

Energy and Water Development Appropriations for Defense Nuclear Nonproliferation: In Brief

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The Department of Energy's (DOE's) nonproliferation and national security programs provide technical capabilities to support U.S. efforts to reduce the threat of nuclear weapons proliferation and nuclear terrorism. These programs are administered by the National Nuclear Security Administration (NNSA), a semi-autonomous agency established within DOE in 2000. NNSA is responsible for maintaining the U.S. nuclear weapons stockpile, providing nuclear fuel to the Navy, nuclear and radiological emergency response, and nuclear nonproliferation activities.

This report gives an overview of annual appropriations for the DOE NNSA Defense Nuclear Nonproliferation (DNN) account. The National Defense Authorization Act (NDAA) authorizes these programs, for which funds are appropriated in the annual Energy and Water Appropriations Act. The FY2026 DNN account request is \$2.285 billion, \$111.4 million (or -4.6%) less than the FY2025-enacted level of \$2.396 billion.

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Introduction

The Department of Energy's (DOE's) nonproliferation and national security programs provide technical capabilities to support U.S. efforts to reduce the threat of nuclear weapons proliferation and nuclear terrorism. These programs are administered by the National Nuclear Security Administration (NNSA), a semi-autonomous agency established within DOE in 2000. NNSA is responsible for maintaining the U.S. nuclear weapons stockpile, providing nuclear reactors and fuel to the Navy, nuclear and radiological emergency response, and nuclear nonproliferation activities.¹

This report gives an overview of annual appropriations for the DOE NNSA Defense Nuclear Nonproliferation (DNN) account. The National Defense Authorization Act (NDAA) authorizes these programs, for which funds are appropriated in the annual Energy and Water Appropriations Act.

FY2026 Request

According to the DOE FY2026 congressional budget justification, the NNSA's DNN programs help prevent adversaries from acquiring nuclear weapons or weapons-usable materials, technology, and expertise; counter adversary efforts to acquire such weapons or materials; and respond to nuclear or radiological threats, incidents, and accidents domestically and abroad.² The FY2026 DNN account request is \$2.285 billion, \$111.4 million (or -4.6%) less than the enacted FY2025 funding of \$2.396 billion.³ Supplemental appropriations and rescissions, as well as mandatory funding provisions from past, proposed, or enacted reconciliation measures, may also affect funding.⁴

Budget Structure for the FY2026 Request

There are two main mission areas under the DNN appropriation: the Defense Nuclear Nonproliferation Program and the Nuclear Counterterrorism and Incident Response Program (NCTIR).⁵ It also includes Legacy Contractor Pensions and Settlement Payments. The FY2026 DNN request is divided into the following functional areas:

- **Material Management and Minimization (M3)** conducts activities to reduce and, where possible, eliminate stockpiles of weapons-useable material around the world. Major activities include conversion of reactors that use highly enriched

¹ See CRS Report R48194, *The U.S. Nuclear Security Enterprise: Background and Possible Issues for Congress*, by Anya L. Fink.

² Department of Energy (DOE), Office of the Chief Financial Officer, *FY 2026 Congressional Justification, Budget in Brief*, May 2025, p. 15. For all agency congressional budget justification documentation, see Department of Energy, FY 2026 Budget Justification website, May 30, 2025, <https://www.energy.gov/cfo/articles/fy-2026-budget-justification>.

³ DOE, FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors, vol. 1, May 30, 2025, p. 1, <https://www.energy.gov/sites/default/files/2025-06/doe-fy-2026-vol-1.pdf>.

⁴ CRS did not identify amounts for DNN in the FY2025 reconciliation law (H.R. 1; P.L. 119-21) or the FY2025 recessions legislation (H.R. 4). For more information on this topic, see CRS Report R48551, *Trump Administration Initial FY2026 Energy and Water Appropriations Request: In Brief*, by Mark Holt et al.

⁵ The DNN programs were reorganized starting with the FY2016 request. NCTIR was previously funded under Weapons Activities. There are three offices under the DNN appropriations: Office of DNN, Office of Counterterrorism and Counterproliferation (CTCP), and Office of Emergency Operations (EO).

uranium (useable for weapons) to low enriched uranium, removal and consolidation of nuclear material stockpiles, and disposition of excess nuclear materials, such as excess U.S. weapons plutonium.

