



Audit of the Defense Nuclear Facilities Safety Board's Process for Planning and Implementing Oversight Activities

**DNFSB-22-A-03
December 20, 2021**



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MEMORANDUM

DATE: December 20, 2021

TO: Joel C. Spangenberg
Executive Director of Operations

FROM: Eric Rivera /RA/
Acting Assistant Inspector General for Audits

SUBJECT: AUDIT OF THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD'S
PROCESS FOR PLANNING AND IMPLEMENTING OVERSIGHT
ACTIVITIES (DNFSB-22-A-03)

Attached is the Office of the Inspector General's (OIG) audit report titled *Audit of the Defense Nuclear Facilities Safety Board's (DNFSB's) Process for Planning and Implementing Oversight Activities*.

The report presents the results of the subject audit. Following the December 2, 2021 exit conference, DNFSB staff indicated that they generally agreed with the report results and recommendations, and opted to provide formal comments for inclusion in this report. The agency provided comments to the report on December 13, 2021, which appear in Appendix C. The OIG's response to the DNFSB's comments appear in Appendix D.

Please provide information on actions taken or planned on each of the recommendation(s) within 30 days of the date of this memorandum.

We appreciate the cooperation extended to us by members of your staff during the audit. If you have any questions or comments about our report, please contact me at (301) 415-5915, or Mike Blair, Team Leader, at (301) 415-8399.

Attachment: As stated

cc: R. Howard, DNFSB



Results in Brief

Why We Did This Review

The Defense Nuclear Facilities Safety Board (DNFSB) was established to oversee the Department of Energy's defense nuclear facilities, and to provide the Secretary of Energy with advice and recommendations to ensure adequate protection of public health and safety at these facilities. The DNFSB is led by presidentially appointed Board members. Oversight is carried out by staff in the Office of the Technical Director (OTD).

The OTD staff annually follow a work planning process to create a work plan that details activities to be carried out in the next fiscal year. The work plan is carefully developed based on the Board's strategic direction and staff input. The specific activities that will be completed are also determined based on the availability and expertise of current staff.

The audit objective was to determine whether the DNFSB's planning, and implementation of oversight activities are effective in helping the DNFSB accomplish its mission.

Audit of the DNFSB's Process for Planning and Implementing Oversight Activities

DNFSB-22-A-03

December 20, 2021

What We Found

The DNFSB's planning and implementation of oversight activities are effective in helping the DNFSB accomplish its mission. However, opportunities exist for improvement with regard to the Board providing more clear and specific strategic direction during the early phases of work planning, as well as addressing subject matter expert areas that lack depth.

Staff need more clear and specific strategic direction from the Board. Management should internally communicate the necessary quality information to achieve the entity's objectives; nevertheless, work planning direction from the Board is generic and could be timelier. As a result, reviews may not be aligned with the Board's priorities, and cause interruptions during work plan execution.

Additionally, the OTD lacks depth in certain subject matter areas. The DNFSB should ensure redundancy in key functions; however, OTD management has not routinely evaluated what subject matter experts it will need for future reviews. As a result, reviews have an increased risk of being delayed.

What We Recommend

This report makes three recommendations to improve the effectiveness of the DNFSB's planning and implementation of oversight activities.

DNFSB management stated its general agreement with the results and recommendations in this report, and opted to provide formal comments for inclusion in this report. Appendix C contains a copy of the agency's formal comments. Appendix D contains the OIG's response to those comments.

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ABBREVIATIONS AND ACRONYMS

DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
FY	Fiscal Year
GAGAS	Generally Accepted Government Auditing Standards
OIG	Office of the Inspector General
OTD	Office of the Technical Director

I. BACKGROUND

Established in 1988, the Defense Nuclear Facilities Safety Board (DNFSB) is an independent organization within the executive branch of the U.S. Government. Congress created the DNFSB to identify the nature and consequences of potential threats to public health and safety at the Department of Energy's (DOE) defense nuclear facilities. The DNFSB was established to assure the public that the DOE's defense nuclear facilities are being safely designed, constructed, operated, and decommissioned.

The DNFSB is responsible for overseeing 10 active DOE defense nuclear sites in the United States. See Figure 1 for the total number of DOE defense nuclear sites, including the 10 sites under the DNFSB's purview.

Figure 1. DOE Defense Nuclear Sites



Source: DNFSB Website.

The agency is led by five¹ presidentially appointed Board members, including a Chair. The agency is organized into four staff offices:

- Office of the Executive Director of Operations;
- Office of the General Manager;
- Office of the General Counsel; and,
- Office of the Technical Director (OTD).

¹ There are currently three Board members.

The majority of DNSFB staff reside within the OTD. The OTD is composed of technical staff with education and experience in fields essential to the design, construction, operation, and eventual decommissioning of defense nuclear facilities.

OTD Oversight Planning

Oversight plans document the technical staff’s strategy for accomplishing DNFSB oversight of the DOE’s defense nuclear facilities. Oversight plans also identify the specific tasks to carry out the strategy. The DNFSB refers to the technical staff responsible for creating oversight plans simply as oversight plan owners. The Board’s Strategic Plan and associated performance goals feed into this oversight plan process. See Figure 2 for the DNFSB’s Strategic Goals based on the Board’s Strategic Plan.

