

The Inspector General's Assessment of the Most Serious Management and Performance Challenges Facing the Defense Nuclear Facilities Safety Board in Fiscal Year 2025



Idaho National Laboratory, Materials and Fuels Complex (Source: inl.gov)

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WHY WE DID THIS REPORT

The Defense Nuclear Facilities Safety Board (DNFSB) is an independent oversight organization within the Executive Branch created by Congress in 1988. The DNFSB is considered a critical oversight agency. The DNFSB's mission involves providing independent analysis, advice, and recommendations to the Secretary of Energy, thereby helping the Secretary ensure adequate protection of public health and safety at defense nuclear facilities within the U.S. Department of Energy (DOE).

The Reports Consolidation Act of 2000 (Public Law 106-531) requires the Office of the Inspector General (OIG) to annually update its assessment of the most serious management and performance challenges facing the DNFSB and the agency's progress in addressing those challenges.

WHAT WE FOUND

With input from the DNFSB's leadership, the OIG has assessed, developed, and described the DNFSB's most serious challenges for FY 2025, noting each challenge, actions already taken by the DNFSB to address the challenge, and continuing work applicable to the challenge. The challenges are:

- 1. Ensuring a Healthy Culture and Climate During Leadership Transitions and Reorganizations;
- 2. Managing Resources to Address Critical Risks; and,
- 3. Continuing to Prioritize the DNFSB's Focus on Technical Oversight and Reviews.

By addressing these challenges, the DNFSB can execute its mission more efficiently and effectively by providing timely and informative oversight that is helpful to decision and policy makers. Addressing these challenges also helps the DNFSB make progress toward achieving its strategic goals while maintaining the highest level of accountability over taxpayer dollars.

AGENCY RESPONSE TO MANAGEMENT AND PERFORMANCE CHALLENGES FOR FY 2025

Prior to issuance, agency management reviewed and provided comments on the draft version of this report. The OIG has incorporated the agency's comments into this report, as appropriate. The agency is in general agreement with the draft report.

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Introduction



Robert J. Feitel, NRC and DNFSB Inspector General

I am pleased to present our assessment of the most serious management and performance challenges facing the Defense Nuclear Facilities Safety Board (DNFSB) in FY 2025.

The Reports Consolidation Act of 2000 requires the Office of the Inspector General (OIG) to annually update our assessment of the most serious management and performance challenges facing the DNFSB and the agency's progress in addressing those challenges. This report provides the updated OIG assessment in these areas.

ABOUT THE OFFICE OF THE INSPECTOR GENERAL

In accordance with the 1988 Amendments to the Inspector General Act of 1978, the OIG was established on April 15, 1989, as an independent and objective unit to conduct and supervise audits and investigations pertaining to the U.S. Nuclear Regulatory Commission. Pursuant to the Consolidated Appropriations Act for Fiscal Year 2014 (Public Law 113-76), the Inspector General of the U.S. Nuclear Regulatory Commission was assigned to also serve as the DNFSB's Inspector General. The purpose of the OIG's audits, evaluations, and investigations is to prevent and detect fraud, waste, abuse, and mismanagement, and promote economy, efficiency, and effectiveness in DNFSB programs and operations. In addition, the OIG reviews existing and proposed regulations, legislation, and directives and provides comments, as appropriate, regarding any significant concerns. The Inspector General keeps the DNFSB Chair and Congress informed about problems, recommends corrective actions, and monitors the DNFSB's progress in implementing such actions.

About the DNFSB

The DNFSB, an independent oversight organization within the Executive Branch, was created by Congress in September 1988 in response to growing concerns about the level of health and safety protection that the Department of Energy (DOE) was providing the public and workers at defense nuclear facilities. In doing so, Congress sought to provide the general public with added assurance that the DOE's defense nuclear facilities are being safely designed, constructed, operated, and decommissioned.

