

**DEFENSE NUCLEAR FACILITIES
SAFETY BOARD**

Washington, DC 20004-2901



March 17, 2026

The Honorable Chris Wright
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Wright:

Pursuant to the Atomic Energy Act of 1954, as amended, the Defense Nuclear Facilities Safety Board (Board or DNFSB) is required to review and evaluate the content and implementation of standards¹ relating to the design, construction, operation, and decommissioning of Department of Energy (DOE) defense nuclear facilities, and to provide advice and recommendations on those specific measures that should be adopted to ensure adequate protection of public health and safety.

In 2018, the Board committed to annually communicate the results of standards reviews conducted during the previous year and provide a list of standards the Board intends to review in the year ahead. The Board selects DOE safety standards for review based on those with revisions in progress, which DOE plans to revise, with complex-wide impact, and that establish controls for high-hazard activities. In a letter dated January 2, 2025, the Board informed DOE of the selected safety standards for review in fiscal year (FY) 2025. The enclosure provides a summary of standards reviews conducted by the Board in FY 2025. The Board is unable to develop a list of reviews for FY 2026 due to apparent recent changes in how DOE manages and communicates revisions to safety regulations and directives.

In 2022, at the direction of Congress², DOE and the Board developed and approved a Memorandum of Understanding (MOU) and MOU Supplementary Agreement³ which identified a framework for how the two agencies would engage on revisions to DOE safety standards. DOE committed to provide timely communication on planned changes to safety regulations and

¹ 42 U.S.C. § 2286a(b)(1) defines standards as including all applicable DOE orders, regulations, and requirements.

² The House Report 116-449 accompanying the FY2021 Energy and Water Development and Related Agencies Appropriations Bill, and the Senate Report 116-236 accompanying the National Defense Authorization Act for Fiscal Year 2021, both directed DOE and DNFSB to develop and approve a memorandum of understanding to govern the interface between the two agencies.

³ [Memorandum of Understanding Between the U.S. Department of Energy and the Defense Nuclear Facilities Safety Board](#), signed February 17, 2022, and [Supplementary Agreement for Memorandum of Understanding Between the U.S. Department of Energy and the Defense Nuclear Facilities Safety Board](#), signed June 1, 2022.

directives and agreed that the Board will participate in DOE's Review and Comment (RevCom) process.

During the past year, DOE initiated a series of revisions to important regulations and directives and has undertaken the creation of program-specific directives that may impact nuclear safety at defense nuclear facilities. The Board understands that DOE is embarking on a new reform initiative called "Project Velocity," which may include drafting revisions to many of its directives. In addition, the Board is aware that on January 9, 2026, a Secretarial memorandum approved action to revise 10 CFR Part 835, *Occupational Radiation Protection*, and related DOE directives. The Board advises that DOE continue the RevCom process for directives and standards related to defense nuclear facilities, or that alternative approaches similarly engage DOE subject matter experts and the Board, particularly for those that impact nuclear safety, such that the statutorily mandated requirement is fulfilled.

The Board and DOE share a commitment to safeguarding the protection of workers and the public in the execution of DOE's vital national security and radioactive waste cleanup missions. To support effective coordination, the Board will continue to maintain a listing of *DOE Standards of Interest to the DNFSB* that can be found at: <https://www.dnfsb.gov/about/doe-standards-interest>.

To ensure timely communication of any advice or recommendations informing DOE of necessary changes to safety standards or requirements, pursuant to 42 U.S.C. § 2286b(d), the Board requests that DOE provide within 30 days of the date of this letter:

- (1) A briefing on all active efforts to revise, or pilot alternate versions of, any *DOE Standards of Interest to the DNFSB*, including plans to implement them at defense nuclear facilities.
- (2) A written report describing DOE's desired method to furnish timely information and engagement on proposed changes to any *DOE Standards of Interest to the DNFSB*.
- (3) Drafts of ongoing revisions⁴ to any *DOE Standards of Interest to the DNFSB*, protected from public disclosure⁵, as appropriate.

Sincerely,



Dr. Patricia L. Lee
Board Member

⁴ 42 U.S.C. § 2286c requires the Secretary of Energy to "provide the Board with prompt and unfettered access to such facilities, personnel, and information as the Board considers necessary to carry out its responsibilities." DOE's *Desk Reference Supporting DOE Order 140.1A* (dated May 2024) acknowledges that "the Board may obtain from DOE deliberative process information as well as other information that is protected from public disclosure."

⁵ 42 U.S.C. § 2286c(c) requires that the "Board may not publicly disclose information provided under this section if such information is otherwise protected from disclosure by law, including deliberative process information."

Enclosure

- c: The Honorable James Danly, Deputy Secretary of Energy
- The Honorable Brandon Williams, Under Secretary for Nuclear Security; Administrator, National Nuclear Security Administration
- The Honorable Scott Pappano, Principal Deputy Administrator for Nuclear Security
- The Honorable Timothy Walsh, Assistant Secretary for Environmental Management
- Ms. Stephanie Martin, Acting Director, Office of Environment, Health, Safety and Security
- Mr. Joe Olencz, Director, Office of the Departmental Representative to the Board

Enclosure

In a letter dated January 2, 2025, the Defense Nuclear Facilities Safety Board (DNFSB or Board) informed the Department of Energy (DOE) of the safety standards selected for review during fiscal year 2025. Below is a summary of the reviews and their status.

- **DOE Order 414.1, *Quality Assurance***—In December 2024, DOE approved a revision that removed (1) safety software requirements and definitions, and (2) the mandated use of American Society of Mechanical Engineers NQA-1, *Quality Assurance Requirements for Nuclear Facility Applications*. In a letter dated January 31, 2025, the Board expressed concern that eliminating the mandated use of NQA-1 and safety software requirements could lead to reduced reliability of safety controls and increase the oversight burden on DOE field offices.