- **Global Material Security (GMS)** has three major program elements: international nuclear security, radiological security, and nuclear smuggling detection and deterrence. Activities toward achieving those goals include the provision of equipment and training, workshops and exercises, and collaboration with international organizations.
- **Nonproliferation and Arms Control (NPAC)** implements programs that aim to strengthen international nuclear safeguards, control the spread of dual-use (weapons or peaceful applications) technologies and expertise, and verify nuclear reductions and compliance with treaties and agreements. This program conducts reviews of nuclear export applications and technology transfer authorizations.
- **Defense Nuclear Nonproliferation Research and Development (DNN R&D)** advances U.S. capabilities to detect and characterize global nuclear security threats such as foreign nuclear material and weapons production, diversion of special nuclear material, and nuclear detonations.
- The **Nonproliferation Construction** program disposes of excess U.S. weapons plutonium through a “dilute and dispose” strategy (see “Surplus Plutonium Disposition Program” below).
- The **Nuclear Counterterrorism and Incident Response (NCTIR)** programs evaluates nuclear and radiological threats and develops emergency preparedness plans, including organizing scientific teams to provide rapid response to nuclear or radiological incidents or accidents worldwide.

**Table 1. DOE Defense Nuclear Nonproliferation Appropriation,
FY2024-FY2026 (Requested)**

(\$ in thousands)

	FY2024 Enacted	FY2025 Enacted	FY2026 Request
Material Management and Minimization	\$496,025	\$328,097	\$275,069
Global Material Security	\$524,048	\$492,048	\$389,872
Nonproliferation and Arms Control	\$212,358	\$227,008	\$221,008
Defense Nuclear Nonproliferation R&D	\$765,750	\$777,850	\$746,654
Nonproliferation Construction	\$77,211	\$40,000	\$50,000
Nuclear Counterterrorism & Incident Response	\$503,021	\$530,897	\$630,000
Legacy Contractor Pensions	\$22,587	\$100	\$20,993
Use of Prior-Year Balances	-\$20,000	\$0	-\$39,574
Cancellation of Prior-Year Balances	\$0	\$0	-\$9,422
Total	\$2,581,000	\$2,396,000	\$2,284,600

Source: Department of Energy, Office of the Chief Financial Officer, *FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, vol. 1, May 30, 2025, p. 4.

Selected Legislative Activity

FY2026 Appropriations

The FY2026 DOE request for DNN appropriations was \$2.285 billion, \$111.4 million (or -4.6%) less than the FY2025-enacted level of \$2.396 billion.⁶ According to the request, the decrease was “largely driven by the termination of lower-priority activities, a shift to prioritizing activities that result in permanent risk reduction without creating permanent financial dependencies on U.S. assistance, termination of the Dilute and Dispose program outside of disposal needed to meet legal obligations to the State of South Carolina, and the use of carryover for FY 2026 scope.”⁷

The House Appropriations Committee-approved Energy and Water Development and Related Agencies Appropriations Act, 2026, includes \$1.984 billion for DNN, approximately \$301 million (13%) less than requested, including the recession and use of prior-year balances.⁸ The bill would provide \$412 million (17%) less than the 2025-enacted amount. The committee report states that DNN reductions “are intended to reduce foreign long-term dependency on the United States while refocusing the Global Material Security program on the activities that have the greatest impact on national security.”⁹ It also notes that reductions to the Nonproliferation and Arms Control subprogram reflect “a changing geopolitical landscape marked by rapid growth of China’s nuclear arsenal and Russia’s frequent violation of arms control agreements.”¹⁰ It states that “the prospect of a new nuclear arms control treaty is improbable.”¹¹ At the bill markup, Energy and Water Development and Related Agencies Appropriations Subcommittee Ranking Member Marcy Kaptur said the proposed cut “effectively guts our efforts to prevent the spread of nuclear weapons, detect covert nuclear threats, and uphold arms control agreements that keep us safe. All a big gift for Iran, Russia, China, Belarus, and North Korea.”¹² The Senate Appropriations Committee has not considered a version of the legislation, as of the publication date of this report.

