor Conversion and Uranium Supply	143,227	143,200	117,820	-25,380	-18%
Nuclear Material Removal and Elimination	37,825	37,725	68,945	+31,220	+83%
Plutonium Management	147,045	147,045	79,039	-68,006	-46%
Total, Material Management and Minimization	**328,097**	**327,970**	**265,804**	**-62,166**	**-19%**
International Nuclear Security	64,707	86,000	61,013	-24,987	-29%
Radiological Security	246,033	258,000	193,104	-64,896	-25%
Nuclear Smuggling Detection and Deterrence	181,308	181,308	136,457	-44,851	-25%
Total, Global Material Security	**492,048**	**525,308**	**390,574**	**-134,734**	**-26%**
Nonproliferation and Arms Control	**227,008**	**212,000**	**214,494**	**+2,494**	**+1%**
Proliferation Detection	305,728	300,000	296,170	-3,830	-1%
Nuclear Detonation Detection	309,488	309,000	318,447	+9,447	+3%
Forensics R&D	37,759	37,759	30,000	-7,759	-21%
Nonproliferation Stewardship Program	124,875	162,000	174,383	+12,383	+8%
Total, Defense Nuclear Nonproliferation R&D	**777,850**	**808,759**	**819,000**	**+10,241**	**+1%**
18-D-150 Surplus Plutonium Disposition Project, SRS	40,000	10,000	-	-10,000	-100%
Total, Nonproliferation Construction	**40,000**	**10,000**	**-**	**-10,000**	**-100%**
Total, Defense Nuclear Nonproliferation Programs	**1,865,003**	**1,884,037**	**1,689,872**	**-194,165**	**-10%**
Emergency Management	23,847	33,122	35,045	+1,923	+6%
Counterterrorism and Counterproliferation	507,050	498,337	650,550	+152,213	+31%
Total, Nuclear Counterterrorism Incident Response Program	**530,897**	**531,459**	**685,595**	**+154,136**	**+29%**
Legacy Contractor Pensions	100	500	14,128	+13,628	+2726%
Use of Prior Year Balances	-	-48,996	-	+48,996	-100%
Total, Defense Nuclear Nonproliferation Appropriation	**2,396,000**	**2,367,000**	**2,389,595**	**+22,595**	**+1%**

Defense Nuclear Nonproliferation
Out Year Funding by Budget Control ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Reactor Conversion and Uranium Supply	130,376	132,984	135,643	138,356
Nuclear Material Removal and Elimination	49,636	50,629	51,642	52,675
Plutonium Management	80,620	82,232	83,877	85,555
Total, Material Management and Minimization	**260,632**	**265,845**	**271,162**	**276,586**
International Nuclear Security	62,233	63,478	64,748	66,043
Radiological Security	196,966	200,905	204,923	209,021
Nuclear Smuggling Detection and Deterrence	139,186	141,970	144,809	147,705
Total, Global Material Security	**398,385**	**406,353**	**414,480**	**422,769**
Nonproliferation and Arms Control	**229,272**	**233,858**	**238,535**	**243,305**
Proliferation Detection	302,093	308,135	314,298	320,584
Nuclear Detonation Detection	324,816	331,312	337,938	344,697
Forensics R&D	30,600	31,212	31,836	32,473
Nonproliferation Stewardship Program	177,871	181,428	185,057	188,758
Total, Defense Nuclear Nonproliferation R&D	**835,380**	**852,087**	**869,129**	**886,512**
18-D-150 Surplus Plutonium Disposition Project, SRS	-	-	-	-
Total, Nonproliferation Construction	**-**	**-**	**-**	**-**
Total, Defense Nuclear Nonproliferation Programs	**1,723,669**	**1,758,143**	**1,793,306**	**1,829,172**
Emergency Management	35,746	36,461	37,190	37,934
Counterterrorism and Counterproliferation	663,561	676,832	690,369	704,176
Total, Nuclear Counterterrorism Incident Response Program	**699,307**	**713,293**	**727,559**	**742,110**
Legacy Contractor Pensions	14,411	14,699	14,993	15,293
Total, Defense Nuclear Nonproliferation Appropriation	**2,437,387**	**2,486,135**	**2,535,858**	**2,586,575**

Material Management and Minimization

Overview

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

M3 partners and trains with the U.S. military and Department of War to remove weapons-usable nuclear material from semi-permissive environments, denying access to this material from adversarial or terrorist networks. This mission is executed through the Mobile Uranium Facility (MUF) or Mobile Plutonium Facility (MPF) infrastructure and highly trained experts.

In furtherance of Administration priorities to reinvigorate the U.S. nuclear industrial base and achieve energy dominance, M3 is a crucial partner for material supply. M3 has made available over one metric ton (MT) of high-assay low-enriched uranium (HALEU) from stocks declared surplus to defense needs to support U.S. advanced reactors. By the end of Fiscal Year (FY) 2027, M3 expects to make available over seven MT (out of NNSA's overall 11.7 MT commitment to the Department's Office of Nuclear Energy (DOE-NE) of HALEU from multiple sources, including from the processing of inventories not usable by NNSA, to support broader U.S. nuclear energy goals while advancing the NNSA/M3 material management and minimization mission. M3 will also help the DOE-NE make plutonium available to industry to fuel advanced nuclear technologies.

Material Management and Minimization
Funding by Budget Control ($K)

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Plutonium Management	147,045	147,045	79,039	-68,006	-46%
Total, Material Management and Minimization	**328,097**	**327,970**	**265,804**	**-62,166**	**-19%**

Outyear Funding ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Reactor Conversion and Uranium Supply	130,376	132,984	135,643	138,356
Nuclear Material Removal and Elimination	49,636	50,629	51,642	52,675
Plutonium Management	80,620	82,232	83,877	85,555
Total, Material Management and Minimization	**260,632**	**265,845**	**271,162**	**276,586**

Material Management and Minimization
Reactor Conversion and Uranium Supply

Overview

The Reactor Conversion and Uranium Supply subprogram, referred to as the Convert subprogram, supports the implementation of key domestic and international nuclear nonproliferation activities while also providing key support to the U.S. advanced reactor industry. The Convert subprogram supports the conversion of civilian research reactors and isotope production facilities to use non-weapons-usable nuclear materials. The subprogram also includes activities to downblend HEU deemed surplus to defense needs and make the resulting HALEU available for sale for research reactors and medical isotope production. These efforts result in permanent threat reduction by minimizing and, to the extent possible, eliminating the use of HEU in civilian applications while supporting the long-term use of HALEU to strengthen the U.S. nuclear energy industry.

As of the end of FY 2025, the Convert subprogram has converted or verified the shutdown of 111 HEU research reactors and isotope production facilities worldwide, including all major global molybdenum-99 (Mo-99) producers. The Convert subprogram is working to convert and verify the shutdown of HEU-fueled reactors around the world, including by providing technical support to develop and make available first-of-a-kind new HALEU fuels for existing and future research reactors. Funding will also support the development and implementation of the proliferation resistance optimization program, under which the subprogram will work with U.S. and international partners on the design of new-build research and advanced/small modular reactors to explore technical options to reduce the ability for these facilities to be misused for proliferation purposes.

The Convert subprogram also supports DOE and NNSA's HALEU supply, uranium enrichment, and deconversion initiatives. For example, the Convert subprogram identified 3.6 MT of HALEU scrap material, mainly at the Y-12 National Security Complex (Y-12), that will be packaged and shipped to BWX Technologies (BWXT) for processing into a usable form. This project will support Y-12's transition to the Uranium Processing Facility (UPF) by clearing material out of Y-12's Building 9212 and enabling the U.S. to make HALEU available for U.S. companies' advanced reactor demonstration projects. The subprogram will also disposition legacy material at Y-12 to support the timely transition to the UPF and to reduce NNSA risks resulting from deteriorating infrastructure. The HEU Thorium/Building 9206, Area 5 De-inventory, and Building 9212 discards were completed by the end of FY 2025, while offsite shipments will be completed by the end of FY 2026. Limited work will continue related to characterization and disposition of HEU not suitable for other needs.

Highlights of the FY 2027 Budget Request

The FY 2027 funding request will support activities to convert or verify the shutdown of research reactors from HEU to HALEU fuel. Funding will also support the Convert subprogram's uranium activities, including packaging and delivering 900 kilograms (kg) of scrap material from Y-12 to BWXT and the production of up to 1.5 MT of HALEU oxide to support advanced reactors. The Convert subprogram will also eliminate hundreds of kg of surplus HEU by downblending it to HALEU to support advanced reactors and for sale to research reactors and medical isotope producers. Further, the Convert subprogram will demonstrate its Modular Reduction Process for HALEU (MORPH) to produce HALEU metal from enriched uranium. The Convert subprogram will collaborate with U.S. entities (e.g., Missouri University and the National Institute of Standards and Technology) and international partners (e.g., Nigeria, Japan) to increase proliferation resistance features in research and advanced/small modular reactor designs.

Reactor Conversion and Uranium Supply (-$25.380 million)
The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level for the U.S. high performance research reactor program, which will be executed throughout FY 2027. That decrease is offset by the addition of funds to complete the first scrap recovery contract and initiate a new contract to continue recovering HALEU oxide to support advanced reactors. This second contract directly supports the President's Executive Orders (EO 14299 and EO 14302).

Material Management and Minimization
Nuclear Material Removal and Elimination

Overview

The Nuclear Material Removal and Elimination subprogram, referred to as the Remove subprogram, supports the removal, consolidation, and disposal of weapons-usable nuclear material internationally to support permanent threat reduction. Each kg of excess nuclear material removed from civilian sites worldwide reduces the risk of terrorists or other malevolent actors acquiring HEU or plutonium for use in an improvised nuclear device. The subprogram directly advances U.S. national security HEU minimization objectives.

This subprogram consists of two primary lines of effort (1) Mobile Packaging and (2) Nuclear Material Removal and Consolidation. Under Mobile Packaging, the Remove subprogram maintains the capability to promptly respond and enable the safe and secure removal of nuclear material worldwide. This specialized capability focuses on addressing HEU and plutonium inventories using MUF and the MPF. Both the MUF and MPF include specialized teams and mobile facilities needed to conduct in-country characterization, stabilization, packaging, and removal of nuclear materials. The Mobile Packaging program undertakes full-scale and small-scale training exercises with the MUF and MPF to maintain team proficiency and ensure both facilities are ready to be deployed on short notice. The program also regularly exercises with the military and Department of War to enable rapid deployment of these unique U.S. Government capabilities in support of U.S. national security objectives.

Under Nuclear Material Removal and Consolidation, the Remove subprogram supports the removal, consolidation, and disposal of weapons-usable nuclear material from civilian facilities around the world. This material includes unirradiated and irradiated HEU of U.S.-origin and other international origins, as well as separated plutonium. The Remove subprogram has also removed HEU and HALEU that will be provided to the Office of Nuclear Energy's HALEU Availability Program, supporting U.S. nuclear industry while permanently reducing the risk of nuclear terrorism. On a case-by-case basis, in support of nonproliferation objectives, some U.S.-origin LEU may be repatriated to the U.S.

The subprogram has also developed new capabilities, such as the Mobile Melt-Consolidate (MMC) system, to address inventories of weapons-usable nuclear material that currently do not have a disposition pathway. MMC is a mobile platform for stabilizing excess nuclear material and converting it into a more proliferation-resistant, low-attractiveness waste form that can be readily disposed of in a storage facility or repository outside the U.S. The subprogram will continue development of a next-generation modular processing system in FY 2027 to support downblending activities in other partner countries. The Nuclear Infrastructure Threat Reduction (NITR) program will also continue to support permanent risk reduction by assisting partner countries to eliminate sensitive nuclear infrastructure at research reactor facilities that are being decommissioned so that the equipment cannot be sold, transferred, or diverted for unauthorized use.