Figure 2. DNFSB Strategic Goals



Source: OIG generated based on the DNFSB 2018-2022 Revised Strategic Plan.

The oversight plans provide the technical staff’s input into the annual work planning process and form the foundation for the OTD annual work plan.² Each year, the Board approves the work plan for the technical staff. The current year’s work is made up of unaccomplished or partially accomplished activities carried forward from the previous year’s work plan, and new activities that are added to fulfill the Board’s mission.

² Oversight plans collectively form the OTD’s annual work plan.

The OTD divides its annual work plan among four technical groups within the OTD: Nuclear Weapons Programs; Nuclear Materials Processing and Stabilization; Nuclear Programs and Analysis; and, Nuclear Facilities Infrastructure and Projects.³

OTD Work Planning Process

The work planning process begins when the technical director⁴ issues the planning memo to the technical staff. The purpose of the planning memo is to guide the technical staff on the OTD work plan for the upcoming fiscal year. In addition, the memo includes information on the approach to work planning, guidance, the work planning schedule, the oversight plans, and oversight plan owners. Technical staff volunteer to be members of the work planning team as it is a collateral duty for the staff on the team.

The work planning team then conducts training on the work planning process for both the general technical staff and the oversight plan owners. Next, the work planning team conducts a Board briefing which informs the Board of the timeline for the work planning effort and provides a high-level overview of the items that may appear in the work plan. Throughout this process, oversight plan owners complete their oversight plans, which are due shortly after the Board briefing.

After the oversight plan owners create the oversight plans, they solicit potential review⁵ ideas from the technical staff and identify reviews to include in their respective oversight plans. Oversight plan owners follow the DNFSB's prioritization guidance⁶ to prioritize the reviews and determine which reviews to include in their oversight plans. OTD management performs an initial assessment of the proposed reviews and their associated prioritization ratings. Subsequently, technical staff sign up for the review plans they are interested in leading or joining as a team member.

³ The fifth group within the OTD is the Field Operations group, composed of the resident inspectors. Resident inspectors provide routine observations of on-site activities and are, therefore, not assigned significant work in the OTD work plan.

⁴ The technical director is the head of the OTD.

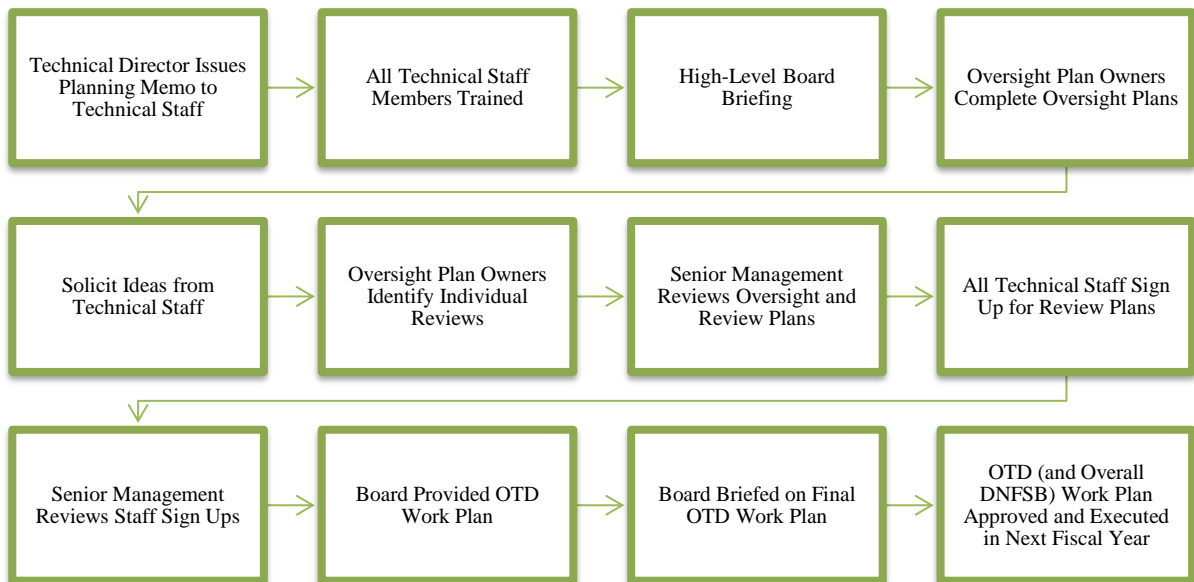
⁵ The technical staff perform reviews of DOE standards, design data, operational data, facility design, and facility construction; and inform the Board of its findings. Reviews concentrate on defined objectives and are executed to support the Board's development of recommendations, advice, and analysis to the Secretary of Energy.

⁶ I-514.1, "Technical Staff Internal Work Prioritization and Reporting Decision Criteria," identifies criteria that the technical staff shall use when identifying, prioritizing, and scheduling oversight work. Staff use the prioritization methodology in this guidance to score the risk of proposed review activities. The priority risk ranking is the matrixed result of the review type, safeguard score, and review tier; and is scaled from 1-6, with the highest priority items being rated a "1." Work that is Board-directed is termed non-discretionary; therefore, it is already considered high-priority and is not risk-prioritized.