FY2025 Appropriations

The FY2025 DOE request for DNN appropriations was \$2.47 billion, \$115.9 million (or 4.5%) less than the FY2024-enacted level of \$2.58 billion.¹³ The DOE congressional budget request

⁶ DOE, *FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, p. 4.

⁷ DOE, *FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, p. 5.

⁸ House Appropriations Committee, “Energy and Water Development and Related Agencies Appropriations Act, 2026,” summary, July 16, 2025, <https://appropriations.house.gov/sites/evo-subsites/republicans-appropriations.house.gov/files/evo-media-document/fy26-energy-water-bill-summary-full-committee.pdf>.

⁹ U.S. Congress, House Committee on Appropriations, *Energy and Water Development and Related Agencies Appropriations Bill, 2026*, report to accompany H.R. 4553, 119th Cong., 1st sess., H.Rept. 119-213, July 21, 2025, pp. 132-133.

¹⁰ H.Rept. 119-213, p. 133.

¹¹ H.Rept. 119-213, p. 133.

¹² Representative Marcy Kaptur, “Ranking Member Kaptur Statement at the Full Committee Markup of the 2026 Energy and Water Development Funding Bill,” press release, July 17, 2025, <https://kaptur.house.gov/media-center/press-releases/ranking-member-marcy-kaptur-statement-full-committee-markup-2026-energy>.

¹³ DOE, Office of the Chief Financial Officer, *FY 2025 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, vol. 1, March 2024, p. 7; and P.L. 118-42; 138 Stat. 201.

attributed this change mainly to “reduced programmatic requirements in Material Management and Minimization, as well as the use of carryover for FY 2025 scope in the Surplus Plutonium Disposition project and Legacy Contractor Pensions and Settlement Payments.”¹⁴ On March 15, 2025, President Trump signed the Full-Year Continuing Appropriations and Extensions Act, 2025 (P.L. 119-4, Division A).¹⁵ This legislation funded the Defense Nuclear Nonproliferation account at \$2.396 billion.¹⁶

The House Committee on Appropriations-reported Energy and Water Development and Related Agencies Appropriations Act, 2025 (H.R. 8997), proposed \$2.45 billion for DNN.¹⁷ The Senate Committee on Appropriations-reported FY2025 Energy and Water Development and Related Agencies Appropriations Act (S. 4927) proposed \$2.63 billion for DNN.¹⁸

The FY2025 DOE request for DNN included increases for “Red Teaming capabilities for a wide range of open-source and industry Artificial Intelligence (AI) systems, for the establishment of the Space Monitoring and Verification Program (Space MVP) to support the Outer Space Treaty, and to increase outreach to high-priority partners in Southeast Asia to address smuggling vulnerabilities and counter Chinese influence.”¹⁹

DOE did not request FY2025 funding for the NNSA Bioassurance Program. Congress funded the Bioassurance Program at \$20 million in FY2023, and DOE requested \$25 million for the program in FY2024. Program goals were to expand DOE’s role in biodefense and develop national laboratory capabilities “to anticipate, detect, assess, and mitigate emerging biothreats.”²⁰ Section 3122 of the FY2024 NDAA (P.L. 118-31) placed prohibitions on establishing this program within NNSA.²¹

Selected Issues for Congress

Supplemental Requests for Ukraine

The Ukraine Security Supplemental Appropriations Act, 2024 (P.L. 118-50, Division B), provided \$143.9 million for NNSA’s Defense Nuclear Nonproliferation (DNN) account to “respond to the security situation in Ukraine.”²² The Ukraine Supplemental Appropriations Act, 2023 (P.L. 117-180, Division B), provided \$35 million for NNSA’s DNN support for Ukraine,²³ and the

¹⁴ DOE, *FY 2025 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, p. 7.

¹⁵ Congress.gov, P.L. 119-4 website, Actions tab.

¹⁶ P.L. 119-4, Division A, Title V; §1502(3); 135 Stat. 25.