Under the Atomic Energy Act of 1954, and as stated in 42 U.S.C. § 2286a(a), the mission of the DNFSB "shall be to provide independent analysis, advice, and recommendations to the Secretary of Energy to inform the Secretary, in the role of the Secretary as operator and regulator of the defense nuclear facilities of the DOE, in providing adequate protection of public health and safety at such defense nuclear facilities, including



Los Alamos National Laboratory, Radiation Control Technicians (Source: lanl.gov)

with respect to the health and safety of employees and contractors at such facilities." The last clause in this mission statement was added by the National Defense Authorization Act (NDAA) for Fiscal Year 2020 (Pub. L. No. 116-92). This clause reflects Congress' intent to ensure the Board and all stakeholders understand that the DNFSB's mission clearly encompasses the health and safety of workers as well as the public.

For FY 2025, the DNFSB's budget request is \$47.2 million and 128 full-time equivalents (FTEs) to carry out its mission. The DNFSB achieved a staffing level of 115 FTEs as of March 11, 2024. The additional FTE positions will help ensure that the Board can recruit or develop the depth of resources in highly specialized technical disciplines necessary to support an enhanced need for oversight of defense nuclear facilities resulting from the DOE's modernization efforts. The DNFSB has executed an aggressive staffing plan focused on hiring highly skilled engineers, scientists, and other professionals to support the agency's mission. Looking forward, the DNFSB is building a multi-year human capital strategic plan to guide training, development, recruiting, retention, and succession planning. The Board's budget request also seeks funding to support enhanced capabilities and improvements related to cybersecurity, physical security, secure communications, information technology modernization, technical efficiencies, organizational effectiveness, and progress on diversity, equity, inclusion, and accessibility throughout the agency.

About the Board Members

The DNFSB's full decision-making body consists of five Board members, including its Chair. As of the date of this report, however, the DNFSB has three Board members, one of whom also serves as its Chair, and two vacant positions. On January 21, 2021, President Biden designated Ms. Joyce Connery as the DNFSB Chair. Ms. Connery has been a member of the Board since August 2015 and was reconfirmed by the Senate on July 2, 2020, for a term that expired on October 18, 2024. Ms. Connery will stay on longer to prevent the panel from losing a quorum. A "quorum saving provision" in DNFSB rules allows her to stay on past expiration until another board member is confirmed. Ms. Connery began her career at the national laboratories, first serving in Kazakhstan working on the shutdown of the BN-350 fast breeder reactor and then returning to Washington, DC, to work in the Office of International Safety in the DOE's National Nuclear Security Administration (NNSA). Ms. Connery has served in several capacities at the DOE, including as the senior policy advisor to the Deputy Secretary of Energy, and she served two tours with the National Security Council. From February 2008 through May 2010, she worked in the areas of nonproliferation and nuclear security, and from January 2012 through July 2015, she served as Director for Nuclear Energy Policy within the Office of International Economics.

Mr. Thomas A. Summers was confirmed by the Senate on July 2, 2020, for a term expiring October 18, 2025. Mr. Summers currently serves as the DNFSB Vice Chair. Prior to that, he served as the DNFSB Acting Chair from September 13, 2020, until Ms. Connery's designation. Mr. Summers previously served as Senior Advisor to the Deputy Administrator and as the Deputy for Research, Development, Test, and Evaluation in the Office of Defense Programs at the DOE's NNSA. He is a retired U.S. Air Force colonel with more than three decades of active duty in a variety of commands, teaching, military staff, and scientific positions.



Savannah River Site, Salt Waste Processing Facility (Source: srs.gov)

Patricia L. Lee, Ph.D was confirmed by the Senate on July 9, 2024. Dr. Lee brings over thirty years of experience in radiation protection and nuclear safety. For over two decades, she was a key leader at the Savannah River National Laboratory (SRNL), where she recently served as Portfolio Manager for the SRNL Digital Enterprise, overseeing the lab's integrated computing strategy. Dr. Lee's career includes nearly a decade at the Centers for Disease Control and Prevention, where she evaluated the impact of DOE nuclear weapons

facilities on human health and the environment. Dr. Lee also held senior advisory roles at DOE headquarters, including two Intergovernmental Personnel Act assignments as a Senior Technical Advisor to the Office of Environmental Management.

Technical Work Planning

For FY 2025, the DNFSB's Office of the Technical Director (OTD) identified 94 high priority reviews consistent with the Board's strategic plan and direction included in the OTD planning memorandum dated May 24, 2024. This total includes 38 reviews that will carry over from FY 2024 and 56 new reviews. The OTD noted that carry-over work

and cancellations of planned work could result from several factors, including changes to DOE schedules, restraints such as travel restrictions, emergent higher-priority work, and resource limitations, especially when the workload calls for certain more technically specialized staff than may be available.

