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**DEFENSE NUCLEAR FACILITIES
SAFETY BOARD**

Washington, DC 20004-2901



August 17, 2022

The Honorable Jennifer M. Granholm
Secretary of Energy
US Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-1000

Dear Secretary Granholm:


The Defense Nuclear Facilities Safety Board's (Board) staff conducted a review of Department of Energy (DOE) safety oversight. The Board identified improvements that DOE should pursue to ensure its safety oversight approach is effective in the following areas:

1. **Effectiveness Assessments:** DOE needs to improve its effectiveness assessments at all levels of the DOE safety oversight framework. DOE safety oversight leverages contractor assurance systems (CAS) without a sufficient, documented federal assessment basis to justify that CASs are reliable and effective.
2. **Staffing:** DOE needs to improve its staffing plans and implementation to ensure sufficient technical capability is applied to safety oversight activities.
3. **Proactive Safety Oversight:** DOE needs to increase proactive safety oversight to ensure safety issues are identified in a timely manner.
4. **Safety Issues Management:** DOE needs to implement an effective safety issues management system to ensure timely and effective correction of safety issues.

The Board also identified several specific safety oversight best practices for certain areas at some DOE offices.

The Board concludes that DOE safety oversight needs improvements in areas identified in the enclosed report, which is being provided as an aid to guide improvement efforts. Pursuant to 42 United States Code § 2286b(d), the Board requests a briefing and written report, within 120 days of receipt of this letter, that address how DOE plans to address these safety matters.

Sincerely,


Joyce L. Connery
Chair

Enclosure

c: Mr. Joe Olencz

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Staff Report

April 10, 2022

Review of DOE Safety Oversight Effectiveness

Summary. The Defense Nuclear Facilities Safety Board's (Board) staff review team conducted a safety review of the Department of Energy (DOE)¹ safety oversight effectiveness at several DOE offices across the complex. Based on the review conducted, DOE should improve its safety oversight approach in the following areas:

1. **Effectiveness Assessments:** DOE's required "effectiveness" assessments for safety oversight need improvements at all levels within DOE's safety oversight framework. DOE safety oversight leverages contractor assurance systems (CAS) without a sufficient, documented federal assessment basis to justify that CASs are reliable and effective. There is also a lack of documented DOE "effectiveness" reviews validating that the remainder of federal oversight is effective.
2. **Staffing:** DOE's staffing plans and implementation need improvement to ensure sufficient technical capability is applied to safety oversight activities. DOE has not clearly documented how its current staffing levels are sufficient to ensure effective oversight.
3. **Proactive Safety Oversight:** DOE's approach for proactive safety oversight needs improvement to ensure safety issues are identified in a timely manner. For operating facilities, the mix and rigor of oversight activities is mostly expert-based with varying guidance.
4. **Safety Issues Management:** DOE lacks an effective safety issues management approach to ensure timely and effective correction of safety issues. DOE is currently replacing several of its issues management software tools to help mitigate this concern.

These safety concerns exist at multiple DOE offices across the complex. Not all the DOE offices had concerns in these areas, and the extent of each concern was not the same among the DOE offices reviewed. Further, some safety best practices have been identified and are shared in this report. For example, one field office has a systematic process for evaluating and leveraging CAS effectiveness and applying that information to other oversight functional areas. Also, the staff review team noted that some offices systematically link their bases for staffing needs to specific oversight responsibilities. Therefore, each DOE office should independently evaluate the applicability of each observation to its safety oversight responsibilities.

¹ As used in this report, DOE is intended to also include the National Nuclear Security Administration (NNSA)

Background. The staff review team conducted a safety review of DOE safety oversight effectiveness at several DOE offices across the complex. Effective oversight is necessary to ensure adequate protection of public health and safety at defense nuclear facilities. These offices included:

- DOE Office of Enterprise Assessment’s Office of Environment, Safety and Health Assessments (EA-30),
- National Nuclear Security Administration (NNSA) Office of Safety (NA-51),
- DOE Office of Environmental Management’s Office of Safety, Security, and Quality Assurance (EM-3.1),
- Carlsbad Field Office (CBFO),
- NNSA Production Office (NPO),
- Savannah River Operations Office (DOE-SR) and NNSA Savannah River Field Office (SRFO), and
- Environmental Management Los Alamos Field Office (EM-LA) and NNSA Los Alamos Field Office (NA-LA).

The staff review team reviewed information provided on DOE’s safety oversight framework and activities from each office, developed agendas with lines of inquiry, and conducted interactions with DOE to discuss these agendas and interview individual DOE staff. The interaction and interview portions for some offices were modified as follows. For NPO interactions, the staff focused on safety oversight activities at the Y-12 National Security Complex. For EM-LA and NA-LA, the staff monitored ongoing NA-51 and EM-3.1 headquarters reviews of those field offices rather than developing independent agendas. For DOE-SR and SRFO, the staff assisted the Board in developing lines of inquiry for the Savannah River Site public hearing on July 13, 2021, rather than drafting independent agendas.

DOE has the challenge of having dual roles as both a customer and a regulator where it must balance production and safety risk. This dual role requires DOE to perform various types of safety oversight including program and production oversight to ensure that mission and budgetary obligations are met, and regulatory safety oversight to ensure that hazardous operations meet safety performance and regulatory requirements. This review focused on the effectiveness of DOE’s regulatory safety oversight. DOE Policy 450.4A, Change 1, *Integrated Safety Management (ISM) Policy*, states “The Department’s ultimate safety goal is zero accidents, work-related injuries and illnesses, regulatory violations, and reportable environmental releases....The ultimate responsibility and accountability for ensuring adequate protection of the workers, the public, and the environment from the operation of DOE facilities rests with DOE line management.” [1] This responsibility cannot be delegated to the contractors that DOE hires to perform the work.

DOE's ISM approach outlines guiding principles, including defining clear roles and responsibilities and identifying safety standards and requirements. DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*, establishes expectations for DOE's oversight approach such that DOE's mission can be accomplished effectively, efficiently, safely, and securely.