OTD management reviews the staff sign-ups, balances resources to ensure each review has an appropriate number of team members with the proper skill set, and approves the oversight and review plans. The work plan document, composed of oversight plans and their respective review plans, is then delivered to the Board. Following work plan delivery to the Board, the work planning team briefs the Board on the work plan. During this briefing and throughout the work planning process, the Board can provide their input.

At the conclusion of the process, the Board approves the OTD technical staff’s work plan as part of the overall DNFSB work plan, which includes sections for the other offices and an agencywide, crosscutting section, for the coming fiscal year. The process takes approximately 3 months from start to finish, though the specific timeframe and schedule can vary. See Figure 3 for the OTD work planning process.

Figure 3. OTD Work Planning Process⁷



Source: OIG generated

OTD Oversight During Covid-19

On March 13, 2020, the DNFSB Chair activated the continuity of operations plan in response to Covid-19. Subsequently, the Chair provided additional direction in the DNFSB Pandemic Response and Recovery Plan, which included information on staffing and a phased approach to returning to the office, among other things.

⁷ The OTD’s work planning process currently does not contain a mechanism for stakeholder input. OIG Investigations will be conducting an independent review of the mechanism by which technical allegations are ushered to the OTD and incorporated into OTD work planning.

At the height of the pandemic, OTD management directed the technical staff to reprioritize oversight activities in the Fiscal Year (FY) 2020 work plan and complete those activities that did not require travel. As a result, a large portion of the OTD staff's work was document reviews, lines of inquiry based on those reviews, and subsequent discussions with the DOE. The DOE also assisted OTD staff in maintaining virtual access to the sites.

For FY 2021, the work planning team directed the technical staff to develop oversight and review plans that they could complete in a telework environment and without requiring travel until the second half of the fiscal year. To prepare for travel in the latter half of FY 2021, staff completed the beginning phases of reviews. The FY 2021 work plan also distinguished which work could be conducted onsite or remotely. Of the reviews included in the FY 2021 work plan, staff could complete 67 percent of the reviews remotely.

II. OBJECTIVE

The audit objective is to determine whether the DNFSB's planning, and implementation of oversight activities are effective in helping the DNFSB accomplish its mission. The report appendix contains information on the audit scope and methodology.

III. FINDINGS

The DNFSB's planning and implementation of oversight activities are effective in helping the DNFSB accomplish its mission. However, opportunities exist for improvement with regard to the Board providing more clear and specific strategic direction during the early phases of work planning, as well as addressing subject matter expert areas that lack depth.

This report highlights staffing and Board level issues already identified in previous OIG engagements. For example, dating back to 2015, the following reports illustrate either agency or staffing issues, or lack of direction from the Board:

- the *Culture and Climate Survey Executive Overview of Key Findings* (DNFSB-15-A-06);
- the *Audit of the DNFSB's Process for Developing, Implementing, and Updating Policy Guidance* (DNFSB-16-A-05);
- the *Audit of the DNFSB's Oversight of Nuclear Facility Design and Construction Projects* (DNFSB-16-A-06);
- the *Audit of the DNFSB's Resident Inspector Program* (DNFSB-17-A-05);
- the *Audit of the DNFSB's Issue and Commitment Tracking System (IACS) and Its Related Processes* (DNFSB-19-A-02);
- the *Audit of the DNFSB's Human Resources Program* (DNFSB-20-A-04); and,
- the *Office of the Inspector General 2021 DNFSB's Safety Culture and Climate Survey* (DNFSB-21-A-05).

A. More Strategic Direction is Needed

Staff need more clear and specific strategic direction from the Board. Management should internally communicate the necessary quality information to achieve the entity's objectives. Nevertheless, work planning direction from the Board is generic and could be

timelier. As a result, reviews may not be aligned with the Board’s priorities, and cause interruptions during work plan execution.

What Is Required

Management Should Internally Communicate the Necessary Quality Information to Achieve the Entity’s Objectives

According to the U.S. Government Accountability Office’s *Standards for Internal Control in the Federal Government*,⁸ effective information and communication are vital for an entity to achieve its objectives. Therefore, management should internally communicate the necessary quality information to achieve the entity’s objectives.

In addition, per the Board’s Procedures, the Board’s work plan should include tasks to meet strategic goals and objectives.

What We Found

Staff Need More Clear and Specific Strategic Direction from the Board

The OTD staff need more clear and specific strategic direction from the Board. In addition, the staff would benefit from more Board involvement and guidance during the early stages of the work planning process.

Staff Need More Clear and Specific Strategic Direction and Priorities

Staff indicated that the Board needs to provide clearer directions and better articulate its priorities. An overwhelming number of staff members informed the OIG of the need to have more clear and specific strategic direction from the Board, particularly in the early stages of the work planning process. Staff also articulated that the Board needs to make its priorities clearer. This would help staff understand the Board’s strategic goals and objectives for that fiscal year. Staff would benefit from the Board coming to a consensus on the strategic technical priorities and clearly signaling that to the staff. Similarly, a Board member opined, “The Board and the staff must have a unified position on priorities of planned work for the year.”