The Remove subprogram plans to begin development of a rapid spent nuclear fuel removal capability in FY 2027 to complement and enhance its capability to respond to emerging nuclear threats. By procuring versatile spent nuclear fuel transport casks, a mobile crane, transfer casks, and specially configured shipping containers, the Remove subprogram will be prepared to rapidly deploy internationally to package and remove at-risk irradiated nuclear material.

The Remove subprogram evaluates excess weapons-usable nuclear material located at civilian sites abroad to prioritize candidate material for removal or disposition. Furthermore, the subprogram works with foreign partners to obtain regulatory permits; characterize, stabilize, package, and transport material; and provide replacement LEU or other incentives to encourage elimination of these materials. Additionally, the subprogram

coordinates all future U.S. receipts with relevant DOE stakeholders, including the Office of Environmental Management (DOE EM), to enable long-term planning and appropriate resource allocation.

Highlights of the FY 2027 Budget Request

The FY 2027 budget request will permanently reduce risks presented by legacy nuclear materials by eliminating excess HEU and plutonium from foreign research reactors. It includes removing and/or confirming the disposition of 15 kg of weapons-usable nuclear material from partner countries. The Remove subprogram will further reduce nuclear security risks by partnering with countries to eliminate sensitive nuclear infrastructure and expanding NITR partnerships.

The Remove subprogram will address inventories of weapons-usable nuclear material that lack a disposition pathway by deploying the MMC system to Norway. This system will be used to downblend Norway's remaining HEU. Additionally, the subprogram will advance the development of a next-generation modular processing system to address additional excess HEU inventories.

To maintain proficiency and readiness for urgent nuclear material removal missions, the program will conduct a small-scale international exercise of the MUF and MPF. Upgrades and repairs on both the MUF and MPF will follow a FY 2026 large-scale exercise. Furthermore, the subprogram will enhance its ability to respond to emerging nuclear threats by developing a rapid spent nuclear fuel removal capability.

Nuclear Material Removal and Elimination (+$31.220 million)
The increase supports development of a new rapid spent nuclear fuel removal capability, deployment of the MMC system to Norway, and HEU removals to advance U.S. national security from partner countries in Asia, the Americas, Europe, and the Middle East.

Material Management and Minimization
Plutonium Management

Overview

The Plutonium Management subprogram (formerly known as Plutonium Disposition), referred to as the Manage subprogram, is responsible for disposing of surplus plutonium in a safe and secure manner, including removing surplus plutonium to meet DOE's legal obligations to the State of South Carolina and in compliance with the President's Executive Order 14302 on Reinvigorating the Nuclear Industrial Base.

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

DOE has identified 19.7 MT of surplus plutonium, including 10.1 MT from NNSA, that can be made available to U.S. industry to fuel advanced nuclear technologies. NNSA has also identified the inventory of surplus pits and other weapon-grade plutonium that will be needed to support defense purposes and is pursuing efforts to reclassify that material as vital to defense needs. Any material that is not suitable for either defense or industry purposes will be dispositioned to meet DOE's legal obligations to the State of South Carolina, including a small amount of plutonium material with safety concerns for long-term storage.

In compliance with the President's Executive Order 14302, in FY 2027 the Manage subprogram will transfer the Advanced Recovery and Integrated Extraction System (ARIES) capability at Los Alamos National Laboratory (LANL) to NNSA's Office of Defense Programs in support of its pit production mission at LANL. No funding for ARIES is requested within the Plutonium Management program.

Highlights of the FY 2027 Budget Request

The FY 2027 budget request supports the President's direction to halt the Dilute and Dispose program, except with respect to DOE's legal obligations to the State of South Carolina. The Plutonium Management program will maintain existing capabilities to dilute and dispose of plutonium from South Carolina that neither industry nor Defense Programs want for their purposes.

Plutonium Management (-$68.006 million)
Decrease primarily reflects the transfer of the ARIES facility operations and work scope at LANL to Defense Programs in support of plutonium pit production. The remaining decrease reflects the reduction in disposition scope following implementation of the President's Executive Order 14302.

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

	Total	Prior Years	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	N/A	N/A	-	-	-
Acid Cleaning Line, BWXT[1]	6,125	4,000	2,125	-	-
Integrated Data Management System, SRS	18,000	18,000	-	-	-
Total, Capital Equipment	**N/A**	**22,000**	**2,125**	-	-

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

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request	Outyears
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	-	-	-	-	N/A
Acid Cleaning Line, BWXT	-	-	-	-	
Integrated Data Management System, SRS	-	-	-	-	
Total, Capital Equipment	**-**	**-**	**-**	**-**	**N/A**

Global Material Security

Overview

The Office of Global Material Security (GMS) denies adversary access to radioactive and nuclear (R/N) materials by securing and preventing the smuggling of these materials. GMS makes America safer and stronger by protecting U.S. communities and stopping threats before they reach U.S. borders. GMS also strengthens America's global leadership on nuclear security, counters malign influence from competitor countries, advances the interests of U.S. industry, and supports the Administration's energy dominance agenda.

GMS leads NNSA efforts to work with the DOE Office of Nuclear Energy to accelerate improvements to U.S. commercial nuclear designs through the implementation of "security by design." This partnership with U.S. industry increases the attractiveness of U.S. industry in the international market, while ensuring advanced methodologies of nuclear security set the world standard. This budget request reflects measures implemented in FY 2026 to improve program efficiency, to increase burden-sharing with bilateral partners as well as likeminded countries, who provide financial contributions to GMS, and to prioritize efforts with the greatest impact in making America safer, stronger, and more prosperous.

A single use of an improvised nuclear or radiological dispersal device anywhere in the world would have significant impacts, including loss of life and damage to U.S. assets or interests, and could result in billions of dollars in economic costs and significantly set back the expansion of U.S. nuclear power.

Instead of allowing nuclear threats to reach the U.S. homeland, GMS prioritizes international partnerships and programs to preclude less secure nations from introducing these risks abroad. This investment greatly reduces the investments needed to combat these threats at home, while increasing the time to respond if a threat materialized overseas. GMS is the away team offense to deny, detect, and defeat would-be R/N adversaries and non-state actors. GMS's work is critical in protecting the Homeland and addressing current and evolving risks, including: the increasing amount of R/N materials in use globally, continued attempts at R/N smuggling, global conflict and terrorist activity, and continued state-based actions to disrupt critical infrastructure and undermine security norms.

GMS prioritizes efforts that provide permanent risk reduction by eliminating disused radioactive materials or sources that do not have a commercial disposition pathway and eliminating the use of sources through replacement with non-radioisotopic alternatives where possible. GMS focuses on top two of the most important R/N threats to the United States: cesium and cobalt. Leveraging its success with cesium replacements, GMS will increase focus on alternatives to cobalt-60 (Co-60) through the launch of its "Accelerators for America" initiative, which will advance the U.S. accelerator industry and promote eBeam as a viable replacement for Co-60.

GMS will engage with foreign counterparts, primarily through technical exchanges with Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratory experts, to verify they are employing strong nuclear and radiological security practices at their facilities. With countries pursuing nuclear power programs, GMS will raise nuclear security awareness, increase demand for secure and reliable U.S. technologies, and counter Russian and Chinese influence. GMS also will work with the U.S. advanced and small modular reactor industry to export safe, secure, and reliable nuclear technologies, while preventing sabotage at foreign sites that could have grave consequences for the future viability of nuclear power.

GMS will lead technical exchanges, drawing upon DOE/NNSA National Laboratory and U.S. law enforcement experts, to train foreign counterparts on strong law enforcement standards to enhance their ability to disrupt

smuggling of R/N materials that could be used in acts of terrorism against the United States, its interests, or allies. GMS's targeted cooperation with priority foreign partners may include delivering American-made radiation detection equipment. Cooperation will be conditional on each counterpart sharing information related to detections, with a revised execution model focused on the partner quickly assuming responsibility for all operations and systems maintenance. This approach drives foreign partners to fund operations in support of U.S. national security priorities without creating financial dependencies on the United States.

GMS will conduct technical exchanges and exercises to verify that foreign counterparts have implemented and are maintaining upgrades and security best practices that GMS has provided. These efforts verify the ongoing national security return on investment for prior U.S. security assistance. GMS will continue to execute the majority, over 95%, of its funding through the National Laboratories and U.S. businesses, supporting American prosperity, technical expertise, and export of superior U.S. technologies. GMS also will seek continued burden-sharing arrangements with like-minded countries, who provide funding to GMS to execute security projects overseas. Finally, GMS will provide tailored and targeted expertise to drive other countries to invest their own resources to secure and stop movement of R/N materials.

Global Material Security
Funding by Budget Control ($K)

	FY 2025 Enacted[1]	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				$	%
International Nuclear Security	64,707	86,000	61,013	-24,987	-29%
Radiological Security	246,033	258,000	193,104	-64,896	-25%
Nuclear Smuggling Detection and Deterrence	181,308	181,308	136,457	-44,851	-25%
Total, Global Material Security	**492,048**	**525,308**	**390,574**	**-134,734**	**-26%**

Global Material Security
Outyear Funding ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
International Nuclear Security	62,233	63,478	64,748	66,043
Radiological Security	196,966	200,905	204,923	209,021
Nuclear Smuggling Detection and Deterrence	139,186	141,970	144,809	147,705
Total, Global Material Security	**398,385**	**406,353**	**414,480**	**422,769**

[1] The FY 2025 Enacted level for International Nuclear Security does not reflect the use of $20 million in prior year carryover.

Global Material Security
International Nuclear Security

Overview

The International Nuclear Security (INS) subprogram leads U.S. efforts abroad to prevent theft of nuclear material and sabotage of nuclear facilities worldwide that keep the United States safe, strong, and prosperous. By working with U.S. industry to export safe, secure, and reliable nuclear facilities, while preventing sabotage at foreign operating sites, these efforts support the Administration's focus on the critical role of nuclear power in unleashing energy dominance by exporting superior U.S. technologies.

The INS subprogram leverages the experience and expertise at DOE/NNSA National Laboratories to support the secure expansion of civil nuclear power around the world, including deployment of advanced and small modular reactors (A/SMRs) and associated fuel cycle facilities. The subprogram engages with U.S. companies to assist with integration of security by design for A/SMRs, further improving U.S. leadership in the nuclear industry and fostering competitive advantage for American exports. In parallel, the subprogram works bilaterally and multilaterally to advance U.S. leadership in nuclear security, counter malign influence from competitor countries, and drive demand for the most secure technologies by countries embarking on new or expanded civil nuclear power programs.

Additionally, INS has expanded cooperation with key strategic partners as part of its efforts to promote the role of nuclear power plants in overall energy security and prevent sabotage incidents that could impact the nuclear industry, impeding global nuclear commerce. The subprogram is working with sites on resilience to attacks against targets critical to plant operation in a holistic fashion that includes insider threat mitigation, cybersecurity, physical protection and uncrewed aerial systems.

The INS subprogram also secures vulnerable inventories of nuclear materials that could pose direct threats to the safety, security, and prosperity of the American people. U.S. leadership has improved nuclear security around the world substantially; however, evolving adversary capabilities, threats from state-based actors and regional conflicts, and advances in technologies, such as artificial intelligence and uncrewed aerial systems, present new challenges and opportunities to traditional security approaches that INS must address.

The subprogram uses a risk-informed and graded approach to prioritize engagements and maximize resources, while identifying opportunities for burden sharing and contributions from like-minded partners. The subprogram has implemented additional measures to maximize program resources as well as its impact on U.S. national security through collaborating with more partners regionally, instead of bilaterally, and focusing security upgrades on the highest-consequence nuclear materials to mitigate the risk of theft by non-state actors. The subprogram also is requiring more cost-sharing from partners in these endeavors to reduce dependency on the United States.

Finally, the INS subprogram engages bilaterally with peers to build international consensus around nuclear security topics. Engaging peers also allows the subprogram to address shared technical challenges and experiences, leverage a peer's technical expertise in other INS engagements, conduct joint technical exchanges or studies, and provide the United States and DOE/NNSA experts access to nuclear fuel cycle facility types that may not exist in the United States to broaden technical knowledge domestically.