Some key **DOE directives** that implement DOE's oversight approach are:

- **DOE Order 450.2, Change 1**, *Integrated Safety Management*, contains federal requirements for implementing ISM policy and delegations of authority to perform safety management functions.
- **DOE Order 226.1B**, *Implementation of Department of Energy Oversight Policy*, establishes requirements and provides direction for implementing DOE's oversight policy.
- **DOE Order 227.1A, Change 1**, *Independent Oversight Program*, contains requirements for DOE's Office of Enterprise Assessment's independent oversight program as part of DOE's multi-faceted approach to oversight.
- **NNSA Supplemental Directive 226.1C**, *NNSA Site Governance*, establishes key supplemental oversight requirements related to NNSA's oversight framework.

Many DOE directives contain contractor requirements documents (CRD) that outline contractor requirements in addition to federal requirements. Both the federal staff and contractors must also follow applicable federal rules such as 10 CFR Part 830. Contractor requirements for ISM are implemented via the DOE Acquisition Regulation (DEAR) clause. The Board's Technical Report-16 (TECH-16), *Integrated Safety Management*, states, "Establishment of this requirements base is essential but not sufficient for effective safety management. The contractor must also develop and commit to implementing procedures." [2] Figures 3-7 in TECH-16 illustrate the flow down from DOE requirements to contractors' implementing procedures. Each ISM functional level (e.g., site-wide, facility, and activity-level) incorporates the same five safety management functions shown in Figure 1 to ensure all work activities are performed safely and drive continuous, sustained improvements.

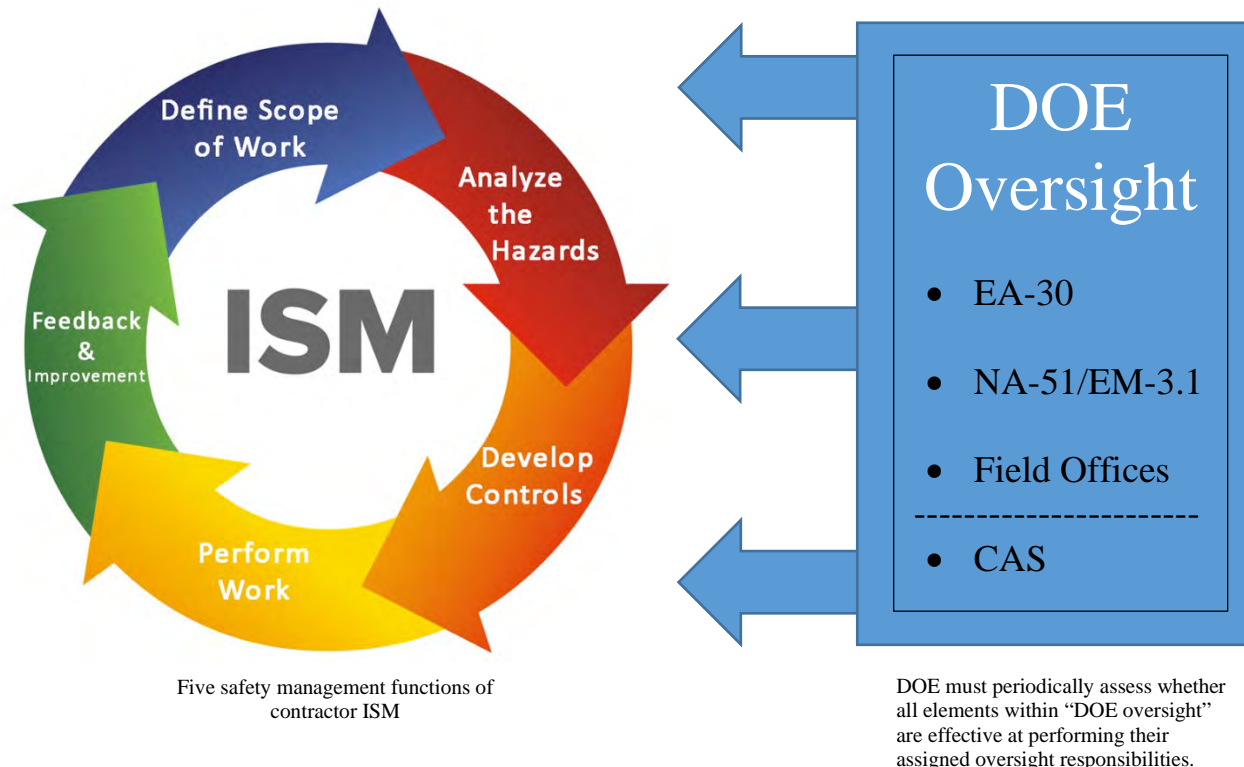


Figure 1. *Contractor ISM and DOE Oversight*

Ideally, the contractors’ ISM processes, established through DOE’s standards-based framework, would be robust enough to identify all hazards and develop and implement sufficient controls during all work activities. Should issues arise, the contractors’ own feedback and improvement mechanisms would ideally be sufficient to fix them. The purpose of DOE’s regulatory safety oversight is to proactively find deficiencies in contractors’ ISM processes and safety performance prior to those issues becoming issues of adequate protection.