Coordination with the DOE

During FY 2022, the Board executed both a bilateral Memorandum of Understanding (MOU) between the Chair and the Deputy Secretary of Energy and a staff-level Supplementary Agreement to implement the MOU. The Board trained all technical staff on the content and expectations relative to the MOU and Supplementary Agreement. The Board also reviewed and has continued to revise, where needed, internal procedures and processes. However, in FY 2023, the DNFSB noted a trend of delayed and partially addressed DOE responses to DNFSB reporting requirements. The Board and DNFSB staff engaged with senior DOE leaders regarding timeliness and effectiveness in responding to DNFSB safety reviews. The DNFSB continues to focus on the effectiveness of the DOE's oversight framework for safe operations at its diverse and aging facilities.

Strategic Plan

In May 2022, the Board approved its Strategic Plan for fiscal years 2022–2026. The Strategic Plan sets goals and objectives aimed at providing the Board's "best advice to the defense nuclear complex, efficiently, effectively, and transparently." Additionally, the plan is intended to "cultivate a multitalented, dynamic staff that embodies the Board's core values, focuses on the mission, and continuously hones its skills through training and development." The Board's revised Strategic Plan sets forth the following strategic goals:

Goal 1—Provide proactive and independent safety oversight of the defense nuclear complex;

Goal 2—Enhance transparency of ongoing agency initiatives and the state of safety within the defense nuclear complex;

Goal 3—Develop and maintain an outstanding workforce to achieve the agency's mission; and,

Goal 4—Maximize the agency's performance by pursuing excellence in our culture and operations.

DNFSB FY 2025 Management and Performance Challenges

We have assessed, developed, and described each of the DNFSB's most serious challenges for FY 2025, noting actions already completed by the agency and the Board's continuing work on each challenge. The challenges are not listed in any order of priority, nor do they necessarily equate to problems; rather, they should be considered areas of continuing important focus for DNFSB management and staff.

DNFSB leadership noted its own assessment of the key challenges facing the agency in its response to the OIG's request for input in this area. We have considered leadership's input and independently identified the following three clear, specific, and actionable challenges that the DNFSB must address in FY 2025:

- 1. Ensuring a Healthy Culture and Climate During Leadership Transitions and Reorganizations;
- 2. Managing Resources to Address Critical Skills; and,
- 3. Continuing to Prioritize the DNFSB's Focus on Technical Oversight and Reviews.

This report presents each challenge we have identified, along with the actions taken by the DNFSB and the Board's continuing work applicable to the challenge. By addressing these challenges, the DNFSB can not only execute its mission more efficiently and effectively, but also achieve progress toward its strategic goals and maintain the highest level of accountability over taxpayer dollars.

Challenge 1: Ensuring a Healthy Culture and Climate During Leadership Transitions and Reorganizations

WHY IS THIS A SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGE? The Senate Committee Report associated with the National Defense Authorization Act for Fiscal Year 2025 (NDAA) noted that OIG assessments identified shortcomings in DNFSB operations, specifically how roles and responsibilities are delegated consistent with the Atomic Energy Act of 1954 (Public Law 83-703) as amended. Further, these assessments identified the need for culture change within the organization to ensure mission performance. The language in the Committee Report would, if carried forward in the NDAA, require the Comptroller General of the United States to conduct a general management review of the DNFSB with a focus on whether past findings from independent assessments have been fully addressed.

CHALLENGE SYNOPSIS

Board Members

The Board is intended to be comprised of five nuclear safety experts with demonstrated competence and knowledge relevant to its independent investigative and oversight functions. However, the Board has not been fully staffed since before the Covid-19 Public Health Emergency. As of September 2024, the Board has three members. Chair Connery's term ends in October 2024, and should the Chair depart before a new Board Member is added, the Board will fall below the number of members (three) necessary for a quorum, hindering the Board's ability to exercise its full authority.