Highlights of the FY 2027 Budget Request

In Fiscal Year (FY) 2027, the INS subprogram will secure facilities with the highest-consequence nuclear materials to prevent theft and protect the U.S. Homeland, requiring more cost-sharing from partners. The subprogram also will provide technical support to U.S. industry, such as engineering research and modelling tools, to enhance cost-effective system designs. It also will provide more in-kind technical partnerships with national lab experts on security by design for A/SMRs to support U.S. leadership in responsible nuclear power development and global deployment dominance.

In addition, for countries embarking on or expanding civil nuclear energy infrastructure, the subprogram will raise awareness of nuclear security tools and best practices to prepare them to develop their nuclear power programs and drive demand for most secure and reliable U.S. technologies.

Finally, the INS subprogram will expand cooperation with key partners to prevent sabotage at nuclear power plants and engage partner countries on planning for crisis contingency events that could have negative implications for a U.S.-led nuclear energy renaissance.

Explanation of Change: International Nuclear Security (-$24.987 million)

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will begin priority projects in FY 2026 that will be executed in FY 2027, including nuclear security support for new 123 Agreements, additional security by design outreach to U.S. industry interested in international exports, and accelerated efforts to secure vulnerable nuclear materials. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.

Global Material Security
Radiological Security

Overview

The Radiological Security (RS) subprogram makes the United States safer, stronger, and more prosperous by eliminating the risk of a radiological dispersal device, or any other malicious use of radioactive material. Every day in the United States and around the world, vital industries like oil and gas, healthcare, pharmaceutical, and medical research use radioactive material to save lives, create prosperity, and strengthen American competitiveness. However, a single incident of radiological terrorism anywhere in the world would have severe economic consequences, create setbacks for the growing demand for peaceful uses of nuclear technologies, and undercut U.S. companies leading innovation in these critical industries.

RS's top priority is the elimination of radioactive material in the United States that could be used to threaten the Homeland. RS also reduces radiological risks globally to eliminate threats before they reach American borders and to protect vital U.S. commercial and military interests around the world. To balance the risk that these materials pose with the benefits that they offer to American society and business, the subprogram works closely with industry to forge partnerships that make the American people safer and encourage American innovation.

RS achieves permanent risk reduction through the elimination of high-activity radioactive material that industry no longer needs. Due to the lack of commercial disposition options, this material may sit idly, often for years, posing a security risk and burdening industry. Leveraging the unique expertise of the DOE/NNSA National Laboratories, RS removes these materials, thus eliminating the risk of malicious use at hundreds of locations, mostly in the United States, and directly protecting American communities. Additionally, the subprogram is developing tools and solutions that allow users to manage their unwanted material safely, securely, and independently of long-term U.S. Government support.

RS is the global leader in promoting transition to safer, more secure advanced nuclear technologies whenever feasible. These cutting-edge technologies do not rely on radioactive material, and, therefore, pose no security risks. For example, X-ray irradiators are a proven alternative to cesium-based devices, delivering equal or superior performance in life-saving medicine and research—all while eliminating the risk of a dirty bomb and securing American healthcare. This also enhances U.S. economic self-reliance and mitigates supply chain issues as most radioactive material comes from outside of the United States, including from Russia and China.

The 2019 National Defense Authorization Act mandated that RS eliminate all cesium-based blood irradiators in the United States by the end of 2027. As of December 31, 2025, RS eliminated 389 of 436 devices. In FY 2027, the subprogram will prioritize completion of this effort. RS also will work to eliminate all remaining research irradiators in the United States. Building from this success and tapping into DOE's Small Business Innovation Research Program, the subprogram supports the development of groundbreaking technologies to replace radioactive material, such as cobalt-60 and americium-241. Through its 'Accelerators for America" initiative, RS will work with industry partners to prove electron beam technology for use in inline or end-of-line radiation processing facilities, in place of cobalt.

Where radioactive material is still needed, RS works with industry, law enforcement, and other government organizations to prevent adversaries from acquiring and using radioactive material by providing cutting edge technologies and capabilities to partners. This includes focusing on such areas as cyber security, insider threat mitigation, transportation security, and response force engagement. RS maintains its extensive network of relationships in the United States and abroad through radiological security advisory assessments, technical

exchanges, and training. RS uses these activities to verify that partners continue to employ security practices and achieve the expected return on previous subprogram investments.

Highlights of the FY 2027 Budget Request

In FY 2027, the RS subprogram will prioritize elimination of radioactive sources to protect the Homeland and advance U.S. innovation and industry. RS will eliminate 700 unwanted radioactive sources (600 from across the United States and 100 from abroad). Additionally, RS will facilitate transition from high-risk radioactive sources to safer, more secure, and more advanced alternatives, including elimination or replacement of 70 devices, and developing, promoting, and incentivizing the use of alternatives to cobalt-60 for cancer treatment, medical product sterilization, food irradiation, and agricultural pest management.

RS will drive American innovation by launching a demonstration project, "Accelerators for America," with U.S. accelerator and medical device manufacturers to prove the feasibility of using eBeam for inline or end-of-line radiation processing at three facilities across the United States. In support of increased burden-sharing, the subprogram will work with international partners to increase their ability to manage disused sources safely and securely by themselves without extended U.S. support and will continue to support the adoption and transition to alternative technologies around the world.

For sites with radioactive materials that cannot be eliminated, RS will use its expertise to advise on technical solutions to secure material from theft, cyber-attacks, and insider threat. The subprogram will also provide local law enforcement the tools, knowledge, and awareness they need to prepare for and respond quickly and safely to suspected thefts of radioactive material. Activities conducted will include 15 tabletop exercises with state and local law enforcement officials and 15 Radiological Awareness Security and Response workshops (ten domestically and five internationally) to demonstrate and reinforce the efficiencies and capabilities gained by adopting new policies and procedures for responding to attempted thefts of high-activity radioactive material.

Finally, RS will maintain and expand partnerships with U.S. industry and build new relationships to identify innovative security solutions to address risks and increase security of radioactive materials. RS will collaborate with industry partners to deploy corporate training programs to enhance security of large sterilization facilities, where transition to alternatives is not yet feasible.

Explanation of Change: Radiological Security (-$64.896 million)

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will fund additional projects consistent with the administration priority to eliminate radiological risk. These projects would be funded in FY 2026 and executed in FY 2027, including domestic and international radioactive device replacements and removals, cyber security, transportation security, and the development of alternative technologies to replace radioactive sources. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.

Global Material Security
Nuclear Smuggling Detection and Deterrence

Overview

The Nuclear Smuggling Detection and Deterrence (NSDD) subprogram increases U.S. national security by countering the smuggling of R/N materials before they can be weaponized and used against the U.S. Homeland, its interests, or allies. Continued U.S. leadership is needed to address existing and evolving threats, including increases in terrorist activity in multiple regions; growing supply and demand for radiological and nuclear technologies; and the continued dissemination of information on developing weapons of mass destruction information in open sources. To address these threats, NSDD provides a suite of proven radiation detection equipment, along with tailored process and procedure development, to enable foreign partners to perform their own operations to detect, disrupt, and investigate R/N materials out of regulatory control. This approach has driven foreign partners to fund their own counter nuclear smuggling (CNS) programs and has resulted in interdictions of dozens of radioactive sources as well as hundreds of kilograms of nuclear material. Intelligence demonstrates that most interdictions of R/N material occur in targeted operations and law enforcement investigations between official border points (e.g., frontier areas) and within the interior of a country. Because of this, the NSDD subprogram prioritizes law enforcement collaboration, which may include providing American-made detection equipment to a limited number of priority foreign counterparts, thereby maximizing risk reduction using existing resources. Equipment deployments for frontier and interior operations typically cost 20% of radiation portal monitor deployments, which the subprogram deployed historically, and have lower lifecycle costs.

To further improve efficiency and increase burden sharing, the NSDD subprogram is accelerating the speed at which partners assume programmatic responsibility for all systems, training, and maintenance. This drives foreign partners to assume primary responsibility for their own CNS programs, while avoiding financial dependency on the United States. This approach results in the development of a global network advancing U.S. national security interests.

To assess return on program investments, the NSDD subprogram will continue to evaluate operational capabilities of partners to verify effectiveness of detection operations, promote information sharing on interdictions, and make partners less reliant on U.S. resources. The subprogram cooperates with economically and scientifically advanced countries and multilateral partners to promote future risk reduction by others outside the United States. The subprogram will continue to seek burden-sharing arrangements with like-minded countries, who provide funding to the subprogram to execute projects overseas.

The NSDD subprogram is the global leader in CNS because it maintains critical relationships with the American private sector and the DOE/NNSA National Laboratory network. Ensuring that U.S. technology and U.S. standards drive the world forward, the NSDD subprogram functions as a major market driver for advancement of radiation detection technology, working closely with American industry to improve technology and minimize operator burden. These advancements have allowed the subprogram to convince high-priority countries to purchase American technologies to counter China's investment in this area, maintaining a balance of power to protect U.S. interests and prevent the emergence of a dominate adversary. The subprogram's efforts yield information from partner countries' CNS operations that can be critical to the U.S. understanding of threats that, were they to go unaddressed, could result in catastrophic consequences. The subprogram can provide early warning indicators on a range of nuclear nonproliferation activities that connect with and may initiate a U.S. counterterrorism (CT) response by the Department of War (DoW), the Federal Bureau of Investigation (FBI), and NNSA's Nuclear Emergency Support Team. The subprogram's collaboration with members of the CT response community improves standardization of U.S.-based technology and supports

seamless information sharing or transition to a response when materials are interdicted through NSDD's broad network of alliances in strategically important regions.

Highlights of the FY2027 Budget Request

In FY 2027, the NSDD subprogram will enhance layered CNS capabilities in a limited number of priority countries to advance U.S. national security interests in the Indo-Pacific, Latin America, the Middle East, and Africa.

The subprogram will pursue cost-sharing opportunities with partners to promote burden sharing and increase global market penetration of U.S.-manufactured detection systems. This includes continuing to integrate the use of machine learning technologies and investigating new project approaches to reduce costs and minimize operational burden.

The subprogram will expand collaboration among NNSA offices and U.S. interagency partners, including the NNSA Office of Counterterrorism and Counterproliferation, the FBI, DoW, and the Department of Homeland Security to promote consistency in U.S. operational approaches and curriculum regarding procedures to detect, disrupt, and investigate efforts to smuggle R/N material.

Finally, the subprogram will design and deliver workshops, exercises, and training courses to enable transfer of responsibility for radiation detection, disruption, and/or investigation operations and equipment maintenance to partners. The subprogram will provide nuclear forensics consultation to improve attribution of R/N material smuggling and prosecution and disruption of trafficking networks.

Explanation of Change: Nuclear Smuggling Detection and Deterrence (-$44,851 million)

The decrease reflects additional FY 2026 enacted funding above the FY 2026 request level. With this additional funding, the subprogram will fund additional priority projects in FY 2026 that will be executed in FY 2027, including accelerating global deployment of counter nuclear smuggling capabilities in support of U.S. national security and Administration priorities. The FY 2027 request level is sufficient for the program to fund all planned priority work scope in FY 2027.

Nonproliferation and Arms Control

Overview

The Nonproliferation and Arms Control (NPAC) program implements the Administration's programs and policies that support the American nuclear industry while advancing U.S. nonproliferation, monitoring and verification priorities and U.S export objectives.