As required by DOE Order 450.2, Requirement 4.(h), all DOE line management and support organizations must develop, issue, and maintain a functions, responsibilities, and authorities (FRA) document that identifies the safety management functions applicable to the office and individuals with the responsibility and authority to perform those functions. [3] For this review, the staff focused on the DOE offices with the bulk of the regulatory oversight assessment functions in the FRA documents. The DOE safety oversight layer consists of several offices that implement key oversight requirements as highlighted in Figure 1. The staff review team notes that this is not an all-inclusive list since other DOE offices provide additional oversight functions. DOE performs oversight of the CAS implemented by DOE’s contractors and leverages the effectiveness of the CAS to determine additional federal oversight activities needed to ensure safe operation. The staff review team did not directly review any CASs but did review how DOE independently evaluated the CASs. Together, the oversight functions in Figure 1 are considered part of the DOE regulatory oversight layer that is needed to be effective to ensure safe nuclear operations. DOE Policy 226.2 states:

Effective oversight of the DOE contractor complex should be integrated into all operations such that all personnel, Federal and contractor alike, are responsible and accountable for conducting their missions to the highest standard....CAS are designed and utilized by contractors to manage performance consistent with contract requirements. CAS enables the corporate parent, if applicable, to assess performance, provides data to the contractor's management decision-making process, and allows the contractor to more effectively manage processes, resources and outcomes. CAS provide clear communication of the mission needs and goals and enable DOE to determine the necessary level of Federal oversight. Under CAS, contractors provide reasonable assurance that their management controls are effective and efficient. CAS are risk-based systems that focus on outcomes and seek to minimize performance risk. [4]

This integrated regulatory oversight model implements the requirements of the key oversight directives. Most of these requirements focus on DOE oversight of the contractor. DOE is also required to periodically assess the “effectiveness” of its oversight. These “effectiveness” assessments are meant to inform DOE as to how well DOE is performing its regulatory oversight responsibility. Performing these assessments and documenting the results is required for compliance with several orders, including the following (**emphasis** added):

- DOE must determine the need for, and frequency of, DOE ISM Declarations (i.e., the status and **effectiveness** of ISM system implementation, including planning and execution of work) for facilities and activities based on hazards, risks, and contractor performance history and document their decisions concerning high consequence activities, such as high-hazard nuclear operations. [DOE Order 450.2, Requirement 4.c.] [3]
- DOE-EA must conduct independent evaluations of DOE sites, facilities, nuclear design/construction projects, organizations (including DOE Headquarters), and operations to evaluate the **effectiveness** of DOE and contractor line management performance and risk management in implementing and overseeing safety (nuclear and industrial) and security (cyber and physical) programs, including line oversight and contractor assurance systems. [DOE Order 227.1A, Requirement 4.a.(1)] [5]
- Oversight processes implemented by applicable DOE line management organizations must evaluate contractor and DOE programs and management systems, including contractor assurance systems, for **effectiveness** of performance (including compliance with requirements). [DOE Order 226.1B, Requirement 4.b.(1)] [6]
- Oversight processes must include DOE Headquarters line organizations' conduct of oversight processes that are focused primarily on their DOE Field Elements, including reviewing contractor activities to the extent necessary to evaluate the implementation and **effectiveness** of the Field Element's oversight of its contractors. [DOE Order 226.1B, Requirement 4.b.(3)] [6]

- Oversight processes implemented by applicable DOE line management organizations must be tailored according to the **effectiveness** of contractor assurance systems, the hazards at the site/activity, and the degree of risk, giving additional emphasis to potentially high consequence activities. [DOE Order 226.1B, Requirement 4.b.(5)] [6]
- The CAS, at a minimum, must include a method for validating the **effectiveness** of assurance system processes. Third party audits, peer reviews, independent assessments, and external certification may be used and integrated into the contractor’s assurance system to complement, but not replace, internal assurance systems. [DOE Order 226.1B, Attachment 1, Requirement 2.b.(1)] [6]
- The CAS, at a minimum, must include metrics and targets to assess the **effectiveness** of performance, including benchmarking of key functional areas with other DOE contractors, industry, and research institutions. [DOE Order 226.1B, Attachment 1, Requirement 2.b.(6)] [6]

Assessing “effectiveness” requires a performance-based assessment in addition to compliance assessments. It also requires clear evaluation criteria used to measure effectiveness, acceptable qualitative or quantitative thresholds for those criteria, and a documented final analysis that validates the result. The staff review team acknowledges that “effectiveness” is subjective, which highlights the importance of documenting the evaluation criteria that assessors use to reach their conclusion.

Examples of assessing both compliance with a DOE oversight requirement and the effectiveness of it are shown in Table 1 below:

Table 1. Compliance and Effectiveness

Requirement	Compliance	Effectiveness	Potential Criteria
DOE must have effective processes for communicating oversight results and other issues in a timely manner.	Does DOE have procedures for communicating oversight results?	Does the procedure clearly define criteria for “timely” and for evaluating how clearly and comprehensively the communication plan identifies issues?	Average time it takes to communicate an issue; number of times the contractor needs additional clarification of the issue
DOE must include written plans and schedules for planned assessments.	Does DOE have an annual integrated assessment plan?	Does the plan give criteria for selecting the right mix and rigor of oversight activities and completing them on time?	Number of postponed reviews; negative contractor performance trends in unreviewed areas
DOE must have an issues management process that is capable of categorizing findings based on risk and priority, ensuring that problems are evaluated and corrected on a timely basis.	Does DOE have an issues management process with risk categories?	Does the process measure whether the issues management process is effective at categorizing findings and correcting them in a timely manner?	Time to closure for correcting high risk issues; recurrence of previously corrected issues

Allowing flexibility could enable each DOE office to optimize its oversight approach to maximize effectiveness. For example, some DOE offices may only need a simple spreadsheet

for issues management since they have minimal issues, while other offices may need a more robust tool to be effective. Because of increased flexibility in complying with safety oversight requirements, these various effectiveness reviews become even more important to ensure that flexibility has not impacted safety. DOE Guide 226.1-2A, *Federal Line Management Oversight of Department of Energy Nuclear Facilities*, provides guidance for sites to consider as they develop their processes to meet current oversight requirements. Section 3.7 of DOE Guide 414.1-1C, *Management and Independent Assessments Guide*, provides additional guidance for conducting performance-based, effectiveness evaluations:

There are two different methods commonly used for accomplishing assessments. These are usually known as compliance assessment and performance-based assessment. While each method has distinct characteristics, a good assessment will usually gauge, at some level, effectiveness of the processes, systems, and programs in meeting the mission and objectives of the organization. In practice, an assessment is likely to include both compliance and performance-based methods.
[7]

This guide also notes that, for performance-based assessments, “greater emphasis is placed on the impact of issues discovered rather than on simply the existence of non-compliance issues (i.e., a compliance assessment)...Performance-based assessments usually provide the most useful information to management; however, it requires a much higher level of competence on the part of the assessment team.” [7] The staff review team agrees that DOE must ensure that its assessors have the needed competencies to perform these types of assessments.