Increased communication and guidance in the front-end of the process would be beneficial to the oversight plan owners and benefit the entirety of the oversight plans, as

⁸ U.S. Government Accountability Office, *Standards for Internal Control in the Federal Government*, GAO-14-704G, September 2014.

staff would consider Board member priorities during the work planning process. A staff member said, “The Board has an amazing perspective and views, very good historical knowledge, and they have a very strong technical background.” Staff said they would benefit from having Board members who championed certain topics or review areas.

DNFSB staff emphasized that although they want more clear and specific strategic direction from the Board, they cautioned against increasing the level of Board engagement to the point of the Board micromanaging the work plan.

Attempts to Involve the Board

The Board needs to better communicate their areas of interest. The OIG found that a recurring problem is that the Board does not make staff aware of which reviews in the work plan are the highest priority to them. For example, if the Board has an interest in a particular review, and the OTD has not completed that review by the end of the year, staff indicated that the Board likely would not be pleased.

The OTD has attempted to have more Board involvement in the work planning process by seeking input regarding the areas they thought were important from a strategic perspective. Despite the OTD’s attempt to increase Board involvement, the Board opted not to provide input. According to staff perspective, this pattern has continued in recent years. Staff have indicated that the Board has not been completely engaged in the work planning process, nor have they provided comments on the final work plan. In addition, staff further indicated that the Board members provide minimal explicit direction to the OTD staff regarding which activities are of particular interest to them.

Further, during the FY 2022 work planning cycle, the work planning team provided the Board with draft oversight plans before the first Board briefing, instead of following the standard work planning process, and providing them with the final OTD work plan before the second Board briefing. Staff opined this was a positive process change, as it allowed the Board to review the information in advance of the briefing and increased the potential for feedback. Although the staff attempted to involve the Board members earlier in the process, according to a staff member, the Board did not provide any feedback related to strategic direction during this briefing.

2021 DNFSB Safety Culture and Climate Survey

The 2021 DNFSB Safety Culture and Climate Survey reinforces staff sentiment, as it identified communication as a top theme. The survey found that staff are looking for more clear and direct messaging from the Board on their mission and objectives. The survey further concluded that the DNFSB should review how the Board hands down

strategic decisions within the agency, and ensure agency goals and objectives are well-defined.

Why This Occurred

Work Planning Direction from the Board Is Generic and Could Be Timelier

The Board primarily communicates its strategic direction to the OTD staff through its Strategic Plan, a high-level document covering a 5-year period. In addition, although the Board can provide input at any point during the work planning process, their primary involvement in the process is participating in briefings conducted by the work planning team, and reviewing and approving the work plan at the end of the process.

Strategic Plan

The Board sets forth its strategic direction in its 5-year Strategic Plan, which serves as the “underpinning of [the DNFSB’s] work planning.” The Strategic Plan is the primary source of strategic direction and communication from the Board to the technical staff for work planning. The Board does not provide an overarching strategic vision other than what is in the Strategic Plan.

Because the Strategic Plan is high-level and covers a 5-year period, it does not provide clear or specific guidance regarding what topics or areas the Board is interested in having the OTD annually review. The document outlines four strategic goals and several strategic objectives under each goal. However, staff told the OIG, “the Board has been in flux with strategic goals and performance measures over the last couple of years,” and, “the Strategic Plan hasn’t been functional since it was created.” Therefore, based on the Strategic Plan alone, it can be difficult for staff to identify reviews they should propose in the annual work plan.

Planning Memo

OTD management provides more detailed strategic direction in the planning memo; however, some staff told the OIG that they do not use or read the planning memo. A staff member said management could improve the planning memo by receiving clearer guidance and more strategic direction regarding the types of reviews the staff should propose, and the areas at which they should look. Soliciting Board input regarding strategic direction and incorporating that information into the planning memo could make the memo more beneficial to the OTD staff, and provide strategic direction from the Board at the beginning of the work planning process.

Why This Is Important

Reviews May Not Be Aligned with the Board’s Priorities and Cause Interruptions During Work Plan Execution

Although staff believe they are accomplishing the enabling statute mandate and mission of the DNFSB, OTD staff may not always propose or complete review activities that are aligned with the Board’s priorities.

Staff recalled instances at the end of the work planning process where the Board asked why particular reviews were not on the work plan, and identified several additional reviews to add to the work plan. These instances illustrate three issues: first, staff work was not fully aligned with the Board’s priorities; second, if these additional reviews are extensive in nature, there may have to be re-shuffling to take other reviews off the work plan, and management may have to redo the resource loading effort; and, third, because work planning is a collateral duty, if the Board identifies changes at the end of the work planning process, staff must pause their technical work to make the necessary changes to the work plan.

Staff reviews are frequently interrupted due to a change in Board member priorities. For example, the Board may come up with reviews in the middle of the fiscal year, which interrupts staff execution of reviews. This situation occurred in FY 2021 when, in the middle of the fiscal year, the Board requested about a dozen “deep dive” reviews.⁹ While the “deep dive” reviews were helpful to both the Board members and new DNFSB staff, that effort displaced several other technical reviews and caused technical work to stop while staff accomplished this task. In addition, in cases where the Board decides to add projects outside of the work plan during the fiscal year, OTD management must adjust for the added work, such as re-allocating resources and taking staff off reviews that were in the work plan, to complete work requested by the Board that was not in the original work plan.