Civil Nuclear Cooperation. NPAC implements the President's Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security by streamlining regulatory and programmatic processes to allow the U.S. nuclear industry to engage with foreign partners (123 Agreements, 10 CFR Part 810), including through the Department's development and deployment of advanced automation tools. NPAC strengthens U.S. national security and facilitates peaceful civil nuclear cooperation by reducing global nuclear proliferation threats and enabling U.S. industry in the expansion of U.S. nuclear influence globally. It also develops programs and strategies to advance U.S. nuclear energy dominance, including through the development of close relationships with new nuclear market entrants, while supporting nonproliferation objectives. NPAC advances American leadership at the International Atomic Energy Agency (IAEA) to ensure that partner states implement the highest standard of international safeguards required to enable peaceful nuclear cooperation consistent with U.S. law. NPAC also implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally to counter Russian and Chinese influence.

Securing the Industrial Supply Chain. NPAC protects America's civil nuclear infrastructure and associated, critical supply chains and implements regulatory and statutory requirements to advance U.S. civil nuclear technologies globally and empower trade relationships that benefit U.S. businesses. In addition, NPAC protects America's emerging technologies (i.e., Artificial Intelligence, quantum technologies) and the associated U.S. industrial base from exploitation from international competitors and would-be proliferators. NPAC also conducts high-efficiency technical reviews of thousands of export licenses for nuclear and dual-use commodities and strengthens domestic and global capacity to detect and prevent diversion of commodities and technologies to adversaries' weapons of mass destruction (WMD) and military programs, creating a more secure environment for U.S. industry to operate globally. NPAC further implements the President's Executive Order on Deploying Advanced Nuclear Reactor Technologies for National Security by engaging with American advanced reactor designers and other stakeholders to provide expert support in promoting the timely incorporation of safeguards by design, through programmatic and technical initiatives. NPAC has trained 27 U.S. designers on safeguards by design and engages directly with 8 U.S. developers.

Monitoring and Verification. NPAC strengthens the IAEA's ability to verify the post-conflict status of Iran's nuclear program and the peaceful use of nuclear materials in 190 countries, supports monitoring and verification of Iranian nuclear capabilities (including impacts of Operations MIDNIGHT HAMMER and EPIC FURY), and develops efficient and cost-effective safeguards tools, technologies, and methods, including a uranium enrichment platform to enhance IAEA and U.S. monitoring capabilities. NPAC prevents the illegal diversion of dangerous nuclear materials and WMD-related commodities and technologies to prevent threats before they reach the U.S. border, and NPAC strengthens domestic and global capacity to detect and prevent diversion of commodities and technologies to adversaries' WMD and military programs. NPAC delivers applied technical measures and implementation capabilities to enable safe, secure, and verifiable reductions and limitations and monitoring of nuclear warheads, fissile material production and associated facilities, and chemical weapons. NPAC also maintains technical readiness to negotiate and implement future arms control agreements, including through the development of high-fidelity assets to train technical experts on warhead monitoring and verification.

In order to take an effective crosscutting approach to its key objectives, the NPAC program has introduced a new reporting-level structure: (1) Civil Nuclear Cooperation; (2) Securing the Industrial Supply Chain; and (3) Monitoring and Verification. NPAC pursues these objectives through four subprograms: (1) International Nuclear Safeguards; (2) Nuclear Export Controls; (3) Nuclear Verification; and (4) Civil Nuclear Cooperation and Engagement. This structure is designed to maximize expertise in core technical areas while taking an integrated and coordinated approach to effectively meet the objectives detailed in the new reporting levels. This comprehensive approach positions NPAC to play a leading role in addressing national security and economic competitiveness threats while also drawing upon its expertise to anticipate emerging nonproliferation challenges and develop technical solutions.

Nonproliferation and Arms Control
Funding by Budget Control ($K)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				$	%
Civil Nuclear Cooperation	67,145	60,633	61,361	+728	+1%
Securing the Industrial Supply Chain	41,749	48,585	49,154	+569	+1%
Monitoring and Verification	118,114	102,782	103,979	+1,197	+1%
Total, Nonproliferation and Arms Control	**227,008**	**212,000**	**214,494**	**+2,494**	**+1%**

Outyear Funding ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Civil Nuclear Cooperation	68,076	69,438	70,827	72,243
Securing the Industrial Supply Chain	52,638	53,690	54,763	55,859
Monitoring and Verification	108,558	110,730	112,945	115,203
Total, Nonproliferation and Arms Control	**229,272**	**233,858**	**238,535**	**243,305**

Highlights of the FY 2027 Budget Request

The NPAC program will execute a wide-ranging set of activities in FY 2027.

Civil Nuclear Cooperation. NPAC will strengthen the expansion of U.S. nuclear cooperation globally by working with the IAEA to ensure effective implementation of all safeguards agreements by current and future U.S. partners. NPAC will engage with American advanced reactor designers and other stakeholders to provide expert support in promoting the timely incorporation of safeguards by design thereby making these American designs more attractive to foreign customers. NPAC will also advance U.S. civil nuclear technologies globally and empower U.S. trade by streamlining civil nuclear technology transfer requests under 10 CFR Part 810 and provide critical technical expertise to complex 123 Agreement negotiations with both new and existing

international partners to support U.S. nuclear industry and to counter foreign competition. NPAC is also actively supporting the U.S. Department of State's negotiation of 20 new 123 Agreements by the 120th Congress - an unprecedented number of agreements to negotiate in the given timeframe. NPAC will also leverage multilateral nuclear cooperation fora, such as the Nuclear Suppliers Group and Nuclear Nonproliferation Treaty, to promote the United States as the preferred nuclear cooperation partner and promote U.S. nuclear energy dominance.

Securing the Industrial Supply Chain. NPAC will reinvigorate the U.S. nuclear industrial base and global marketplace by advancing global nuclear safeguards and improving foreign partner strategic trade control systems. NPAC will also enhance interactions with U.S. reactor designers, and international and maritime regulatory authorities to unleash U.S.-based reactor technologies into the global marketplace. NPAC will increase the marketability of U.S. nuclear designs by providing in-kind support as well as direct funding to U.S. industry to address international safeguards requirements. In addition, NPAC will strengthen technical capabilities at national laboratories in critical emerging technologies (i.e., semi-conductors/microelectronics, quantum, advanced manufacturing, hypersonics) to proactively identify proliferation risks associated with these technologies and develop/implement export controls to protect them from adversaries and strategic competitors. This will help protect America's key emerging technologies and associated U.S. industrial base from exploitation from international competitors and would-be proliferators. NPAC will provide data analysis and technical reachback to support U.S. enforcement agencies to prevent adversaries from illicitly acquiring sensitive dual use commodities from U.S. industry and from diversion through countries with less stringent export control systems in place. NPAC will continue to grow its data analytics capabilities to secure a robust and competitive supply chain at home and identify where partners controls can be strengthened abroad. Together, this strengthens America's economy, which aligns with national security.

Monitoring and Verification. The NPAC program will strengthen the IAEA's capacity to verify the post-conflict status of Iran's nuclear program and nuclear materials in 190 countries, close the holes in the global safeguards system by working with partner countries to build domestic capabilities to control nuclear materials, and implement U.S. safeguards obligations. NPAC will target investments in U.S. laboratory capabilities to further the development of tools, technologies, and methods that improve the effectiveness and efficiency of international nuclear safeguards. NPAC will execute test-plan activities at a unique nonproliferation enrichment training platform to support the development of new safeguards technologies and approaches. NPAC will also deploy technical expertise to support interagency maximum pressure efforts in export control and interdiction to counter proliferant countries. NPAC will develop solutions to address new strategic stability challenges requiring innovative monitoring and verification technologies and approaches, including for novel weapon systems, nuclear weapon-free zones, and potential arms control with Russia, China or others. NPAC maintains a scalable readiness posture to support future nuclear threat reduction initiatives that require onsite monitoring and verification of nuclear material production and related weapons facilities. NPAC will complete significant refurbishment for the Pantex Monitoring and Verification Test Facility to advance testing, demonstration, and exercising of warhead monitoring and verification capabilities to support future arms control treaties, and more broadly, develop, demonstrate, and deploy applied monitoring and verification technologies. NPAC will deliver innovations in applied monitoring and verification technologies and approaches and maintain U.S. readiness and technical capabilities to support onsite monitoring and verification activities.

Explanation of Changes: Nonproliferation and Arms Control (+ $2.494 million)
No significant changes

Defense Nuclear Nonproliferation Research and Development

Overview

The Defense Nuclear Nonproliferation Research and Development (DNN R&D) program directly contributes to national security by developing United States (U.S.) capabilities to detect and characterize global nuclear threats in full coordination with the goals and priorities of U.S. Government mission stakeholders across nonproliferation, nuclear warfighting, counterterrorism, and counterproliferation mission areas. In addition, the DNN R&D program sustains and develops foundational nonproliferation technical competencies to provide the technical agility needed to support a broad spectrum of U.S. nonproliferation missions and anticipate threats. To execute these activities, the program leverages the unique facilities and scientific skills of the Department of Energy/National Nuclear Security Administration (DOE/NNSA) National Laboratories and sites and universities to perform research and demonstrate advances in capabilities, develop prototypes, and produce sensors for integration into operational systems.

Specifically, the DNN R&D program makes these strategic contributions through the development of innovative U.S. technical capabilities to detect, identify, locate, and characterize foreign nuclear material production and weapons development activities, movement and illicit diversion of special nuclear materials, and global nuclear detonations. The program advances U.S. capabilities to monitor and characterize foreign nuclear programs independently of treaties or agreements. It also develops nuclear forensics technical capabilities to enable rapid decision-making during nuclear or radiological incidents and determinations of the origin of interdicted materials or nuclear devices. These technical capabilities are either advanced to higher maturities, transitioned to stakeholders for further development for mission-specific applications, or transferred to operational performers. In addition, the program sustains and develops foundational nonproliferation technical capabilities by providing targeted, long-term support for enabling infrastructure, science and technology, and an expert workforce. The program supports four university consortia to conduct basic research addressing program requirements in collaboration with the DOE/NNSA National Laboratories.

The DNN R&D program also leverages artificial intelligence (AI) to advance national security. The program harnesses the unique capabilities of the DOE/NNSA National Laboratories to develop and apply AI technologies to critical national security challenges in nuclear nonproliferation. Activities include the development of robust data management capabilities and AI models that leverage the program's extensive data to detect and characterize foreign nuclear weapons development activities.

Defense Nuclear Nonproliferation Research and Development
Funding by Budget Control ($K)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				$	%
Proliferation Detection	305,728	300,000	296,170	-3,830	-1%
Nuclear Detonation Detection	309,488	309,000	318,447	+9,447	+3%
Forensics R&D	37,759	37,759	30,000	-7,759	-21%
Nonproliferation Stewardship Program	124,875	162,000	174,383	+12,383	+8%
Total, Defense Nuclear Nonproliferation R&D	**777,850**	**808,759**	**819,000**	**+10,241**	**+1%**

Defense Nuclear Nonproliferation Research and Development
Outyear Funding ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Proliferation Detection	302,093	308,135	314,298	320,584
Nuclear Detonation Detection	324,816	331,312	337,938	344,697
Forensics R&D	30,600	31,212	31,836	32,473
Nonproliferation Stewardship Program	177,871	181,428	185,057	188,758
Total, Defense Nuclear Nonproliferation R&D	**835,380**	**852,087**	**869,129**	**886,512**

Defense Nuclear Nonproliferation Research and Development
Proliferation Detection

Overview

The Proliferation Detection (PD) subprogram develops capabilities for detecting and characterizing foreign nuclear weapons programs, establishing independent United States (U.S.) capabilities to monitor and characterize foreign development of nuclear weapons irrespective of treaties or agreements, and interdicting nuclear materials outside of regulatory control. Efforts are aligned along major functional areas: (1) Nuclear Weapons Development and Material Production Detection efforts targeted toward the detection, identification, location, and characterization of foreign nuclear weapons program activities; (2) Nuclear Weapons Monitoring and Counterterrorism efforts targeted toward independent nuclear monitoring capabilities (including space monitoring, which incubates remote sensing activities to address emerging challenges in the space environment), operational interdiction, and radiological source replacement; and (3) Nonproliferation Enabling Capabilities efforts supporting a broad R&D base to bring new, cross-cutting technologies to multi-use applications across NNSA and the interagency community, including artificial intelligence.