Safety Observations. The staff review team identified four safety observations related to DOE oversight:

1. **Effectiveness Assessments:** DOE’s required “effectiveness” assessments for oversight need improvements at all levels within DOE’s oversight framework. DOE oversight leverages contractor assurance systems (CAS) without a sufficient, documented federal assessment basis to justify that CASs are reliable and effective. There is a lack of documented DOE “effectiveness” reviews and a lack of frequency requirements for conducting these reviews which are needed to validate that federal oversight is effective.
2. **Staffing:** DOE’s staffing plans and implementation need improvement to ensure sufficient technical capability is applied to safety oversight activities. DOE has not clearly documented how its current staffing levels are sufficient to ensure effective oversight.
3. **Proactive Safety Oversight:** DOE’s approach for proactive safety oversight needs improvement to ensure safety issues are identified in a timely manner. For operating facilities, the mix and rigor of oversight activities is mostly expert-based with varying guidance.

4. **Safety Issues Management**: DOE lacks an effective safety issues management approach to ensure timely and effective correction of issues. DOE is currently replacing several of its issues management software tools to help mitigate this concern.

The sections below will explore each of these observations in detail, with supporting examples and analysis.

Effectiveness Assessments—Required “effectiveness” assessments of DOE safety oversight need improvements at all levels within DOE’s oversight framework. This weakness in effectiveness assessments hinders DOE feedback and improvement mechanisms used to ensure that the DOE safety oversight approach and execution is adequate. Because the purpose of DOE safety oversight is to proactively identify contractor ISM issues and correct those issues in time to prevent unsafe operations, DOE safety oversight ineffectiveness could impact safe nuclear operations.

The Board’s staff examined key contributors to this safety observation, including: DOE’s lack of consistent, documented evaluation criteria with acceptable thresholds to evaluate the effectiveness of its safety oversight; the lack of clarity of responsibilities in DOE’s FRA documents and associated office procedures; and DOE’s failure to specify a frequency for how often periodic effectiveness assessments must be performed.

DOE lacks consistent, documented evaluation criteria with acceptable thresholds to evaluate the effectiveness of its safety oversight. In those cases where DOE has developed and documented oversight effectiveness criteria, the criteria do not always include contractor performance elements, which can indicate ineffective safety oversight. CASs are responsible for performing the foundation of oversight in the current framework. Additional federal oversight is determined based on leveraging the effectiveness of the CAS. DOE is required to perform effectiveness assessments of both the CAS and its own federal offices.

In 2016, DOE tasked the Energy Facility Contractors Group (EFCOG) to help address CAS effectiveness concerns. EFCOG developed best practices for CAS effectiveness validation and a CAS maturity evaluation tool. The staff review team believes these are good tools but did not see all field offices incorporating them. These EFCOG tools provide good attributes to consider for CAS effectiveness evaluation criteria, but do not quantify any thresholds for what should be deemed effective. That decision would be left to the DOE field office to determine.

Government Accountability Office (GAO) Report 15-216, *NNSA Actions Needed to Clarify Use of Contractor Assurance Systems for Oversight and Performance Evaluation*, dated May 2015, identified several recommendations for CASs. GAO recommended that “NNSA establish comprehensive policies and guidance, beyond a general framework, for using information from CAS to conduct oversight of contractors, clarifying whether CAS is to cover mission-related activities and describing how to conduct assessments of risk, CAS maturity, and the level of the contractor's past performance.” [8] This recommendation was still open at the completion of the staff’s review, more than six years later. The staff review team discussed this recommendation with GAO staff and agrees that more specificity is still needed to quantify CAS

effectiveness and leverage its use. In addition, the inability of NNSA to close this open recommendation in a timely manner could indicate ineffectiveness.

The “effectiveness” evaluation criteria for CAS still need improvement. All site contractors have developed CASs, but they are at varying levels of maturity. In addition, some sites need to improve processes for leveraging CAS effectiveness results to identify what additional federal oversight is needed. While the staff review team did not directly review any CASs, it did review federal safety oversight processes for evaluating the effectiveness of the CASs. The observations related to evaluating and leveraging the CASs include:

- EM-LA oversight procedures did not include CAS effectiveness review criteria. For NA-LA, the staff review team agreed with the most recent Chief of Defense Nuclear Safety (CDNS) assessment finding that assistant managers were not evaluating the effectiveness of CAS implementation and transparency, as required by Management Procedure 00.08, *Implementation of NA-LA Line Oversight*. While this procedure contains CAS effectiveness attributes to consider during assessments, the staff review team identified that NA-LA still needs to translate these into measurable criteria for effectiveness reviews. The fiscal year (FY) 2020 NA-LA performance evaluation report for the contractor agreed with the staff review team’s observation stating that the contractor’s “methods for validating effectiveness of assurance system processes are not completely effective but the lab has made improvements in quality, issues management and overall contractor assurance.” [9]
- The staff review team identified that CBFO Management Procedure 10.9, *Surveillance Operational Awareness, and Issues Management*, has five CAS evaluation criteria in Attachment III. However, the staff review team did not find any documented evidence of CAS effectiveness reviews that used these criteria. CBFO agreed that it should improve the CAS evaluation criteria, CAS effectiveness oversight documentation, and how it leverages the results. CBFO plans to perform more comprehensive CAS effectiveness reviews this year. Similar to NA-LA, CBFO has developed specific performance criteria that impact annual award fees to help drive the needed CAS improvements.
- NPO has a more defined process than the other field offices for evaluating and leveraging CAS effectiveness. NPO evaluates the CAS as its own functional area and rates it on an effectiveness scale from 1-30 with 30 being the least effective. During the time of the review, NPO rated the CAS as scoring 28 out of 30. They apply this score to all other oversight functional areas to determine the additional federal oversight needed due to an ineffective CAS. The question arises as to whether NPO has sufficient resources to perform the additional federal oversight for a CAS that is significantly ineffective. In addition, NPO must ensure that the contractor takes appropriate corrective actions to improve the CAS in a timely manner. NPO was in the process of evaluating several corrective actions to improve the effectiveness of the CAS rated 28 out of 30.