Earlier Board involvement in the work planning process should improve its efficiency. Earlier Board involvement would also better equip staff to ensure the annual work plan reviews they are proposing and executing throughout the fiscal year are aligned with the Board’s priorities.

⁹ The “deep dive” reviews were detailed reviews of each DOE defense nuclear site under DNFSB jurisdiction. OTD staff conducted these reviews and subsequently made presentations to the Board, which covered an array of information relating to each site.

Recommendation

The OIG recommends that the DNFSB:

1. As an agency overall, and the respective Board members themselves, continue to identify, implement, and directly participate in, process improvements that will provide clearer direction and priorities from the Board during the early phases of the work planning process, such as incorporating strategic direction from the Board into the planning memo.

B. The OTD Lacks Depth in Certain Subject Matter Expert Areas

The OTD lacks depth in certain subject matter expert areas. The DNFSB should ensure redundancy in key functions; however, OTD management has not routinely evaluated what subject matter experts it will need for future reviews. As a result, reviews have an increased risk of being delayed.

What Is Required

The DNFSB Should Ensure Redundancy in Key Functions

In its 2018-2022 Revised Strategic Plan, the DNFSB identified a strategic goal to develop and maintain an outstanding workforce to achieve the agency's mission. To meet that strategic goal, a key performance goal is to ensure redundancy in key functions to reduce mission vulnerabilities due to projected staff attrition. Meeting this goal will be measured by the DNFSB identifying those key functions that require redundancy, along with the requirements and cross-training needs.

Further, the U.S. Government Accountability Office's *Standards for Internal Control in the Federal Government* states that management should help maintain effective internal control in the federal government by demonstrating a commitment to recruit, develop, and retain competent individuals. As such, personnel need to possess and maintain a level of competence to accomplish their assigned responsibilities.

What We Found

The OTD Lacks Depth in Certain Subject Matter Expert Areas

No Depth in Certain Skill Sets

The DNFSB applies a wide range of expertise in science and engineering in carrying out its mission of safety oversight. The seven areas of expertise most important to the DNFSB's work include: chemical engineering, civil engineering, earthquake engineering, electrical engineering, fire protection engineering, mechanical engineering, and nuclear engineering, including nuclear criticality safety. However, some skill sets are not fully represented at the agency. The staff indicated the OTD is experiencing a staff shortage in:

- criticality safety;
- fire protection;
- nuclear safety;
- radiological control; and,
- health physics radiation safety.

OTD staff mentioned criticality safety and fire protection most often. The OIG completed an analysis of subject matter expertise areas for the technical staff in the OTD. The OIG found that criticality safety is the primary expertise for only one staff member. Further, criticality safety is a secondary expertise for three other staff members. Fire protection is the primary expertise for two staff members, and there are no staff members with fire protection as a secondary area of expertise.¹⁰

To compensate for the lack of depth in specific subject matter areas, experienced staff who are knowledgeable about these subject areas do a cursory review. Following the staff member's review, they only forward the areas identified as potentially problematic to the actual subject matter expert for their review. In addition, the OTD cross-trains staff in subject matters outside of their immediate area(s) of expertise, which also helps the OTD mitigate the effects of the lack of depth in particular subject matter areas. Further, the DNFSB has the authority to hire outside experts, and previously had a steady cadre of external experts in several subject matter areas. However, the DNFSB has not re-established contracts with external subject matter experts. Doing so could alleviate the effects of lacking depth in certain subject matter areas.

¹⁰ In FY 2022, the DNFSB will establish a human capital strategy plan that identifies any gaps in expertise.

The OIG's Audit of the DNFSB's Human Resources Program

Hiring employees with expertise in subject matter areas which lack depth would help resolve the issue; however, the DNFSB has had difficulties with its hiring processes due to issues previously identified by the OIG, as well as competition in hiring for the more in-demand specialties. The OIG's 2020 *Audit of the DNFSB's Human Resources Program* found that the agency's Human Resources program is currently not designed and implemented to support the execution of its mission effectively. As a result, the agency remains understaffed.¹¹ See Appendix B for DNFSB staffing data.

The DNFSB continues to face some of the hiring challenges identified in the OIG's 2020 report. According to a senior staff member, "the DNFSB is losing candidates because they [Human Resources] can't turn offers around fast enough." Another senior staff member believes the reasoning for candidates failing to complete the hiring process are "low interest in working for the agency, non-competitive pay, other competing opportunities, or failing to meet the security requirements for on-boarding." According to a Human Resources representative, "the DNFSB's deficiencies are related to its lack of personnel in some areas." The DNFSB has hired contract support for the Division of Human Resources to assist in the hiring process.

Why This Occurred

OTD Management Has Not Routinely Evaluated What Subject Matter Experts It Will Need for Future Reviews

Inconsistent Review of Staff Skill Sets

Currently, the OTD maintains awareness of subject matter areas that may become understaffed in the future, through a comparison of primary and secondary expertise areas for the OTD staff with a list of employees eligible for retirement. However, the OTD only completed this awareness effort recently. The last time the OTD reviewed its subject matter expert list was at least 2 years ago. By grouping the list of primary and secondary subject matter expertise areas into the seven areas of expertise most important to the DNFSB's work, the OTD could better identify and maintain awareness of current and future staff shortages. Awareness of staff expertise helps the OTD keep track of subject matter areas that need to be backfilled or strengthened by training.