In addition, the PD subprogram has a field experiment and demonstration program and a university nuclear nonproliferation research program. The field demonstration program integrates research and experimental testbed activities to advance technology in support of U.S. nuclear monitoring needs.

As part of DNN R&D's University Consortia for Nuclear Nonproliferation, the PD subprogram supports three consortia which link universities and DOE/NNSA National Laboratories to address basic research requirements in nuclear nonproliferation.

Highlights of the FY 2027 Budget Request

In FY 2027, the PD subprogram will advance U.S. capabilities to detect and characterize foreign nuclear weapons production activities. It will strengthen detection and monitoring of special nuclear material movement and enhance nuclear safeguards, and it will develop and execute national testbeds for validating new sensors, equipment, and monitoring capabilities for nonproliferation efforts. The subprogram will also continue developing U.S. capabilities for independent monitoring of foreign nuclear weapons stockpiles and related activities, including assembly, transportation, storage, dismantlement, and delivery system integration, in support of warfighting, intelligence, and nonproliferation missions targeting vertical proliferation.

The PD subprogram will provide a broad, underlying set of technical capabilities that support nuclear nonproliferation and continue to expand current technical approaches, including efforts to address interagency requirements through cross-cutting research and development leveraging artificial intelligence and data science for the early detection of nuclear proliferation. The subprogram will invest in a robust data management capability and data governance process to enable the development and training of AI models at the DOE/NNSA National Laboratories using the vast amounts of data produced by DNN R&D programs to detect, locate, and characterize foreign nuclear proliferation activities. The subprogram will also continue remote sensing and data science research efforts to address the nuclearization of space in collaboration with the Nuclear Detonation Detection (NDD) subprogram. Finally, the PD subprogram will continue three university-DOE/NNSA National Laboratory consortia to address basic research requirements and provide a pipeline of next-generation nuclear science and engineering experts to the DOE/NNSA National Laboratories.

Proliferation Detection (-$3.83 million)
No major change.

Overview

The Nuclear Detonation Detection (NDD) subprogram develops and builds space sensors for the United States (U.S.) Government's operational nuclear warfighting, space control, and nuclear test treaty monitoring missions and advances U.S. capabilities to monitor seismic and radionuclide signatures of ground-based nuclear detonations, including low-yield and evasively conducted underground nuclear explosions. The NDD subprogram also conducts research, demonstration, and validation activities in collaboration with the PD subprogram that advances U.S. space monitoring capabilities for independently addressing emerging challenges in the space environment.

Highlights of the FY 2027 Budget Request

In FY 2027, the NDD subprogram will produce nuclear detonation detection satellite payloads in accordance with the negotiated schedule with the U.S. Space Force (USSF). The subprogram will also support the payload-side technical integration, pre-launch, and on-orbit testing activities for previously delivered payloads in accordance with host satellite schedules.

The NDD subprogram will conduct research in seismic and radionuclide detection to support national capability in terrestrial and airborne monitoring and analysis methods and improve the U.S. ability to detect evasive nuclear testing by conducting low-yield explosion monitoring field experiments. As part of this effort, the subprogram will leverage AI models to improve capabilities for rapidly identifying and interpreting events of interest.

Finally, the subprogram will continue research, development, and demonstration activities to advance and validate sensors and systems to enable nuclear monitoring in and from space, in collaboration with the PD subprogram.

Nuclear Detonation Detection (+$9.447 million)
The increase reflects the acceleration of nuclear test detection activities, including R&D to improve U.S. capabilities to detect and characterize foreign low-yield, evasive nuclear testing.

Defense Nuclear Nonproliferation Research and Development
Forensics R&D

Overview

The Forensics R&D subprogram advances technical nuclear forensics analysis capabilities at the DOE/NNSA National Laboratories that can support time-critical decisions in the event of a nuclear or radiological incident and determinations of the origin of interdicted materials or nuclear devices. The subprogram's R&D includes the collection, analysis, and evaluation of pre-detonation and post-detonation nuclear and other radioactive materials, devices, and debris, as well as the immediate effects created by a nuclear detonation. It also sustains subject matter expertise to support exercises, mentoring, training, expert reach-back, and real-world contingency operations.

As part of the DNN R&D program's University Consortia for Nuclear Nonproliferation, the Forensics R&D subprogram supports one consortium, which links universities and DOE/NNSA National Laboratories to address basic research requirements of NNSA's technical nuclear forensics missions.

Highlights of the FY 2027 Budget Request

The Forensics R&D subprogram will develop and maintain advanced technical nuclear forensics pre- and post-detonation analysis capabilities at DOE/NNSA National Laboratories that support United States Government response to a nuclear or radiological event.

Additionally, the subprogram will award a new nuclear forensics R&D university consortium, as part of the DNN R&D program's University Consortia for Nuclear Nonproliferation, to address basic research requirements and provide a pipeline of next-generation nuclear forensics experts to the DOE/NNSA National Laboratories.

Forensics R&D (-$7.759 million)
The decrease reflects the prioritization of other DNN R&D program activities.

Overview

The Nonproliferation Stewardship Program (NSP) subprogram sustains and maintains critical nonproliferation foundational technical competencies at the DOE/NNSA National Laboratories. The NSP subprogram recognizes that the United States (U.S.) nuclear weapons program and domestic nuclear fuel-cycle infrastructure has significantly narrowed or declined since the Cold War era, leaving the Nation without a large cadre of DOE/NNSA National Laboratory personnel with hands-on experience and expertise in sensitive fuel-cycle processes, material handling, and nuclear weapons development and testing. At the same time, advances in manufacturing, computing, and other key areas, combined with easier access to nuclear-related information, represent new and diverse pathways for developing a nuclear weapon, which the U.S. must understand to detect, identify, locate, and characterize foreign activities through the development of advanced sensors and to support relevant missions across the U.S. Government. To ensure the technical capacity and agility needed to support nonproliferation missions and anticipate threats, the NSP subprogram sustains and develops foundational nonproliferation technical competencies by providing critical enabling infrastructure and science and technology (S&T) that targets an expert nonproliferation workforce at the DOE/NNSA National Laboratories and sites.

Highlights of the FY 2027 Budget Request

In FY 2027, the NSP subprogram will develop needed expertise through operational testbeds and S&T laboratories to address immediate, highest-priority capability shortfalls in nonproliferation missions, especially in uranium enrichment, uranium conversion, weaponization, and plutonium sciences. The subprogram will also continue planned infrastructure recapitalization activities ensuring the Nation's capacity to meet future nonproliferation goals and anticipate threats through representative S&T and research environments.

The NSP subprogram will continue development of the Advanced Testbed and Operations Learning Laboratory to grow competencies and workforce expertise in uranium enrichment technologies operated in complex environments. It will also develop, optimize, and validate physics-based predictive models for uranium enrichment systems and facilities and upgrade the classified high-performance computing (HPC) platform at Oak Ridge National Laboratory (ORNL) supporting these models.

In addition, the NSP subprogram will begin operations of representative uranium conversion equipment supporting phase III laboratories of the Uranium Science and Technology Center, which continues establishing a modern laboratory environment to develop technical expertise and includes a pilot approach to knowledge preservation and transfer for uranium conversion before the permanent loss of critical expertise. The subprogram will also continue developing the Uranium Production and Weaponization Testbed to build critical competencies through pilot-scale uranium chemical conversions, separations, and uranium component fabrication. The NSP subprogram will also continue development of infrastructure and S&T activities to build plutonium science expertise, including at the Radiochemical Processing Laboratory (RPL), the Plutonium Science Laboratory, and through the Athena Initiative focusing on plutonium processing. Finally, the subprogram will recruit and onboard the fourth cohort of the Next Generation Leadership Development Program to sustain a targeted talent technical leadership pipeline to DOE/NNSA National Laboratories.

Nonproliferation Stewardship Program (+$12.383 million)
The increase funds upgrades of the classified HPC platform at ORNL supporting ongoing physics-based modeling of uranium gas centrifuge enrichment.

DNN Research and Development
Capital Equipment Summary
($K)

	Total	Prior Years	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	N/A	N/A	86,465	80,922	82,540
Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL[1]	15,000	6,000	3,000	3,000	3,000
Dirac HPC, ORNL	25,000	-	-	-	25,000
Total, Capital Equipment	**N/A**	**N/A**	**89,465**	**83,922**	**110,540**

DNN Research and Development
Capital Equipment Summary
Outyears ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request	Outyears
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	84,191	85,875	87,592	89,344	N/A
Tuolumne (formerly Unclassified El Capitan-like System (ATS-4)), LLNL	-	-	-	-	-
Dirac HPC, ORNL	-	-	-	-	-
Total, Capital Equipment	**84,191**	**85,875**	**87,592**	**89,344**	**N/A**

[1] NNSA will utilize lease-to-purchase contracts (also referred to as lease-to-own (LTO)) for High Performance Computing procurements when such contracts are found to be the best programmatic and financial value to the government. SRT&E and a LLNL overhead cost pool fund the remainder of costs for this MIE.

Nuclear Counterterrorism and Incident Response Program

Overview

The Department of Energy/National Nuclear Security Administration's (DOE/NNSA) fulfills a unique national security role in delivering technical expertise to inform and execute emergency and continuity planning and operations; countering nuclear terrorism and nuclear proliferation; and responding to nuclear or radiological incidents, accidents, or emergencies worldwide. The Nuclear Counterterrorism and Incident Response (NCTIR) program strengthens strategic deterrence by ensuring that the Department is appropriately postured to provide emergency preparedness and response capabilities to keep America safe and secure. NCTIR is critical to defeating threats against the homeland by providing scientific understanding of nuclear threat devices and maintaining technical nuclear forensics tools and operational capabilities for the attribution of nuclear material found outside of regulatory control or used in a nuclear device. The scientific knowledge of the DOE/NNSA National Laboratories underpins these capabilities, enabling rigorous technical assessments of nuclear and radiological threats that inform domestic and international policies, regulations, contingency planning, training, and preparedness. These activities strengthen national and international counterterrorism, counterproliferation, and incident response.

The NCTIR Program includes the following subprograms:

- The **Emergency Management (EM) subprogram** provides both the structure and processes to administer a comprehensive and integrated approach to emergency management and continuity of operations, thereby enhancing Departmental and national resilience. The EM program coordinates a whole-of-community approach to emergency management for improved readiness and effectiveness of the DOE Comprehensive Emergency Management System on a programmatic and performance level, while promoting unity of effort and a culture of continuous improvement.
- The **Counterterrorism and Counterproliferation (CTCP) subprogram** protects American security and interests by reducing nuclear and radiological threats through specialized emergency preparedness and response operations, capabilities, and expertise. It serves as the technical foundation for nuclear deterrence by denial and attribution, providing innovative scientific and technological assessments that inform decision-making on counterterrorism, counterproliferation, and incident response topics. It maintains unique capabilities, including scientific and operational infrastructure, to avert, respond to, and mitigate the consequences of nuclear and radiological incidents and accidents in the United States (U.S.) and abroad.