- In 2019, EM-3.1 staff led CAS effectiveness reviews at the Savannah River Site. The staff review team discussed those reviews with members of DOE’s team. The results showed that the CAS was collecting a lot of good data, but that improvement was needed in using the data to make effective CAS improvements. This reinforces the concept that all evaluation criteria must include actionable thresholds that drive needed improvements. For example, if “findings that remain open for greater than 180 days” is used as evaluation criteria, it would also require defining thresholds for how many findings exceeding this threshold are needed before requiring certain improvement actions.

In addition to CAS effectiveness reviews, all DOE offices are required to perform self-assessments of their oversight effectiveness. EA-30 is required to perform independent assessments of oversight effectiveness for both DOE headquarters and DOE field offices. The CDNS and Chief of Nuclear Safety (CNS) are also required to perform periodic assessments of field office safety oversight effectiveness.

DOE provided the total number of self-assessments from each office for previous years along with copies of recent reports. Most of the documented self-assessments reviewed focused only on compliance with specific requirements (refer to Table 1 for differences between compliance and effectiveness criteria). Many of these assessments came from the quality assurance organizations within each DOE office. For example, a NA-LA self-assessment of software quality assurance (SQA) oversight focused solely on whether NA-LA had appropriately mapped SQA oversight responsibilities into NA-LA procedures, not whether NA-LA was performing effective oversight of SQA. Another assessment looked at whether scheduled reviews were completed, not whether the reviews were effective at proactively identifying contractor issues and driving needed improvements.

There were several CDNS reviews where the reports reached a conclusion without documenting the basis for the decision. For example, the 2021 CDNS review of NA-51 stated:

The Biennial Review results show that the NA-40 and NA-50 organizations are effectively implementing nuclear safety responsibilities....The team reviewed five functional areas and concluded that three of the functional area objectives met NNSA expectations, except for Issues Management and Quality Assurance. The Issues Management functional area grade is ‘Does not meet expectations.’ [10]

There are no explicit grading criteria or defined thresholds for determining how needing improvement in two of five functional areas results in being effective overall.

EA-30 had already identified this as an area for improvement prior to the staff review team interaction and recently developed a new criteria and review approach document (CRAD) for federal line management oversight processes. Federal Line Management Oversight CRAD 30-07 was first issued on December 8, 2020.

DOE FRA documents, and associated office procedures that implement those responsibilities, need to improve clarity of responsibilities to assist in developing appropriate

effectiveness criteria. For each FRA defined responsibility, each DOE office should be able to define how effective implementation of that responsibility is accomplished. This will help in developing appropriate evaluation criteria and acceptance thresholds for future effectiveness assessments. The staff review team found that most FRA-defined responsibilities were very high-level and that further clarity was needed in supplemental office programs and procedures, including clear linkage to the FRA responsibilities. For example, CBFO states that facility representatives will perform safety-related oversight to ensure “contractor management systems effectively control conduct of operations objectives” and ensure “effective lines of communication between DOE and the contractor are maintained during periods of normal operation.” It is not clear what evaluation criteria would be used to determine if CBFO is effectively implementing both of those responsibilities. The lack of clear criteria for effectively implementing each assigned responsibility was common for all DOE offices and makes it difficult to perform the required effectiveness assessments. The staff review team learned that some effectiveness criteria may be contained in a staff member’s individual performance plan. The downside of this approach is that individual performance plans are not available to assessment teams who are required to evaluate effectiveness. Here are two examples that illustrate the varying level of details for each FRA responsibility and the significance in meeting the required effectiveness assessment:

- NNSA Supplemental Directive 450.2B, *Functions, Responsibilities, and Authorities (FRA) for Safety Management*, Section 8.c.(7)(c), states that NA-51 has the responsibility to “Maintain operational awareness of contractor safety management program performance in conjunction with field offices. Drives continuous improvement by sharing of lessons learned, trending, and implementation of metrics to evaluate overall safety management program health.” [11] It is not clear what criteria should be used to evaluate this responsibility for effective implementation. “Maintaining operational awareness” could range from periodic site visits for conducting formal operational awareness walkdowns to simpler remote monitoring methods. Currently, NA-51 implements a checkerboard process to maintain operational awareness using staff assigned as safety area functional leads and site points of contact. This process mostly relies on evaluating data provided by the sites and periodic teleconferences. It was not clear to the staff review team how NNSA will measure the effectiveness of this safety oversight responsibility. For example, simply gathering the data and performing the teleconferences should not be the sole criteria for evaluating the effectiveness of the checkerboard to maintain operational awareness. NNSA should consider additional criteria to ensure the fidelity of the data and ensure the checkerboard provides an accurate reflection of contractor performance. This will ensure that NA-51 is effectively implementing their operational awareness responsibility.
- NNSA Production Office Procedure 2.2.2.1, *Functions, Responsibilities, and Authorities Manual*, Section 5.7.d. states six responsibilities for safety system oversight (SSO) but most of them are very high-level. For example, the first two responsibilities are “Provides oversight of the contractor’s System Engineering Program” and “Conducts line oversight of systems related safety management programs to ensure effective implementation and maintenance.” [12] This could

require very limited safety oversight activities depending on what criteria NPO uses to demonstrate effectiveness. However, NPO developed NPO Procedure 3.1.3.2, *Safety System Oversight Program*, which provides additional detail (22 detailed responsibilities) for SSO personnel responsibilities in Section 5.5. For example, SSO personnel should “periodically perform system walk-downs and observe maintenance or surveillance activities” and “confirm configuration documentation, procedures, and other sources of controlling information are current and accurate.” [13] Providing this level of additional detail allows for a much better effectiveness review related to implementing this safety oversight responsibility.