¹¹ At the time of this report's issuance, all six recommendations from the *Audit of the DNFSB's Human Resources Program* remain open.

Awareness of Staff Skill Sets Can Be Improved

Board members believe awareness of understaffed skill sets could be improved. A Board member said the DNFSB does maintain awareness of the subject matter areas that need more personnel, but there is room for improvement. Another Board member said the DNFSB needs to focus on whether there are any areas of expertise in which they are lacking. Further, Board members acknowledged that the DNFSB's staffing plan had not been developed to properly maintain awareness of the subject matter expert areas.¹² Through a staffing plan, the DNFSB wants to ensure it has the core expertise areas needed, including multipliers of specific skill sets, and opportunities where staff can be trained to fill in those skill sets.

Why This Is Important

Reviews Have an Increased Risk of Being Delayed

Review Timeliness is Impacted

The DNFSB needs to have enough quality subject matter experts to complete reviews in a timely manner, and conduct oversight in mission-critical areas. If a particular expertise is needed for a portion of a review that is already in progress, and the pertinent staff member is conducting another review, the OTD may delay the review until that individual becomes available. Those delays can have a cascading negative effect on other reviews in progress. This situation is even more likely when the portion of the review in question is related to a subject matter in which the DNFSB lacks depth, such as fire protection and criticality safety. Moreover, when experts in subject matters that lack depth are conducting reviews, they must often concurrently field questions from several technical staff, further delaying their review.

Experts Can Become Overwhelmed

Staff were complimentary of the OTD management's practice of taking staff workloads into account and planning the reviews accordingly. However, some staff can be overburdened, especially understaffed subject matter experts who are full-time review team members. For example, prior to the DNFSB's recent hiring of a fire protection engineer, for several years, there was only one fire protection engineer in the agency. If that engineer was needed, review teams would have to wait until he was available, to avoid overloading his schedule. Strengthening the staff expertise in subject matter areas that lack depth could mitigate the effects of overburdening staff and prevent delays of future reviews.

¹² Following the completion of the fieldwork phase of this audit, on November 10, 2021, the DNFSB approved a staffing plan which includes a list of expertise areas on which the Board wants the OTD to focus on.

Recommendations

The OIG recommends that the DNFSB:

2. Develop and implement a strategy for maintaining routine awareness of future subject matter areas that may become understaffed; and,
3. Strengthen expertise in subject matter expert areas that lack depth through knowledge management and training.

IV. CONSOLIDATED LIST OF RECOMMENDATIONS

The OIG recommends that the DNFSB:

1. As an agency overall, and the respective Board members themselves, continue to identify, implement, and directly participate in, process improvements that will provide clearer direction and priorities from the Board during the early phases of the work planning process, such as incorporating strategic direction from the Board into the planning memo;
2. Develop and implement a strategy for maintaining routine awareness of future subject matter areas that may become understaffed; and,
3. Strengthen expertise in subject matter expert areas that lack depth through knowledge management and training.

V. THE DNFSB'S COMMENTS

On November 15, 2021, the OIG provided the DNFSB with a discussion draft of this report prior to the exit conference, which was held on December 2, 2021. Board members and agency management provided supplemental information via informal written and verbal comments that have been incorporated into this report, as appropriate.

On December 13, 2021, the Board provided formal comments to the draft report that indicated general agreement with the findings and recommendations. Appendix C contains a copy of the DNFSB's formal comments. Appendix D contains the OIG analysis of the DNFSB's formal comments.

OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

The audit objective was to determine whether the DNFSB's planning, and implementation of oversight activities are effective in helping the DNFSB accomplish its mission.

Scope

This audit focused on the DNFSB's planning and implementation of oversight activities that help the DNFSB accomplish its mission. The OIG conducted this performance audit from May to October 2021 via teleconferences with staff from the DNFSB (Washington, D.C.).

Internal controls related to the audit objective were reviewed and analyzed. Specifically, the OIG reviewed the internal control components control environment, risk assessment, and information and communication. Within those components, the OIG reviewed the principles of demonstrating a commitment to recruit, develop, and retain competent individuals; defining objectives clearly to enable the identification of risks and define risk tolerances; using quality information to achieve the entity's objectives; and, internally communicating the necessary information to achieve the entity's objectives.

Methodology

The OIG reviewed relevant laws, regulations, and guidance including:

- *Atomic Energy Act of 1954, as amended;*
- U.S. Government Accountability Office's *Standards for Internal Control in the Federal Government;*
- *Defense Nuclear Facilities Safety Board 2018-2022 Strategic Plan, Revised;*
- *Defense Nuclear Facilities Safety Board 31st Annual Report to Congress;*
- *Defense Nuclear Facilities Safety Board Procedures;*
- Operating Procedure 521.2-1, *Developing Technical Staff Oversight Plans;*
- Instruction 530.1, *Execution of Technical Staff Reviews;*

- Instruction 514.1, *Technical Staff Internal Work Prioritization and Reporting Decision Criteria*; and,
- *Defense Nuclear Facilities Safety Board Pandemic Response and Recovery Plan*.