¹⁷ H.R. 8997, p. 41.

¹⁸ S. 4927, p. 44.

¹⁹ DOE, *FY 2025 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, p. 7.

²⁰ DOE, Office of the Chief Financial Officer, *FY 2024 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, vol. 1, March 2023, p. 11.

²¹ A provision in the FY2024 NDAA (P.L. 118-31, §3122; 137 Stat. 792) amended permanent law to include a new section (50 U.S.C. §2796) stating that the NNSA Administrator “may not establish, administer, manage, or facilitate a program within the Administration for the purposes of executing enduring national security research and development effort to broaden the role of the Department of Energy in national biodefense.”

²² P.L. 118-50, Division B, Title II; 138 Stat. 912.

²³ P.L. 117-80, Division B, Title II; 136 Stat. 2131.

Additional Ukraine Supplemental Appropriations Act, 2023 (P.L. 117-328, Division M), provided \$126.3 million,²⁴ bringing the FY2023 supplemental funding total for the account to \$161.3 million.

The FY2025 congressional budget justification for DNN subprograms' FY2023 accomplishments in Ukraine stated the following:

- “Bolstered the resilience of nuclear power plants in Ukraine by providing physical protection and cyber security upgrades and provided equipment to the National Guard of Ukraine to strengthen their capability to protect nuclear power plants still under Ukrainian control.”
- “Provided equipment, training, and technical assistance to partners in Ukraine to secure and monitor 36 facilities housing high-activity radioactive sources. Removed five disused sources from medical facilities to secure storage facilities in Ukraine.”
- “Deployed additional equipment and associated training to border security, law enforcement, and emergency agencies across Ukraine to detect and deter illicit movement of materials and ... monitor for radiation release within Ukraine.”²⁵

A June 2025 Government Accountability Office (GAO) report examined these programs and recommended that NNSA make plans to transition responsibility to Ukrainian authorities for “future sustainment of NNSA-provided nuclear and radiological security and safety assistance.”²⁶

Surplus Plutonium Disposition Program

The United States pledged in an agreement with Russia to dispose of 34 metric tons of U.S. surplus weapons plutonium, which was originally to be converted into fuel for commercial power reactors.²⁷ The U.S. facility for this purpose was to be the Mixed Oxide Fuel Fabrication Facility (MFFF), which had been under construction at the DOE Savannah River site in South Carolina. The MFFF faced escalating construction and operation cost estimates, and the Obama Administration proposed to terminate it in FY2017. After congressional approval, in 2018 DOE ended MFFF construction and began pursuing a replacement disposal method, Dilute and Dispose (D&D), for this material. This effort is called the Surplus Plutonium Disposition (SPD) Program. The D&D method consists of “blending plutonium with an inert mixture, packaging it for safe storage and transport, and disposing of it in a geologic repository,” according to the FY2024 request.²⁸ Under the D&D method, plutonium is down-blended at Savannah River then shipped as transuranic waste to the Waste Isolation Pilot Plant (WIPP) in New Mexico.

²⁴ P.L. 117-328, Division M, Title III; 136 Stat. 5194.

²⁵ DOE, *FY 2025 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, pp. 636, 639, 641.

²⁶ Government Accountability Office, “Ukraine: DOE Could Better Assess Fraud Risks and Formalize Its Transition Plans for Nuclear Security and Safety Efforts,” GAO-25-108444, June 12, 2025, <https://www.gao.gov/products/gao-25-108444>.

²⁷ Disposition of surplus plutonium is required by a 1998 agreement, amended in 2010, between the United States and the Russian Federation. Each country agreed to convert 34 metric tons of surplus weapons-grade plutonium to a form that could not be returned to nuclear weapons, to begin in 2018. Russia suspended its participation in the agreement in October 2016 due to what it called “hostile actions” by the United States. For more information on this topic, see CRS Report R43125, *Mixed-Oxide Fuel Fabrication Plant and Plutonium Disposition: Management and Policy Issues*, by Mark Holt and Mary Beth D. Nikitin.

²⁸ DOE, *FY 2024 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, p. 719.