In addition, the staff review team agreed with the findings from the most recent CNS review at EM-LA including “roles and responsibilities for safety basis reviews and approvals are not adequately defined.” [14] EM-LA has since corrected several issues identified from this review and is in the process of approving a new safety basis. CNS will need to continue to monitor the effectiveness of the planned and completed corrective actions to address the findings.

CBFO is restructuring its Office of the National TRU Program to include both an operations division and a compliance division. Previous CBFO oversight responsibilities for this area focused mostly on compliance. CBFO determined that additional operational oversight responsibilities are needed to provide more effective oversight. CBFO will need to evaluate the effectiveness of these corrective actions to ensure they perform the necessary oversight.

Evaluation criteria for oversight effectiveness should also look for gaps in defined responsibilities. Board letters dated June 23, 2020, and June 15, 2021, identified weaknesses in federal oversight including lack of clearly defined roles and responsibilities for various DOE offices to ensure there are no gaps in oversight related to weapon response development processes at Sandia National Laboratories, Los Alamos National Laboratory, and the Pantex Site. [15][16] NNSA has since taken actions to ensure these safety oversight responsibilities are clearly defined and any gaps are addressed. However, as part of its required effectiveness reviews, DOE should continue to evaluate whether other gaps exist and should improve the clarity of assigned responsibilities to assist in developing appropriate effectiveness evaluation criteria.

DOE requires “periodic” effectiveness assessments for all DOE offices (and CASs) to ensure that DOE is adequately performing its role as a safety regulator. However, DOE directives do not require a specific frequency for how often any of these periodic assessments must be performed. NNSA has a supplemental directive that requires CDNS assessments of every field office and the NA-51 headquarters office “every two years whenever possible, not to exceed three years.” Some DOE office procedures require performing self-assessments at a certain frequency. For example, NPO revised NPO Procedure 3.4.1.1, NPO Oversight Planning and Implementation Process, to fully integrate self-assessments into their integrated assessment schedule of the contractor. These include quarterly self-assessments as well as a comprehensive annual self-assessment. However, both CDNS and individual DOE offices can change these requirements at any time since they are not driven by DOE directives.

When requesting oversight data from each DOE office, the staff identified that some DOE offices, such as SRFO, EM-3.1, EM-LA, and NA-51 reported that they had not performed any self-assessments for certain years. In addition, some field offices, such as CBFO and NA-LA, could not provide documented CAS effectiveness assessments or CAS operational awareness activities for certain years. This observation illustrates the unlimited flexibility that “periodic” allows with regards to frequency.

DOE-EA needs to improve its frequency of DOE program office and field office effectiveness assessments. The staff review team analyzed the previous five years of EA-30 assessment reports and found no assessments of NA-51 or EM-3.1 offices. For site reviews, EA-30 typically prefers to review the contractor and DOE field office together while on-site. However, the staff review team noted a lack of documentation related to the DOE field offices in EA-30 assessment reports. Most of the EA-30 reports focused only on contractor deficiencies and were not clear whether the federal safety oversight was assessed at all. Upon discussion, the staff review team was able to verify that EA-30 site leads maintain field notes that contain additional information related to tracking DOE field office concerns. In addition, EA-30 had already self-identified that it could improve documenting field office scope in assessment reports.

CDNS performs formal biennial reviews of its field offices, but, until recently, CNS has not been performing formal effectiveness reviews of its field offices as required. CDNS is considering reducing its review frequency to triennial. Both CDNS and CNS recently completed reviews of NA-LA and EM-LA respectively. The staff review team was able to monitor these reviews and found them to be effective at identifying DOE oversight issues. The staff review team has a concern with these assessments related to timely and effective correction of identified issues from previous reports. This is discussed below in the section on safety issues management.

Some DOE safety oversight improvements were being made outside these formal office assessment processes and procedures. For example, in 2018 NNSA developed the NNSA Safety Roadmap (and subsequent revision in 2020), which analyzed ways NNSA could be more effective with its safety oversight. NNSA developed several initiatives to improve safety oversight effectiveness such as achieving an accredited technical qualification program across NNSA and developing a safety basis review team approach that improves DOE’s safety oversight effectiveness for reviewing and approving contractor safety bases. NPO developed an escalation process that improved the communication of issues between the DOE field office and contractor. CBFO has now instituted partnership meetings as part of their oversight activities. These new oversight approaches have resulted in a better understanding of contractor issues and resolving them in a more timely and effective manner. The purpose of conducting DOE oversight effectiveness assessments is to ensure that DOE makes needed improvements to the oversight approach. DOE may be making improvements not directly tied to a documented effectiveness review; however, this reduces the likelihood of their sustainability.

In summary, DOE is required to perform periodic effectiveness reviews of its safety oversight at every level. The staff review team believes that all assigned safety oversight responsibilities in the FRA (and any gaps in responsibilities) should be assessed at the frequency

necessary to ensure DOE oversight is effective. When contractor issues are identified, DOE oversight primarily focuses on ensuring the contractor corrects the issue in a timely manner. But as part of their required oversight effectiveness evaluations, DOE should also consider if ineffective safety oversight, e.g., gaps in the FRA, lack of clarity in the FRA, insufficient staffing, insufficient contract mechanisms, or insufficient review selection criteria allowed the contractor safety issue to develop in some way. Because the purpose of DOE oversight is to proactively identify and correct contractor issues in a timely manner, any failure to prevent significant or systemic contractor issues infers that the DOE oversight was ineffective in some way. DOE should consider this when developing oversight effectiveness criteria.

Staffing—DOE’s staffing plans and implementation needs improvement to ensure sufficient technical capability is applied to safety oversight activities. DOE has not clearly documented how its current staffing levels are sufficient to ensure effective oversight. DOE cannot effectively perform its required safety oversight responsibilities without comprehensively identifying and sustaining the staff needed to perform those responsibilities.