Status: DOE has not expressed interest in adjusting DOE Order 414.1E. DNFSB is monitoring the safety impacts at DOE's defense nuclear facilities.

- **DOE Order 420.1, *Facility Safety***—DOE has been revising this order as part of its implementation plan for Recommendation 2020-1, *Nuclear Safety Requirements*. DNFSB staff submitted substantive comments in 2024 via DOE's review and comment (RevCom) process. DOE addressed many concerns in the latest draft during the final phase of the revision process.

Status: DOE committed to making improvements in response to the Board's recommendation but has not yet issued the new revision of DOE Order 420.1 or otherwise informed the Board of a change in its implementation plan.

- **DOE Order 421.1, *Nuclear Safety Basis***—DOE has been developing this new nuclear safety order as part of its implementation plan for Recommendation 2020-1. The Board and its staff provided substantive feedback to DOE throughout 2024, including a letter dated November 15, 2024, and comments via DOE's RevCom process. In response, DOE incorporated many of the Board's safety suggestions and resolved outstanding concerns in the latest draft.

Status: DOE committed to issuing this new order in response to the Board's recommendation, but measurable progress slowed to a halt in the past year. In a letter dated August 5, 2025, the Board urged DOE to continue development efforts for this important safety order. DOE has not responded.

- **DOE Guide 151.1, *Comprehensive Emergency Management System Guide***—DOE began revising this guidance document to align with DOE Order 151.1E, *Comprehensive Emergency Management System*, which was issued in October 2024.

Status: In December 2024, DNFSB staff provided suggestions to improve the draft guide, and DOE staff agreed with the edits. DOE has not issued this updated guide.

- **DOE Standard 1189, *Integration of Safety into the Design Process***—In 2024, DOE started revising this standard, which provides requirements and guidance to ensure that nuclear safety considerations are addressed during the design process—as directed by Congress in 2007. DNFSB staff reviewed proposed changes for nuclear safety impacts, provided comments in March 2025, and met with DOE to discuss comment resolution.

Status: DOE has not provided an updated version for DNFSB staff to review.

- **DOE Standard 1212, *Explosives Safety***—DNFSB staff suggested edits to the proposed revision of this standard, which establishes technical requirements for an explosives safety program.

Status: The National Nuclear Security Administration (NNSA) issued the revised standard on January 2, 2025, incorporating most of the staff’s comments, which clarified and improved several sections (e.g., ensuring consistency between this standard and nuclear explosive safety directives).

- **DOE Standard 1628, *Development of Probabilistic Risk Assessments for Nuclear Safety Applications***—Consistent with the implementation plan for Recommendation 2009-1, *Risk Assessment Methodologies at Defense Nuclear Facilities*, DOE issued this standard in 2013. DOE proposed changes in 2024.

Status: DNFSB staff identified and communicated nuclear safety concerns to DOE in August 2025. DOE has postponed comment resolution and has not indicated a planned timeframe to proceed.

- **DOE Handbook 3010, *Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities***—In 2021, DOE proposed revisions to this technical guidance document that provides standardized data and methodologies for estimating the release of radioactive materials into the air during accidents or abnormal conditions. The values in the handbook and their use in nuclear safety analyses are critical to ensuring that DOE defense nuclear facilities have appropriate controls to adequately protect workers and the public.

Status: DNFSB staff met with DOE several times in 2025 to continue resolving extensive comments. Efforts are ongoing at the staff-to-staff level.

- **DOE Standard 3013, *Stabilization, Packaging and Storage of Plutonium-Bearing Materials***—Since 2023, DOE has been revising this standard, which provides guidance for the stabilization, packaging, and safe storage of plutonium-bearing materials. DOE originally developed this standard in close coordination with the DNFSB in response to the Board’s Recommendation 94-1, *Improved Schedule for Remediation in the Defense Nuclear Facilities Complex*. Use of this standard for the storage of plutonium has significantly strengthened safety for workers and the public.

Status: DNFSB staff reviewed the proposed revision and provided suggestions in January 2025. DOE staff agreed with the edits. However, DOE has not issued the updated standard or indicated a planned timeframe to do so.

- **NNSA Supplemental Directive 226.1-1B, *Headquarters Biennial Review of Nuclear Safety Performance*, and NNSA Supplemental Directive 226.2, *Chief of Defense Nuclear Safety (CDNS) Review of Nuclear Safety Oversight Performance***—In 2024, NNSA developed Supplemental Directive 226.2 to replace Supplemental Directive 226.1-1B. DNFSB staff reviewed the proposed supplemental directive, which establishes the requirements, processes, and procedures for conducting CDNS reviews of nuclear safety oversight performance. NNSA committed to using the CDNS to provide the technical support necessary to fulfill Central Technical Authority (CTA) responsibilities in response to the Board’s Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*. For nearly two decades, the CDNS biennial reviews have provided key CTA technical support to ensure nuclear safety at DOE’s defense nuclear facilities.

Status: DNFSB staff provided comments on Supplemental Directive 226.2 and met with NNSA in January 2025 to discuss comment resolution. In August 2025, NNSA proposed canceling both supplemental directives and finalized the cancellation in December 2025.

- **NNSA Supplemental Directive 452.2, *Nuclear Explosives Safety Evaluation Processes***—DNFSB staff reviewed proposed changes to this supplemental directive, which provides additional requirements and guidance to NNSA and its contractors related to nuclear explosive safety, as well as the required evaluation processes for nuclear explosive operations and associated programs.

Status: In late 2024, DNFSB staff provided comments to NNSA to clarify certain sections and address potential safety concerns introduced by the proposed changes. NNSA issued the revised directive on April 25, 2025, incorporating most of the staff’s suggestions.