Subsequent delays to the program resulted in a 2020 legal settlement between the Department of Energy and the State of South Carolina. The settlement included an upfront payment of \$600 million to South Carolina and set a 2037 deadline for removing 9.5 metric tons of plutonium from the state.²⁹

The FY2024 budget request stated the Administration was “increasing the total project cost by \$155 million resulting in a corresponding increase to the high-end of the cost range which is \$775 million” and extending the completion date to the fourth quarter of FY2030. The request stated the changes were necessary due to design, safety, and construction challenges “of integrating the new mission into the existing facility and operations.”³⁰ It also cited a lack of skilled professional and craft labor, which is also an issue for other NNSA construction projects.

NNSA planned to expand capability to disassemble and convert plutonium cores or “pits” for disposal. The FY2025 budget request stated the SPD project “will add additional glovebox capacity at the Savannah River Site to accelerate plutonium dilution and aid in the removal of plutonium from the state of South Carolina.”³¹ The FY2025 request stated NNSA was completing the final design review to request approval and start full construction on the SPD project, which represents a delay and cost increase.

A May 23, 2025, executive order halted the D&D program.³² The executive order stated, “The Secretary of Energy shall halt the surplus plutonium dilute and dispose program except with respect to the Department of Energy’s legal obligations to the State of South Carolina.”³³

The FY2026 budget request seeks funding for plutonium disposition related activities in the Material Management and Minimization (Material Disposition subprogram) and the Nonproliferation Construction accounts. Following the 2025 executive order halting the program, the request states in part, “FY 2026 funding requirements for Plutonium Disposition are contingent upon further analysis of plutonium stocks held in SC and their potential for economic use by industry as fuel for advanced nuclear technologies. If certain capabilities are no longer necessary, such capabilities will be terminated and funds repurposed for other activities supporting the President’s Executive Order.”³⁴

²⁹ “Secretary Brouillette and South Carolina Officials Announce Historic Agreement Between the Trump Administration and the State of South Carolina,” Department of Energy press release, August 31, 2020, [https://www.energy.gov/articles/secretary-brouillette-and-south-carolina-officials-announce-historic-agreement-between](https://www.energy.gov/articles/secretary-brouillette-and-south-carolina-officials-announce-historic-agreement-between;); and Federal Circuit Case No. 19-2324, South Carolina Settlement Final Agreement at <https://www.scag.gov/wp-content/uploads/2020/08/South-Carolina-Settlement-Agreement-Final-signed-8-28-20.pdf>.

³⁰ DOE, *FY 2024 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, p. 722.

³¹ A glovebox is a sealed container for handling hazardous materials through ports with sleeved gloves on the inside. DOE, *FY 2025 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities Defense Nuclear Nonproliferation, Naval Reactors*, p. 11.

³² Executive Order 14302 of May 23, 2025, “Reinvigorating the Nuclear Industrial Base,” 90 *Federal Register* 22595, May 29, 2025, <https://www.govinfo.gov/content/pkg/FR-2025-05-29/pdf/2025-09801.pdf>

³³ E.O. 14302.

³⁴ DOE, *FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, pp. 469-470.

The FY2026 request also says that

DNN will partner with NNSA's Office of Defense Programs and DOE's Office [of] Nuclear Energy to assess surplus plutonium material inventories to support implementation of the President's Executive Order on Reinvigorating the Nuclear Industrial Base and meet DOE's legal obligations to the State of South Carolina. This analysis, when completed, will be the basis for determining DNN's future requirements for SPD project capabilities. If such analysis determines that additional, shielded dilution capacity is not needed, DNN will terminate the project, provide the procured gloveboxes to the Office of Defense Programs, and repurpose funding to support the President's Executive Order.³⁵

It is not clear how much of the plutonium will still need to be disposed of to satisfy the legal obligations to South Carolina. Congress may consider whether to seek clarification about what activities are to be halted, what might replace D&D plans, and how these changes might affect planned expansion and construction at SRS.

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³⁵ DOE, *FY 2026 Congressional Justification, National Nuclear Security Administration, Federal Salaries and Expenses, Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors*, p. 495.