Staffing numbers are always fluid and must continuously be monitored. This review only provided a snapshot in time; however, the underlying issues persist. The staff was informed that there are additional staffing analysis documents with the DOE Office of the Chief Human Capital Officer that it did not have access to that may address some of these concerns. Several factors contributed to this observation.

First, DOE has not always performed both unconstrained and constrained full-time equivalent (FTE) cap staffing plans. The staff review team requested the previous five years of staffing plans and workforce analyses to evaluate how DOE ensured it had sufficient staffing. Some of the older staffing plans began with the constrained case, knowing that only so many FTE had been authorized for that DOE office. Constraining the analysis does not allow for determining true sufficient staffing needs. Recent staffing plans have corrected this and now allow for an unconstrained analysis. DOE should continue to ensure that DOE office managers use an unconstrained approach in determining their staffing needs, regardless of authorized staffing levels or budget constraints.

Second, in the staffing plans that the staff review team evaluated, DOE did not always document the basis of staffing “needs.” The staff review team believes that directly mapping staffing needs to the assigned oversight responsibilities in FRA documents is needed to ensure an office has sufficient staffing. If an office first assesses what oversight activities are needed to effectively implement each of its required oversight responsibilities, then it can better quantify the staff it needs to perform those activities. This includes both the total number of staff and the competencies needed to perform those oversight activities. Because the reviewed staffing analyses did not always align the two and provide the basis for staffing “needs,” it is not clear that sufficient staffing needs have been identified.

For example, during the Savannah River Site virtual public hearing on July 13, 2021, the Board inquired about whether an additional facility representative was needed for new construction activities at the surplus plutonium disposition project. The DOE-SR field office manager replied that they did not see an additional staffing need at the time because the

additional oversight is all within the same facility where the current facility representative performs oversight. He did not believe the additional construction oversight activities significantly increased the burden. The staff review team is aware that Appendix C of DOE-STD-1063, *Facility Representatives*, has a process to determine facility representative staffing needs, but the process requires a lot of qualitative analysis for determining certain inputs like activity levels. The expectation is that periodic effectiveness reviews of DOE oversight would eventually identify whether initial staffing needs analyses were inadequate. The staff review team also identified that the remainder of DOE oversight responsibilities do not have institutionalized processes in DOE technical standards for determining staffing needs like facility representatives.

The review identified a few good examples of linking the staffing need basis to performing specific oversight responsibilities to show as a best practice. For example, in NPO’s 2018 Workforce Analysis and Staffing Plan, NPO identified an additional staffing need for a fire protection SSO engineer. The staffing plan stated the basis for this need was:

This position provides safety system oversight at the Pantex Plant. A detailed staffing analysis, trends in safety system performance and resource capabilities identified this position as a critical need. The key emphasis of this position will be Fire Protection Systems. Fire Protection Systems at Pantex are vital safety class systems, and NPO has not had dedicated oversight from a safety system oversight professional. Further complicating the situation is that the maintenance, repair and upgrade of the fire protection systems has been problematic necessitating the need for dedicated federal oversight. The oversight of safety class fire protection systems is required to ensure that degraded components do not increase safety and program risks. [17]

Third, even if each DOE office staffing “needs” are sufficient to perform effective oversight, the staff review team found that none of the DOE offices had all their needs staffed during the time of the review. To the staff review team, this meant that none of the DOE offices had sufficient staffing. The most recent data collected in May of 2022 for facility representative and safety system oversight staffing needs is summarized in Table 2.

Table 2. Facility Representative and Safety System Oversight Staffing

DOE Office	Site	Facility Representative		Safety System Oversight	
		Filled	Qualified	Filled	Qualified
ORP	Hanford	56%	19%	See RL	See RL
RL	Hanford	75%	56%	83%	67%
NNSA	LANL	79%	21%	80%	60%
EM	LANL	50%	25%	N/A	N/A
NNSA	Y-12	83%	33%	100%	57%
EM	Oak Ridge	100%	46%	100%	100%
NNSA	Pantex	71%	29%	75%	25%
NNSA	SRS	100%	100%	100%	100%
EM	SRS	86%	62%	56%	33%

All DOE offices identified mitigation strategies for any time when onboard DOE staffing is less than what is needed. The staffing plans all included similar language stating that staffing mitigation strategies rely on using resources from other DOE headquarters and field offices, using support service contractors, relying more on contractor assurance system oversight, and having current federal staffing perform multiple oversight responsibilities.

- **Using resources from other DOE headquarters and field offices:** Staffing plans failed to specify how the previous oversight responsibilities for assisting staff will be performed. The plans only mention the concept of using staff from other offices on details, but not the specifics of how each oversight responsibility will be met. During review discussions, DOE stated that it attempts to prioritize more risk significant oversight responsibilities, such as facility representatives, over lesser risk significant oversight responsibilities. The staff could not find any documentation of how effectiveness reviews evaluate the displacement of certain oversight responsibilities for others.
- **Using support service contractors:** DOE has used support service contractors to supplement the federal workforce, but like the previous strategy, the specific oversight responsibilities that contractors are fulfilling are not always clearly defined in the staffing plans. The review notes that support service contractors are not required to meet the requirements in DOE O 426.1B, *DOE Federal Technical Capabilities*, because they are not federal employees. Thus, DOE must ensure that contractors have the necessary competencies when they are hired. DOE must also ensure that the contractors are not performing inherently governmental functions in any oversight activity they perform. GAO Report 19-608, *Support Service Contracts: NNSA Could Better Manage Potential Risks of Contractors Performing Inherently Governmental Functions*, still has open recommendations related to concerns over the use of contractors. The staff review team discussed this report with GAO staff. At the time of the review, DOE had a reduced reliance on support service contractors. However, it is important to highlight training differences and concerns related to performing inherently governmental functions to ensure DOE institutionalizes the appropriate measures for ensuring effective DOE safety oversight.
- **Relying more on contractor assurance system oversight:** If DOE can demonstrate that contractor assurance systems are effective, this can help mitigate the impacts of reduced federal oversight. However, as stated previously, there is a lack of documented CAS effectiveness assessments to justify this approach.
- The final mitigation strategy that DOE often mentioned and used in practice, is **having current federal staff perform multiple oversight responsibilities** at the same time. The staff review team believes this can increase oversight effectiveness if there are synergies between the various oversight responsibilities. For example, a DOE facility representative may also be able to perform certain SSO responsibilities if those systems are part of the facility they oversee. However, if additional responsibilities lack synergy or are simply too much for one person to perform

effectively, then this practice can mask insufficient staffing. This highlights the importance of performing periodic effectiveness assessments that are directly tied to assigned oversight responsibilities. If any ineffectiveness is identified, a contributing cause may be insufficient staffing to fulfill those responsibilities.