The OIG conducted interviews with the DNFSB Board members, managers, and staff, to gain an understanding of roles, responsibilities, and processes related to the DNFSB's work planning process. The OIG interviewed the staff from the Office of the Executive Director of Operations, Office of the Technical Director, and the Office of the General Manager. The OIG also interviewed staff from the Office of Environment, Health, Safety, and Security, in the Department of Energy. Further, the OIG analyzed the DNFSB's technical staffing data and the technical staff's areas of expertise.

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Throughout the audit, auditors considered the possibility of fraud, waste, and abuse in the program.

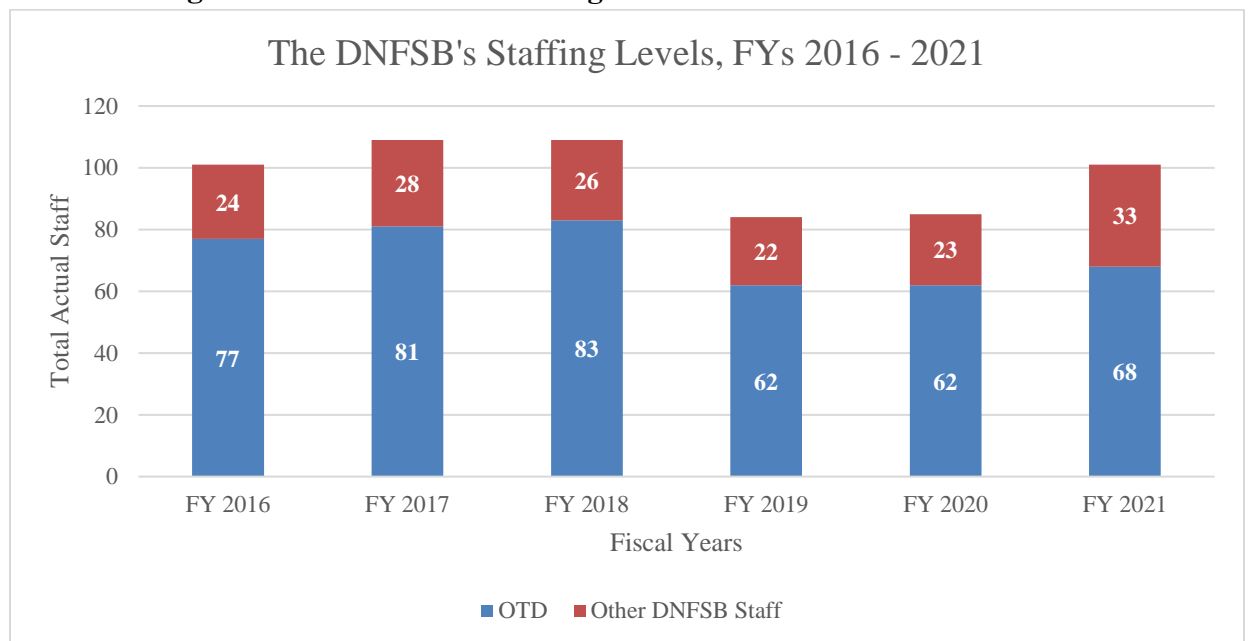
The audit was conducted by: Mike Blair, Team Leader; Regina Revinson, Audit Manager; Janelle Wiggs, Senior Auditor; and, Stephanie Dingbaum, Auditor.

THE OIG'S STAFFING ANALYSIS

The DNFSB's enabling legislation authorized a staff of up to 130 personnel in FY 2018. Further, in the Joint Explanatory Statement accompanying the Consolidated Appropriations Act, 2021, Congress directed the Board to ensure a minimum of 110 full-time employees. The DNFSB is continuing its effort to hire up from the current staff of 101 to the congressionally-mandated staffing floor of 110, in FY 2022.

The DNFSB's staffing was previously analyzed in the 2020 *Audit of the DNFSB's Human Resources Program*. The DNFSB's staffing for FYs 2016 – 2021 is shown in Figure 4. The OTD's staff accounts for an average of 73 percent of the DNFSB's total staffing during this period.

Figure 4. The DNFSB's Staffing Levels from FYs 2016 – 2021.



Source: OIG generated based on the DNFSB's FYs 2016 – 2022 staffing plans.

According to the FY 2022 staffing plan, as of November 10, 2021, the DNFSB had 101 staff on board, with 68 staff in the OTD. At 101 positions, the Board meets 92 percent of its hiring mandate.

THE DNFSB'S FORMAL COMMENTS

Joyce L. Connery, Chair
Thomas A. Summers, Vice Chair
Jessie H. Roberson

**DEFENSE NUCLEAR FACILITIES
SAFETY BOARD**
Washington, DC 20004-2901



December 13, 2021

The Honorable Robert J. Feitel
Inspector General
US Nuclear Regulatory Commission
Defense Nuclear Facilities Safety Board
11555 Rockville Pike
Rockville, MD 20852

Dear Inspector General Feitel:

The Board appreciates the Nuclear Regulatory Commission's Office of Inspector General's (NRC OIG) report and gladly welcomes factual-based evidence to support report feedback to make relevant and lasting improvements to the agency. In some cases, the OIG's office relies heavily on conversations with staff that haven't been adequately substantiated with documented evidence or presents contradictory information about Board priorities, which makes it more difficult for the Board to validate and act on the OIG's Recommendations. While we agree with the proposed NRC OIG recommendations to make the agency better, we believe that the NRC OIG partially missed the mark by failing to request or not including some pertinent Board verbal and written comments relating directly to this audit.