Nuclear Counterterrorism and Incident Response Program
Funding by Budget Control ($K)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request	FY 2027 Request vs FY 2026 Enacted	
				$	%
Emergency Management	23,847	33,122	35,045	+1,923	+6%
Nuclear Incident Response/Nuclear Emergency Support Team	*281,704*	*267,991*	*321,361*	*+53,370*	*+20%*
National Technical Nuclear Forensics	*62,900*	*62,900*	*83,265*	*+20,365*	*+32%*
Nuclear Threat Science	*147,979*	*147,979*	*200,105*	*+52,126*	*+35%*
Nuclear Incident Preparedness and Collaboration	*14,467*	*14,467*	*19,319*	*+4,852*	*+34%*
Global Security Recapitalization	*-*	*5,000*	*26,500*	*+21,500*	*+430%*
Subtotal, Counterterrorism and Counterproliferation	507,050	498,337	650,550	+152,213	+31%
Total, Nuclear Counterterrorism & Incident Response Program	**530,897**	**531,459**	**685,595**	**+154,136**	**+29%**

Outyear Funding ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request
Emergency Management	35,746	36,461	37,190	37,934
Nuclear Incident Response/Nuclear Emergency Support Team	*327,795*	*334,350*	*341,038*	*347,858*
National Technical Nuclear Forensics	*84,930*	*86,629*	*88,361*	*90,129*
Nuclear Threat Science	*204,107*	*208,189*	*212,353*	*216,600*
Nuclear Incident Preparedness and Collaboration	*19,699*	*20,093*	*20,495*	*20,905*
Global Security Recapitalization	*27,030*	*27,571*	*28,122*	*28,684*
Subtotal, Counterterrorism and Counterproliferation	663,561	676,832	690,369	704,176
Total, Nuclear Counterterrorism & Incident Response Program	**699,307**	**713,293**	**727,559**	**742,110**

Nuclear Counterterrorism and Incident Response Program
Emergency Management

Overview

The EM program executes mandated emergency management and continuity functions. The Fiscal Year (FY) 2027 Budget Request focuses on EM activities and resources across three subprogram areas: preparedness, continuity, and emergency operations. The preparedness subprogram promotes a comprehensive approach to mitigate, prepare for, respond to, and recover from incidents impacting the DOE/NNSA mission. This subprogram develops and implements emergency management directives, guidance, and plans; assists Headquarters (HQ), Field Elements, and facility contractors in implementing effective emergency management programs; and leads the exchange of best practices and facilitates collaboration across DOE and NNSA emergency managers. The continuity subprogram executes DOE and NNSA Continuity of Operations Program (COOP), Continuity of Government (COG), and Enduring Constitutional Government (ECG) programs, ensuring the availability and interoperability of continuity communications systems. The subprogram prepares the Department's continuity personnel, sites, senior leadership, and successors. The subprogram also deploys continuity capabilities with interagency partners during both with-notice and no-notice emergencies and National Special Security Event, such as the Presidential Inauguration and State of the Union Address. The emergency operations subprogram operates and maintains the Department's HQ Emergency Operations Center (HQ EOC), including the 24/7/365 Watch Office, which serves as a central point-of-contact during emergencies, periods of heightened international tension, natural disasters, and acts of terrorism. This subprogram ensures DOE/NNSA leadership is informed, unifies emergency management efforts, and staffs EM Specialists for Department-wide support.

Highlights of the FY 2027 Budget Request

The EM program's FY 2027 Budget Request funds program-specific and cross-cutting initiatives. The preparedness subprogram will manage the emergency management Technical Qualification Program; advance data-informed decisions and readiness assurance data collection and analysis; host and lead the annual DOE Emergency Management Symposium; and provide laboratories, plants, and sites technical support and tools. The continuity subprogram will maintain interoperability and availability of continuity facilities, communications systems, and capabilities, to include capabilities with interagency partners, and hardening of identified infrastructure from electromagnetic security threats. The emergency operations subprogram will incorporate information technology tools into operations to improve analytics and dynamic reporting while decreasing human error and enhancing situational awareness. In addition, the EM program will continue renovations to the DOE HQ EOC, maintain 24/7/365 Watch Office, and manage the DOE response framework, to include the Unified Coordination Group (UCG), in support of DOE and NNSA emergency response efforts.

Emergency Management (+$1.923 million)
The FY 2027 Budget Request funds the hardening of identified infrastructure from electromagnetic security threats.

Overview

The CTCP subprogram protects American security and economic interests by reducing radiological and nuclear (R/N) threats through specialized emergency preparedness and response operations, capabilities, and expertise. The CTCP subprogram focuses on R/N incidents, accidents, and threats, with the core mission to prepare for and respond to such events.

The **Nuclear Incident Response/Nuclear Emergency Support Team (NIR/NEST)** subprogram is the Nation's last line of defense against nuclear or radiological emergencies. It delivers integrated mission support to protect America and Americans, by applying the unique technical capabilities within the DOE/NNSA's Nuclear Security Enterprise (NSE) to prepare for, prevent, respond to, and mitigate the consequences of nuclear or radiological threats, incidents, and accidents worldwide.

The NIR/NEST subprogram works closely with other DOE elements as well as partner federal organizations, including the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), Nuclear Regulatory Commission (NRC), Department of War (DoW), Federal Bureau of Investigation (FBI), and the Intelligence Community. The subprogram responds domestically or abroad to nuclear and radiological emergencies, including terrorist threats involving nuclear materials, to ensure safe incident resolution and the protection of the public and environment, and validates these response capabilities by conducting regular exercises with mission partners. The subprogram accomplishes this by ensuring the appropriate resources (e.g., people, communications, locations, doctrine/training) are in place to provide command, control, coordination, and communications of DOE/NNSA nuclear incident response assets. The subprogram also ensures that the incident response personnel are properly organized, trained, and equipped to rapidly deploy in response to an incident.

The **National Technical Nuclear Forensics (NTNF)** subprogram advances strategic deterrence by maintaining the nuclear forensics technical and operational capabilities that underpin the U.S. Government's core nuclear forensics mission. The NTNF subprogram holds key roles in improvised nuclear device exploitation and disassembly, interdicted nuclear material analysis, post-nuclear detonation ground debris sample collection and in-field sample processing, and post-nuclear detonation device assessment by leveraging U.S. nuclear weapons expertise to reverse engineer the device design. It provides nuclear forensic capabilities to hold adversaries accountable.

The NTNF subprogram sustains mission readiness through training, drills, and exercises for responders; maintenance and development of highly sophisticated equipment, tools, and techniques; and technical integration and maintenance of specialized pre- and post-detonation response teams and facilities. Additionally, continued development of the National Nuclear Materials Archive (NNMA) ensures high-value new and historical nuclear materials are identified, analyzed, and preserved. Comparative analysis of material characteristics significantly aids assessment of interdicted materials and thus enhances technical nuclear forensics capabilities for attribution.

The **Nuclear Incident Preparedness and Collaboration (NIPC)** subprogram strengthens emergency preparedness and response for radiological or nuclear incidents and accidents posing a potential risk to U.S. territory, citizens, or national security and economic interests. This subprogram works with federal, state, and local officials to expand their capabilities to respond to radiological or nuclear incidents, accidents, and terrorism threats. It also provides international partners and nuclear newcomer nations with the knowledge to

develop mature, appropriate, and right-sized emergency preparedness and response mechanisms without the need for direct investment by the U.S. Government.

The NIPC subprogram aims to accelerate the adoption of nuclear energy by partner nations, build confidence in nuclear power as a reliable source of energy, and foster relationships that enable cooperation in other areas of emergency preparedness, incident response, and U.S. national security. Its engagements are part of a robust strategy for U.S. energy dominance that enable international partners and allies to prepare for and address radiological or nuclear incidents in their regions without reliance on the U.S. These shared capabilities reduce risk and alleviate the need for a full U.S. response by minimizing the requirement to deploy U.S. assets to respond to international radiological and nuclear incidents. NIPC funding covers domestic engagements, while the cost of most international engagements is shared with that partner (e.g., Israel, Mexico, Norway, and the Republic of Korea). This strategy keeps costs low while both enhancing U.S. safety and security and reducing nuclear and radiological risks.

The **Nuclear Threat Science (NTS)** subprogram provides the Nation's technical capability to understand and defeat nuclear threat devices, including improvised nuclear devices, radiological dispersal devices, and lost or stolen foreign nuclear weapons. The subprogram delivers rigorous technical assessments that inform U.S. decision making on counterterrorism, counterproliferation, and incident response, including evaluating risks and opportunities associated with emerging technologies from Artificial Intelligence (AI) to advanced nuclear technologies, as well as assessing novel nuclear threats against U.S. strategic interests.

The NTS subprogram maintains and advances its scientific expertise and technical capabilities through partnerships with DOE/NNSA's nuclear weapons design laboratories and production facilities and classified technical and policy exchanges with the United Kingdom and France under respective Mutual Defense Agreements. It delivers classified assessments on nuclear reactors and advance fuel cycles to inform and advance U.S. energy strategy. The subprogram also conducts focused science on explosive and nuclear material behaviors, including performing integrated experiments on materials and threat device designs to validate and advance predictive capabilities for the U.S. Government and its partners. Collectively, this work shapes the U.S. understanding of nuclear terrorism and nuclear proliferation threats, thus advancing U.S. safety and security, and energy dominance.

The **Global Security (GS) Recapitalization** subprogram makes critical investments in CTCP scientific and operational infrastructure. The subprogram coordinates with and complements investments by the Weapons Activities Recapitalization program to address growing and unique GS mission-specific infrastructure requirements. Using innovative acquisition approaches, the GS Recapitalization subprogram delivers critical capabilities for the CTCP mission in a timely, executable, and affordable manner across DOE/NNSA sites. GS Recapitalization underscores the CTCP commitment to sustained operational readiness and scientific excellence.

Highlights of the FY 2027 Budget Request

The CTCP subprogram FY 2027 Budget Request focuses on making America safer and more secure by leveraging unique expertise from the Nuclear Emergency Support Team (NEST) to strengthen U.S. domestic R/N emergency preparedness and response capabilities. It delivers rigorous technical assessments that inform U.S. decision making on counterterrorism, counterproliferation, and incident response; counters adversarial influence; and creates opportunities with nuclear states and newcomers that support American economic interests and energy dominance.

CTCP is executing mission priorities at a heightened operational tempo and leveraging unique technical and operational expertise from within NEST and the NSE to strengthen emergency preparedness and response capabilities. Its efforts protect American citizens and interests overseas, strengthening partner preparedness and mitigating the consequences of overseas emergencies before they can harm the U.S. homeland. The CTCP subprogram mission requires world-class capabilities in science and operations, including strategic infrastructure to support consistent, effective responses.

Funding for NIR/NEST in the FY 2027 Request sustains domestic weapons of mass destruction (WMD) response capabilities developed under the Capability Forward (CF) initiative. CF enables regional FBI counter-WMD teams to take decisive action to secure and defeat WMD devices, thereby accelerating life-saving responses to R/N threats to the homeland. CF training development delivered by NIR/NEST expands and enhance capabilities within all FBI field offices through a standardized curriculum that builds and sustains federal law enforcement mastery of critical emergency response skills. Further, the NIR/NEST subprogram sustains NEST capabilities to respond to WMD incidents, accidents, and threats to protect public health and safety.

The FY 2027 Budget Request for NTNF advances nuclear forensic capabilities, specifically the technical expertise, tools, and techniques that improve attribution timelines for holding adversaries accountable. NTNF strengthens U.S. strategic deterrence by sustaining and improving NNSA's world-class nuclear forensic capabilities and operational readiness posture, including expanded pre-detonation asset maturation and material analysis capabilities, strengthened post-detonation rapid ground debris collection, and fully operationalized post-detonation device assessment. The NTNF subprogram leverages additional operational and scientific expertise throughout the DOE/NNSA National Laboratories to progressively eliminate key technical gaps and streamline roles and responsibilities across the federal government for a more effective response. The NTNF subprogram's work credibly dissuades foreign states from supporting or facilitating non-state actors' acquisition of nuclear materials, either wittingly or unwittingly, and thus complicates any efforts to attempt to conduct a clandestine nuclear attack.

The 2027 Budget Request for NTS will enhance DOE/NNSA National Laboratories' capabilities for rigorous technical nuclear threat assessments of evolving foreign nuclear capabilities. Leveraging classified computing facilities, experimental platforms, and seasoned technical staff, the NTS subprogram will provide the underpinning science that informs high-stakes government policy in support of crisis operations and national level planning efforts. It will arm decisionmakers with knowledge on the potential impacts of open source and proprietary AI, large language models on the nuclear domain, provide classified risk assessments of advanced fuel cycles and reactors that support energy dominance, and execute integrated experiments to validate risk assessments of nuclear materials and threat devices. Notably, the FY2027 Request allows the NTS subprogram—NNSA's lead for understanding how AI is altering the WMD threat landscape—to advance its comprehensive and scalable framework for assessing how fast-moving AI improvements and digital security threats enhance adversary nuclear capabilities.