Culture and Climate

In FY 2024, the DNFSB saw the retirement of one Board Member and the subsequent appointment of a new Board Member. In addition, the DNFSB reorganized the agency's administrative functioning by changing the name of the Office of the General Manager to the Office of Administrative Services, eliminating the General Manager and Deputy General Manager positions, and establishing the Chief Administrative Officer position. Further, the DNFSB developed new positions and filled vacant positions in the Office of the Executive Director of Operations.

Additionally, the agency hired a new Executive Director of Operations (EDO) and filled two Deputy EDO positions. These changes in organizational structure present certain challenges for the agency as it continues to update policies, procedures, and practices to account for the new positions and ensure that the agency meets its mission efficiently and effectively.

Ongoing Actions

The DNFSB developed a detailed agency Human Capital Plan (HCP) incorporating cross-agency input and provided the drafted HCP to the Board for consideration. The HCP includes strategies for succession planning, workforce development, career pathing, and valuing diverse talents applicable to each office. The plan will be completed and released in early FY 2025.

Completed Actions

The DNFSB conducted Schedule A training for hiring managers to increase awareness of using hiring pipelines for persons with disabilities. The DNFSB also prepared recruiter training and provided this training to its technical managers.

Challenge 2: Managing Resources to Address Critical Risks

WHY IS THIS A SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGE? Due to the ever-evolving cybersecurity and physical security threats concerning infrastructure, the DNFSB needs to maintain effective and efficient centralized administrative functions to ensure that DNFSB management and staff can carry out the agency's mission.

CHALLENGE SYNOPSIS

Critical information technology and administrative functions underpin the DNFSB's ability to carry out its mission. To perform mission functions effectively, technical staff rely on DNFSB corporate support services, such as contract and human resources support, financial reporting, and information technology services. These investments enable the staff to complete mission-critical work more efficiently and effectively. Information security presents unique challenges because it requires balancing safeguards with the access needs of legitimate users. Cybersecurity threats are constantly evolving, and hostile actors could take advantage of current trends, such as the use of hybrid and remote work options.

In parallel, the DNFSB must continue using robust, proactive measures to protect its buildings and other infrastructure, personnel, and information from internal and external threats. Criminals and foreign intelligence organizations pose continuous external threats, while insiders who could maliciously or unintentionally compromise the security of facilities and information systems could pose internal threats. Although the DNFSB plans to update directives and procedures to ensure the agency follows all security regulations and protocols, the agency remains at risk until all the security procedures are up to date and fully implemented. In addition, the DNFSB is in the process of developing an Enterprise Risk Management (ERM)¹ program. The lack of an ERM program leaves the DNFSB susceptible to poor governance and weak processes.

¹ Enterprise Risk Management is a methodology that examines risk management strategically from the perspective of the entire organization. It is a top-down strategy that aims to identify, assess, and prepare for potential losses, dangers, hazards, and other potential harms that may interfere with an organization's operations and objectives and/or lead to losses.

Ongoing Actions

The DNFSB continues to make improvements in implementing OIG recommendations from past Federal Information Security Modernization Act audit reports; implementing its **Continuous Diagnostics and Mitigation** program to obtain additional tools and a dashboard to monitor its security posture; ensuring multifactor authentication is in place for its network; establishing performance metrics for information system contingency plan tests; improving its Freedom of Information Act process; and, making enhancements to its physical and cybersecurity infrastructure.

Completed Actions

As part of ongoing efforts to improve the DNFSB's information security program and practices, DNFSB completed the following actions:

The DNFSB updated its Risk Management Framework and Risk Assessment Policy to document the current roles, responsibilities, policies, and procedures of the DNFSB environment.

The DNFSB implemented a data loss prevention functionality for the Microsoft Office 365 environment.

The DNFSB established performance metrics captured through the information system contingency plan test exercises, such as capturing recovery time.

The DNFSB provided training to staff who have significant incident response responsibilities.

Challenge 3: Continuing to Prioritize the DNFSB's Focus on Technical Oversight and Reviews

WHY IS THIS A SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGE? Maintaining an independent technical oversight process is the best way to ensure quality protection and increase public confidence in the DNFSB's oversight of nuclear weapons, facilities, and waste safety. The agency's mission is to provide independent analysis, advice, and recommendations to the Secretary of Energy regarding technical oversight involved in protecting the public health and safety concerning defense nuclear facilities.