Sincerely,

Joyce L. Connery
Chair

OIG ANALYSIS OF THE DNFSB FORMAL COMMENTS

The OIG appreciates the Board and the DNFSB’s staff cooperation, perspectives, and thoughts throughout the course of this audit, and moving forward. The DNFSB provided formal comments for this report, which are included in Appendix C, “The DNFSB’s Formal Comments.” The DNFSB generally agrees with the audit findings and recommendations. However, the DNFSB Chair indicated that: “[i]n some cases, the OIG’s office relies heavily on conversations with staff that haven’t been adequately substantiated with documented evidence or presents contradictory information about Board priorities, which makes it more difficult for the Board to validate and act on the OIG’s Recommendations.” The Board also believes the: “OIG partially missed the mark by failing to request or not including some pertinent Board verbal and written comments relating directly to this audit.”

The OIG has a process, as well as numerous checks and balances in place for that process, to ensure all audits comply with GAGAS, and all findings are backed by sufficient and appropriate evidence to support our conclusions. The audit team conducted an extensive amount of work throughout the course of the 6-month survey and fieldwork phases of this audit, including extensive document review, data analyses, and staff interviews. Per GAGAS, auditors are to present “sufficient and appropriate” evidence in the audit report to support the findings, conclusions, and recommendations. Therefore, not every piece of information, nor every analysis conducted, is represented in the report.

While the OIG does not typically include in its reports each piece of data gathered, or the results of every data analysis conducted throughout the audit, the OIG added additional data-based information into the report to address the DNFSB’s concerns that the OIG relied heavily on unsubstantiated anecdotal evidence. The data, which was already collected by the OIG throughout the course of the audit, further support the conclusions stated in the initial draft report shared with DNFSB management. As part of its data analysis, the OIG reviewed and analyzed overall agency full-time equivalent numbers for FYs 2017-2021, as well as budget obligations. The OIG also requested data, and subsequently analyzed the data, relating to the technical staff in the OTD between FYs 2016-2020, as well as the number of accessions and separations in the OTD during that time period. This data was requested on July 7, 2021, and provided to the OIG on July 28, 2021. The OIG also requested data, and subsequently analyzed the data, relating to a breakdown of subject matter experts in the OTD. This data request was requested on July 7, 2021, and provided to the OIG on July 30, 2021. The DNFSB management

acknowledged the information was not readily available at the time of the OIG's request, and had to be compiled for the OIG's analysis.

Additionally, the OIG analyzed the FY 2016 – 2020 staffing plans that were previously analyzed in the *2020 Audit of the DNFSB's Human Resources Program*, which were provided to the OIG by the DNSFB and approved by the Board in each respective year. This audit's fieldwork phase ended on October 18, 2021. Consequently, the initial draft audit report did not originally reflect information from FY 2021, as the information was only available six weeks after FY 2021 ended. At the DNFSB's request, the OIG added FY 2021 information from the DNFSB's FY 2022 Staffing Plan, which was only finalized on November 10, 2021.

Certain DNFSB individuals also expressed concern over the fact that the OIG failed to mention the DNFSB's completion of its FY 2022 Staffing Plan in its original report. However, in its FY 2022 Congressional Budget Request, the DNFSB noted that as of September 30, 2020, the DNFSB's human capital plan was only 50 percent developed. Therefore, at the conclusion of the fieldwork phase of this audit on October 18, 2021, the staffing plan was not complete, as was originally reflected in the report. After the staffing plan was approved on November 10, 2021, the OIG was not notified at any point that the staffing plan was completed or approved. Again, to address the DNFSB's concerns, the OIG edited the report to note the completion of the FY 2022 Staffing Plan.

Finally, the staff perspectives shared in the report were views expressed to the OIG by a significant number of DNFSB staff. The OIG assessed the consistent messages it received from expert staff, and corroborated this testimonial evidence with data analyses, as appropriate. In addition, the OIG interviewed all three Board members individually from August 23-25, 2021. These interviews were conducted towards the end of the fieldwork phase, and the interview questions alluded to the finding areas and recommendations, which were already established, by this point, in the audit. The Board members had an opportunity during their interviews, as well as prior to or afterwards, to provide the OIG with any additional feedback, or share any concerns. The OIG incorporated Board member comments into the draft report, as appropriate.

The OIG will continue to foster an open and collaborative relationship with the Board and the DNFSB staff in order to promote the economy and efficiency of the DNFSB's operations. We thank the Board and the DNFSB staff for their cooperation and thoughtful perspectives throughout the audit.

TO REPORT FRAUD, WASTE, ABUSE, AND EMPLOYEE OR MANAGEMENT MISCONDUCT

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Mail Stop O5-E13
11555 Rockville Pike
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COMMENTS AND SUGGESTIONS

If you wish to provide comments on this report, please email the OIG using this [link](#).

In addition, if you have suggestions for future OIG audits, please provide them using this [link](#).