The FY 2027 Budget Request in NIPC advances collaborative federal, state, local, and international partnerships to strengthen capabilities and address gaps in R/N emergency preparedness and response to foster resilience, and bolster NEST operational capacity to protect public health and safety. Working with first responder entities and coordination authorities, NIPC helps counter adversarial influence and foster American strategic and economic interests by speeding the growth of nuclear energy in foreign and nuclear newcomer nations by building confidence in their emergency preparedness and response mechanisms. It facilitates NEST international engagement coordination for emergency response, with most international work requiring partner cost sharing arrangements so that NIPC remains focused on supporting U.S. subject matter experts. With a

particular focus on strengthening domestic capabilities in FY 2027, the NIPC subprogram's work secures and protects America's citizens and economic and national security interests.

Funding for GS Recapitalization in the FY 2027 Budget Request will complete critical renovations at the NEST Training and Operations Center (NTOC) in Albuquerque, New Mexico, including building its Sensitive Compartmented Information Facility (SCIF) and Special Access Program Facility (SAP-F). NTOC will centralize global NEST home team operations at a resilient facility that was purchased by NNSA in FY 2026 using real estate authorities to achieve a 58 percent lifecycle cost savings compared to traditional federal construction.

Explanation of Change

Counterterrorism and Counterproliferation (+$152.213 million)
The increase protects American security and economic interests by investing specialized R/N scientific and operational capabilities that deliver effective federal response to accidents, incidents, and threats; timely, actionable technical assessments of nuclear threats from state and non-state actors to U.S. decisionmakers; advance technical and operational collaboration with partners; and world-class nuclear forensic expertise to support strategic deterrence.

CTCP expects to continue to execute an increasing scope of planned and unplanned NEST operations in support of national security and public safety priorities throughout FY 2027.

- **NEST Equipment Recapitalization**. Restores NEST mission equipment recapitalization efforts and unifies the response equipment of the domestic WMD device response architecture via an integrated FBI national and regional response team equipment sustainment.
  NEST Training. Accelerates NEST training activities to recover from deferred training in FY 2026 to re-establish full response readiness in mid-FY 2027.
- **Emergency Preparedness and Response**. Expands domestic incident response capabilities at the state and local levels through exercises and new or enhanced curriculum as well as new partnerships with first responder entities to protect the health and safety of American citizens.
- **Accelerated Attribution through Nuclear Forensic Response**. Launches new technology maturation initiatives to transform forensic response capabilities which will address technical gaps for pre- and post-nuclear detonation response requirements. CTCP will adapt lab-based analytical capabilities into fieldable tools that may provide discriminating and actionable information significantly earlier in the post-nuclear detonation response timeline. CTCP will grow the roster of trained, expert responders across the DOE National Laboratories to meet accelerated nuclear forensics response timelines for attribution.
- **Nuclear Forensics for the Emergent Nuclear Fuel Cycle**. Proactively evaluate new and emerging nuclear materials signatures in support of nuclear security and attribution in alignment with the growth of global demand for commercial nuclear energy. This includes advanced and small modular reactors and new fuel forms to populate the NNMA.
- **Nuclear Security Assessments**. Increases capacity to support the deployment of emergent civil nuclear technologies through rigorous analysis and expertise. These investments will allow DOE's Office of Nuclear Energy to expedite reviews of new technologies. Funding also supports increased analytical capabilities to assess AI-enabled tools ability to undermine current information security standards and to develop mitigations for any identified threats (e.g. how AI tools coupled with open-source codes could enhance adversary capabilities within the nuclear security domain).
  Nuclear Threat Assessment and Characterization Capabilities. Increase capacity for innovative scientific and technological assessments and predictive models that inform decision making and provide

intelligence informed, vetted, peer-reviewed nuclear weapons expertise and predictive assessments in support of DoW and Intelligence Community national level planning against emergent and novel nuclear threats. Invests across the five National Laboratories that support NTS' technical portfolio on materials, code development, and experimental validation. Funding supports material science experimental validation and material model development on materials not currently in our priority materials roadmap, including mixes of materials. Increased demand and pace of running assessments to inform security plan development for new facilities and risk awareness where required.

- **NTOC.** Builds Phase 1 of 2 of the NTOC Technical Operations Center to include SCIF/SAP-F facilities. This highly specialized facility will enable and enhance the global NEST remote technical reachback and streamline NEST training and operations. Each phase will deliver a unique and independent scope of work, which is complete and useable.

Nuclear Counterterrorism and Incident Response Program
Capital Equipment Summary ($K)

	Total	Prior Years	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	N/A	N/A	8,434	8,603	8,775
Total, Capital Equipment	**N/A**	**N/A**	**8,434**	**8,603**	**8,775**

Nuclear Counterterrorism and Incident Response Program
Outyear Capital Equipment Summary ($K)

	FY 2028 Request	FY 2029 Request	FY 2030 Request	FY 2031 Request	Outyears
Capital Equipment (> $500K)					
Total Non-MIE Capital Equipment (TEC <$10M)	8,950	9,129	9,312	9,498	N/A
Total, Capital Equipment	**8,950**	**9,129**	**9,312**	**9,498**	**N/A**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Argonne National Laboratory			
Reactor Conversion and Uranium Supply	30,280	15,327	17,650
Nuclear Material Removal and Elimination	1,300	800	0
Plutonium Management	565	150	117
Material Management and Minimization	32,145	16,277	17,767
International Nuclear Security	1,673	1,290	628
Radiological Security	3,241	2,540	2,544
Nuclear Smuggling Detection and Deterrence	1,706	500	985
Global Material Security	6,620	4,330	4,157
Nonproliferation & Arms Control	13,107	16,030	16,218
Proliferation Detection	3,436	3,371	3,328
Forensics R&D	565	565	431
Nonproliferation Stewardship Program	1,000	1,277	1,085
Defense Nuclear Nonproliferation R&D	5,001	5,213	4,844
Emergency Management	317	250	200
Counterterrorism and Counterproliferation	3,698	3,554	4,355
Nuclear Counterterrorism & Incident Response	4,015	3,804	4,555
Total Argonne National Laboratory	**60,888**	**45,654**	**47,541**
Brookhaven National Laboratory			
Reactor Conversion and Uranium Supply	300	0	0
Material Management and Minimization	300	0	0
Radiological Security	1,175	354	923
Nuclear Smuggling Detection and Deterrence	100	0	292
Global Material Security	1,275	354	1,215
Nonproliferation & Arms Control	2,310	1,824	1,845
Proliferation Detection	8,469	8,310	8,204
Forensics R&D	465	465	355
Defense Nuclear Nonproliferation R&D	8,934	8,775	8,559
Counterterrorism and Counterproliferation	3,082	2,932	3,516
Nuclear Counterterrorism & Incident Response	3,082	2,932	3,516
Total Brookhaven National Laboratory	**15,901**	**13,885**	**15,135**
Carlsbad Area Office			
Radiological Security	250	80	196
Global Material Security	250	80	196
Total Carlsbad Area Office	**250**	**80**	**196**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Fermi National Accelerator Laboratory			
Radiological Security	300	111	236
Global Material Security	300	111	236
Proliferation Detection	750	736	727
Defense Nuclear Nonproliferation R&D	750	736	727
Total Fermi National Accelerator Laboratory	**1,050**	**847**	**963**
Idaho National Laboratory			
Reactor Conversion and Uranium Supply	44,008	10,369	6,950
Nuclear Material Removal and Elimination	7,405	7,625	14,175
Material Management and Minimization	51,413	17,994	21,125
International Nuclear Security	4,331	4,838	4,319
Radiological Security	20,550	8,659	16,129
Nuclear Smuggling Detection and Deterrence	40	500	1,093
Global Material Security	24,921	13,997	21,541
Nonproliferation & Arms Control	5,147	5,174	5,235
Proliferation Detection	12,341	12,110	11,955
Forensics R&D	500	500	382
Nonproliferation Stewardship Program	4,550	4,263	3,623
Defense Nuclear Nonproliferation R&D	17,391	16,873	15,960
Counterterrorism and Counterproliferation	7,210	6,936	8,517
Nuclear Counterterrorism & Incident Response	7,210	6,936	8,517
Total Idaho National Laboratory	**106,082**	**60,974**	**72,378**
Kansas City National Security Complex (KCNSC)			
Plutonium Management	5,300	9,800	6,736
Material Management and Minimization	5,300	9,800	6,736
Nonproliferation & Arms Control	2,439	2,466	2,495
Proliferation Detection	1,860	2,281	2,252
Nonproliferation Stewardship Program	900	2,111	1,361
Defense Nuclear Nonproliferation R&D	2,760	4,392	3,613
Counterterrorism and Counterproliferation	36,682	37,520	68,547
Nuclear Counterterrorism & Incident Response	36,682	37,520	68,547
Total Kansas City National Security Complex (KCNSC)	**47,181**	**54,178**	**81,391**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Lawrence Berkeley National Laboratory			
Nonproliferation & Arms Control	1,114	630	637
Proliferation Detection	17,281	16,958	16,741
Forensics R&D	100	100	76
Nonproliferation Stewardship Program	0	4,000	5,200
Defense Nuclear Nonproliferation R&D	17,381	21,058	22,017
Counterterrorism and Counterproliferation	340	323	388
Nuclear Counterterrorism & Incident Response	340	323	388
Total Lawrence Berkeley National Laboratory	**18,835**	**22,011**	**23,042**
Lawrence Livermore National Laboratory			
Reactor Conversion and Uranium Supply	236	200	200
Nuclear Material Removal and Elimination	0	12	0
Plutonium Management	100	0	0
Material Management and Minimization	336	212	200
International Nuclear Security	6,469	5,055	4,870
Radiological Security	10,761	7,649	8,447
Nuclear Smuggling Detection and Deterrence	4,288	3,000	1,513
Global Material Security	21,518	15,704	14,830
Nonproliferation & Arms Control	31,804	34,430	34,835
Proliferation Detection	45,505	44,264	43,699
Nuclear Detonation Detection	29,315	29,268	31,138
Forensics R&D	8,280	8,280	6,319
Nonproliferation Stewardship Program	22,240	20,200	24,200
Defense Nuclear Nonproliferation R&D	105,340	102,012	105,356
Emergency Management	417	380	380
Counterterrorism and Counterproliferation	99,619	98,060	127,365
Nuclear Counterterrorism & Incident Response	100,036	98,440	127,745
Total Lawrence Livermore National Laboratory	**259,034**	**250,798**	**282,966**
Los Alamos National Laboratory			
Reactor Conversion and Uranium Supply	423	250	200
Nuclear Material Removal and Elimination	315	200	200
Plutonium Management	60,608	57,558	75
Material Management and Minimization	61,346	58,008	475
International Nuclear Security	3,905	2,672	2,776
Radiological Security	25,229	21,426	19,802
Nuclear Smuggling Detection and Deterrence	13,085	7,000	6,670
Global Material Security	42,219	31,098	29,248
Nonproliferation & Arms Control	55,894	41,105	41,588
Proliferation Detection	37,913	36,814	36,344
Nuclear Detonation Detection	108,908	108,736	110,314
Forensics R&D	9,420	9,420	7,189
Nonproliferation Stewardship Program	3,075	3,150	4,750