CHALLENGE SYNOPSIS

When DNFSB technical staff members evaluate safety at DOE facilities, they must analyze many unique processes and hazards. Complex operations critical to national defense include the assembly and disassembly of nuclear weapons, the fabrication of plutonium pits and weapon secondary assemblies, the production and recycling of tritium, nuclear criticality experiments, and experiments to characterize special nuclear materials under extreme conditions. The DNFSB highlighted this critical function in its Strategic Plan for FY 2022–FY 2026.

The Board's key technical program challenges include:

- Ensuring that operations are conducted in a manner that is accountable and transparent and directing the Board's resources toward oversight of the most significant potential safety risks in the DOE's defense nuclear complex;
- Maintaining open and effective communication with the DOE that enables problem-solving through mutual understanding of safety issues that require action, as well as factors that may constrain action to address safety issues;
- Ensuring that DNFSB staff at both headquarters and DOE facilities have well-defined guidance for the oversight function;
- Ensuring that internal controls are fully understood and implemented; and,
- Continuing to attract, develop, and sustain staff that earn the respect and confidence of the public and the DOE through its expertise in nuclear safety and the performance of its oversight functions.

Ongoing Actions

On January 12, 2024, DNFSB staff initiated a new review to assess any potential public and worker health and safety impacts related to the current structural condition of the Salt Handling Shaft at the Waste Isolation Pilot Plant (WIPP) in New Mexico. The DNFSB intends to review aspects of the facility maintenance program, documented safety analysis, and federal oversight approach to support this review effort.

Completed Actions

On January 26, 2024, the Board issued Recommendation 2023-1, Onsite Transportation Safety, to the Secretary of Energy. The recommendation was intended to strengthen the U.S. Department of Energy's regulatory safety framework related to onsite transportation and address safety deficiencies in the national laboratory's transportation safety document to ensure adequate protection for public health and safety.

On January 26, 2024, the DNFSB transmitted to the Secretary of Energy a new recommendation advising the DOE to strengthen its safe harbor for preparation of safety bases for onsite transportation of radioactive materials, address specific safety deficiencies, perform a causal analysis for safety issues, and take corrective actions to preclude recurrence.

TO REPORT FRAUD, WASTE, OR ABUSE

Please Contact:

Online: <u>Online Form</u> Telephone: 1.800.233.3497 TTY/TDD: 7-1-1, or 1.800.201.7165 Address: U.S. Nuclear Regulatory Commission Office of the Inspector General Hotline Program Mail Stop O12-A12 11555 Rockville Pike Rockville, Maryland 20852

COMMENTS AND SUGGESTIONS

If you wish to provide comments on this report, please email the OIG using this <u>link</u>. In addition, if you have suggestions for future OIG audits, please provide them using this <u>link</u>.

NOTICE TO NON-GOVERNMENTAL ORGANIZATIONS AND BUSINESS ENTITIES SPECIFICALLY MENTIONED IN THIS REPORT

Section 5274 of the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Pub. L. No. 117-263, amended the Inspector General Act of 1978 to require OIGs to notify certain entities of OIG reports. In particular, section 5274 requires that, if an OIG specifically identifies any non-governmental organization (NGO) or business entity (BE) in an audit or other non-investigative report, the OIG must notify the NGO or BE that it has 30 days from the date of the report's publication to review the report and, if it chooses, submit a written response that clarifies or provides additional context for each instance within the report in which the NGO or BE is specifically identified.

If you are an NGO or BE that has been specifically identified in this report and you believe you have not been otherwise notified of the report's availability, please be aware that under section 5274 such an NGO or BE may provide a written response to this report no later than 30 days from the report's publication date. Any response you provide will be appended to the published report as it appears on our public website, assuming your response is within the scope of section 5274. Please note, however, that the OIG may decline to append to the report any response, or portion of a response, that goes beyond the scope of the response provided for by section 5274. Additionally, the OIG will review each response to determine whether it should be redacted in accordance with applicable laws, rules, and policies before we post the response to our public website. Please send any response via email using this link. Questions regarding the opportunity to respond should also be directed to this same address.