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Defense Nuclear Nonproliferation R&D	159,316	158,120	158,597
Counterterrorism and Counterproliferation	90,512	89,038	115,507
Nuclear Counterterrorism & Incident Response	90,512	89,038	115,507
Total Los Alamos National Laboratory	**409,287**	**377,369**	**345,415**
National Energy Technology Lab			
Nonproliferation & Arms Control	175	787	520
Nonproliferation Stewardship Program	0	400	400
Defense Nuclear Nonproliferation R&D	0	400	400
Total National Energy Technology Lab	**175**	**1,187**	**920**
Nevada Field Office			
Nuclear Detonation Detection	325	324	352
Defense Nuclear Nonproliferation R&D	325	324	352
Counterterrorism and Counterproliferation	90	86	103
Nuclear Counterterrorism & Incident Response	90	86	103
Total Nevada Field Office	**415**	**410**	**455**
Nevada National Security Site			
Nuclear Material Removal and Elimination	625	200	200
Material Management and Minimization	625	200	200
Nonproliferation & Arms Control	344	29	19
Proliferation Detection	15,056	14,774	14,585
Nuclear Detonation Detection	31,531	31,481	34,209
Forensics R&D	165	165	126
Defense Nuclear Nonproliferation R&D	46,752	46,420	48,920
Emergency Management	110	160	160
Counterterrorism and Counterproliferation	54,296	52,109	63,776
Nuclear Counterterrorism & Incident Response	54,406	52,269	63,936
Total Nevada National Security Site	**102,127**	**98,918**	**113,075**
NNSA Albuquerque Complex			
International Nuclear Security	3,596	460	3,809
Radiological Security	18,222	17,370	14,303
Nuclear Smuggling Detection and Deterrence	54,675	75,104	39,158
Global Material Security	76,493	92,934	57,270
Proliferation Detection	21,543	21,139	20,869
Nuclear Detonation Detection	13,703	13,681	14,127
Forensics R&D	5,000	5,000	5,000
Nonproliferation Stewardship Program	8,190	9,000	13,700
Defense Nuclear Nonproliferation R&D	48,436	48,820	53,696
Counterterrorism and Counterproliferation	733	697	836
Nuclear Counterterrorism & Incident Response	733	697	836

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Legacy Contractor Pensions and Settlement Payments - DNN	100	500	14,128
Total NNSA Albuquerque Complex	**125,762**	**142,951**	**125,930**
Oak Ridge Institute for Science and Education			
Radiological Security	10	0	0
Global Material Security	10	0	0
Counterterrorism and Counterproliferation	3,652	3,495	4,248
Nuclear Counterterrorism & Incident Response	3,652	3,495	4,248
Total Oak Ridge Institute for Science and Education	**3,662**	**3,495**	**4,248**
Oak Ridge National Laboratory			
Reactor Conversion and Uranium Supply	4,552	4,372	9,000
Nuclear Material Removal and Elimination	7,295	7,485	11,805
Plutonium Management	10,323	3,450	1,852
Material Management and Minimization	22,170	15,307	22,657
International Nuclear Security	13,274	6,063	8,241
Radiological Security	18,439	16,544	14,473
Nuclear Smuggling Detection and Deterrence	18,259	14,000	15,149
Global Material Security	49,972	36,607	37,863
Nonproliferation & Arms Control	22,288	24,811	25,103
Proliferation Detection	41,410	40,634	40,116
Forensics R&D	2,845	2,845	2,171
Nonproliferation Stewardship Program	43,875	58,867	67,300
Defense Nuclear Nonproliferation R&D	88,130	102,346	109,587
Counterterrorism and Counterproliferation	12,110	12,101	16,221
Nuclear Counterterrorism & Incident Response	12,110	12,101	16,221
Total Oak Ridge National Laboratory	**194,670**	**191,172**	**211,431**
Pacific Northwest National Laboratory			
Reactor Conversion and Uranium Supply	13,715	3,852	3,100
Nuclear Material Removal and Elimination	450	650	200
Plutonium Management	3,020	2,968	2,500
Material Management and Minimization	17,185	7,470	5,800
International Nuclear Security	4,747	15,079	12,303
Radiological Security	84,667	49,680	66,453
Nuclear Smuggling Detection and Deterrence	62,379	18,000	50,675
Global Material Security	151,793	82,759	129,431
Nonproliferation & Arms Control	28,686	24,591	24,881
Proliferation Detection	24,423	23,965	23,659
Nuclear Detonation Detection	18,863	18,833	20,299
Forensics R&D	4,215	4,215	3,217
Nonproliferation Stewardship Program	10,900	19,878	15,071
Defense Nuclear Nonproliferation R&D	58,401	66,891	62,246

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Emergency Management	1,826	2,176	2,176
Counterterrorism and Counterproliferation	11,707	11,374	14,298
Nuclear Counterterrorism & Incident Response	13,533	13,550	16,474
Total Pacific Northwest National Laboratory	**269,598**	**195,261**	**238,832**
Pantex Plant			
Plutonium Management	2,750	0	0
Material Management and Minimization	2,750	0	0
International Nuclear Security	680	0	0
Global Material Security	680	0	0
Nonproliferation & Arms Control	12,872	9,703	9,817
Proliferation Detection	275	979	966
Defense Nuclear Nonproliferation R&D	275	979	966
Counterterrorism and Counterproliferation	3,396	3,250	3,945
Nuclear Counterterrorism & Incident Response	3,396	3,250	3,945
Total Pantex Plant	**19,973**	**13,932**	**14,728**
Princeton Plasma Physics Laboratory			
Nonproliferation & Arms Control	0	165	109
Proliferation Detection	205	201	199
Defense Nuclear Nonproliferation R&D	205	201	199
Total Princeton Plasma Physics Laboratory	**205**	**366**	**308**
Richland Operations Office			
Counterterrorism and Counterproliferation	1,887	1,795	2,153
Nuclear Counterterrorism & Incident Response	1,887	1,795	2,153
Total Richland Operations Office	**1,887**	**1,795**	**2,153**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Sandia National Laboratories			
Reactor Conversion and Uranium Supply	902	150	200
Plutonium Management	1,340	649	0
Material Management and Minimization	2,242	799	200
International Nuclear Security	20,482	13,335	19,427
Radiological Security	50,879	29,714	39,934
Nuclear Smuggling Detection and Deterrence	20,555	15,000	17,337
Global Material Security	91,916	58,049	76,698
Nonproliferation & Arms Control	16,753	24,142	24,426
Proliferation Detection	36,959	35,879	35,421
Nuclear Detonation Detection	98,623	98,467	99,817
Forensics R&D	1,395	1,395	1,065
Nonproliferation Stewardship Program	250	375	375
Defense Nuclear Nonproliferation R&D	137,227	136,116	136,678
Counterterrorism and Counterproliferation	79,594	77,412	98,129
Nuclear Counterterrorism & Incident Response	79,594	77,412	98,129
Total Sandia National Laboratories	**327,732**	**296,518**	**336,131**
Savannah River National Laboratory			
Reactor Conversion and Uranium Supply	2,715	1,900	1,600
Nuclear Material Removal and Elimination	14,702	11,350	17,460
Plutonium Management	9,688	4,686	763
Material Management and Minimization	27,105	17,936	19,823
International Nuclear Security	1,242	980	513
Nuclear Smuggling Detection and Deterrence	583	288	513
Global Material Security	1,825	1,268	1,026
Nonproliferation & Arms Control	11,540	9,680	9,794
Proliferation Detection	13,027	12,783	12,620
Forensics R&D	1,280	1,280	977
Nonproliferation Stewardship Program	10,200	10,729	9,068
Defense Nuclear Nonproliferation R&D	24,507	24,792	22,665
Counterterrorism and Counterproliferation	2,907	2,775	3,353
Nuclear Counterterrorism & Incident Response	2,907	2,775	3,353
Total Savannah River National Laboratory	**67,884**	**56,451**	**56,661**
Savannah River Operations Office			
Nuclear Material Removal and Elimination	650	350	570
Plutonium Management	38,148	0	355
Material Management and Minimization	38,798	350	925
Counterterrorism and Counterproliferation	120	114	137
Nuclear Counterterrorism & Incident Response	120	114	137
Total Savannah River Operations Office	**38,918**	**464**	**1,062**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Savannah River Site			
Nuclear Material Removal and Elimination	783	2,390	2,700
Plutonium Management	357	23,694	54,728
Material Management and Minimization	1,140	26,084	57,428
18-D-150, Surplus Plutonium Disposition Project, SRS	38,000	9,572	0
Nonproliferation Construction	38,000	9,572	0
Total Savannah River Site	**39,140**	**35,656**	**57,428**
SLAC National Accelerator Laboratory			
Forensics R&D	275	275	210
Defense Nuclear Nonproliferation R&D	275	275	210
Total SLAC National Accelerator Laboratory	**275**	**275**	**210**
Thomas Jefferson National Accelerator Facility			
Radiological Security	211	185	166
Global Material Security	211	185	166
Proliferation Detection	500	491	484
Defense Nuclear Nonproliferation R&D	500	491	484
Total Thomas Jefferson National Accelerator Facility	**711**	**676**	**650**
Washington Headquarters			
Reactor Conversion and Uranium Supply	13,592	91,717	38,633
Nuclear Material Removal and Elimination	0	2,288	11,335
Plutonium Management	7,409	38,346	3,461
Material Management and Minimization	21,001	132,351	53,429
International Nuclear Security	1,343	34,112	1,381
Radiological Security	1,446	97,525	1,137
Nuclear Smuggling Detection and Deterrence	2,217	43,916	1,017
Global Material Security	5,006	175,553	3,535
Nonproliferation & Arms Control	17,096	12,310	12,837
Proliferation Detection	23,822	23,376	23,078
Nuclear Detonation Detection	8,220	8,210	8,191
Forensics R&D	2,559	2,559	1,952
Nonproliferation Stewardship Program	19,695	7,750	8,250
Defense Nuclear Nonproliferation R&D	54,296	41,895	41,471
18-D-150, Surplus Plutonium Disposition Project, SRS	2,000	428	0
Nonproliferation Construction	2,000	428	0
Emergency Management	21,177	30,156	32,129
Counterterrorism and Counterproliferation	88,988	88,547	107,419
Nuclear Counterterrorism & Incident Response	110,165	118,703	139,548
Total Washington Headquarters	**209,564**	**481,240**	**250,820**

DEPARTMENT OF ENERGY
Funding by Site
TAS_0309 - Defense Nuclear Nonproliferation - FY 2027
(Dollars in Thousands)

	FY 2025 Enacted	FY 2026 Enacted	FY 2027 Request
Waste Isolation Pilot Plant			
Plutonium Management	6,837	5,744	8,452
Material Management and Minimization	6,837	5,744	8,452
Radiological Security	0	200	0
Global Material Security	0	200	0
Nonproliferation & Arms Control	250	107	71
Counterterrorism and Counterproliferation	21	20	24
Nuclear Counterterrorism & Incident Response	21	20	24
Total Waste Isolation Pilot Plant	**7,108**	**6,071**	**8,547**
Y-12 National Security Complex			
Reactor Conversion and Uranium Supply	32,504	15,063	40,287
Nuclear Material Removal and Elimination	4,300	4,375	10,300
Plutonium Management	600	0	0
Material Management and Minimization	37,404	19,438	50,587
International Nuclear Security	2,965	2,116	2,746
Radiological Security	10,653	5,963	8,361
Nuclear Smuggling Detection and Deterrence	3,421	4,000	2,055
Global Material Security	17,039	12,079	13,162
Nonproliferation & Arms Control	5,189	4,016	4,064
Proliferation Detection	953	935	923
Forensics R&D	695	695	530
Nonproliferation Stewardship Program	0	20,000	20,000
Defense Nuclear Nonproliferation R&D	1,648	21,630	21,453
Counterterrorism and Counterproliferation	6,406	6,199	7,713
Nuclear Counterterrorism & Incident Response	6,406	6,199	7,713
Total Y-12 National Security Complex	**67,686**	**63,362**	**96,979**
Total Funding by Site for TAS_0309 - Defense Nuclear Nonproliferation	**2,396,000**	**2,415,996**	**2,389,595**