Fourth, assuming DOE has appropriately identified their staffing needs, some DOE offices have struggled to hire staff, train new staff in a timely manner, or retain staff to maintain staffing needs. Several contributors to this issue have persisted for a long time. DOE should look for ways to mitigate these contributing impacts similar to how it addressed many of them in responding to Board Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Programs*. Mitigation options include:

- **Hiring:** While not fully resolving staffing deficiencies, DOE has developed some hiring initiatives to help mitigate the concern. These include delegating direct hiring authority to DOE field office managers up to authorization levels and the NNSA Graduate Fellowship Program. However, some DOE offices such as CBFO, need additional solutions. DOE revised their hiring guidance in response to Recommendation 93-3 with new initiatives developed from input in the field. The staff review team discussed CBFO's recent hiring initiatives and believes input from the field is a must when determining effective, sustainable solutions. Other DOE field offices, including EM-LA and NA-LA, have similar challenges as discussed during their recent CDNS and CNS assessments.
- **Training:** For many DOE responsibilities, training and qualification can take up to 24 months. This is a known delay in having sufficient staffing able to perform all oversight responsibilities directly after hiring them. Some areas for potential improvements identified during the review were a lack of qualifying officials and mentors. During the Savannah River Site virtual public hearing on July 13, 2021, the Acting Assistant Secretary for the Office of Environmental Management stated, "There are specialties where the training within the Department takes an extended period of time, and so building up the cadre of people that you need in that area can be challenging. I think nuclear criticality safety is a good example of that. Another good example of that is our nuclear safety specialists, the folks who evaluate and review our documented safety analyses across the complex. That's another specialty that requires a bit of time to really train and develop. We have to monitor that. It's not a thing that you can go out and easily find." [18]
- **Retention:** All DOE staffing plans evaluated the percentage of their workforce that is retirement eligible. However, until recently, DOE would have to wait for the incumbent staff member to retire before hiring a replacement. The staff review team found that NNSA allowed for double encumbering positions for up to one month to help transition departing staff members. NNSA also authorized hiring 5 percent above authorization levels to help with turnover and attrition. DOE should solicit feedback from the field to determine what other incentives to consider for retaining employees once DOE has spent the time and investment in training them. This

applies to all DOE employees (not just retirement eligible ones), especially given the cost and delay to retrain a new person outside of DOE.

In summary, DOE's staffing plans and implementation needs improvement to ensure sufficient technical capability is applied to safety oversight activities. DOE has not clearly documented how its current staffing levels are sufficient to ensure effective safety oversight. In some areas, DOE has not directly linked staffing needs to the assigned oversight responsibilities to ensure an office has sufficient staffing. In addition, the staff review team identified barriers to hiring, training and retaining the necessary staff to complete safety oversight responsibilities.

Proactive Safety Oversight—DOE's approach for proactive safety oversight needs improvement to ensure safety issues are identified in a timely manner. For operating facilities, the mix and rigor of oversight activities is mostly expert-based with varying guidance. The lack of proactive safety oversight reduces DOE's ability to identify emerging issues in a timely manner. Over-reliance on reactive oversight in a low-frequency high consequence environment is not ideal. In addition, DOE cannot effectively adjust their safety oversight focus (i.e., perform risk-informed oversight) without proactively looking for safety issues. Some key contributors to this observation are:

- The concept of a **“baseline” level of oversight** is important and not always defined the same way at each DOE office. Some DOE offices say they “re-baseline” every year based on contractor performance in each functional area from the previous year. The staff review team uses the definition provided in Section 3.5.2 of DOE Guide 226.1-2A:

Baseline oversight is defined as the minimum level of oversight to be conducted, regardless of the contractor's performance. Baseline oversight should ensure the adequacy and effectiveness of contractor and field element performance with respect to safe operation and adherence to DOE requirements and contract provisions. [19]

- DOE directives do not require many oversight activities for operating facilities more than once every three years for some functional areas. This provides a very limited level of baseline oversight as a starting point. NNSA supplemental directives require assessments of safety management programs at least once every five years. The staff review team reviewed every site integrated assessment plan and believes that most of the planned oversight assessments would be considered supplemental or reactive oversight. This is because contractor performance is a contributing factor, even if minor, into the selection process for many of those planned assessments. The staff review team believes that supplemental and reactive oversight are important; however, these oversight activities often result when proactive oversight failed to identify issues at an earlier stage.
- Operational awareness activities are the cornerstone of DOE's proactive oversight but the frequency, mix, and rigor of selecting these activities is mostly expert-based. SRFO includes some operational awareness activities in its assessment plan including

topical areas and frequency. NPO does not include operational awareness activities in their plan citing the fluid nature of these activities. NPO, CBFO, and NA-LA procedures allow for managers to provide additional operational awareness guidance as necessary and do not require an approved plan. In some cases, operational awareness topical areas for consideration are outlined in site procedures. DOE-STD-1063 Table A-3 lists 30 different operational awareness activities for facility representatives to consider. Operational awareness activities are often used as part of CAS effectiveness reviews, but there is no minimum defined level of oversight for CAS.

Because the frequency, mix, and rigor can always change, it is difficult to determine whether DOE has a sufficient baseline level of proactive safety oversight to identify safety issues as early as possible. As discussed earlier, the safety function of DOE oversight is to proactively identify contractor issues and effectively resolve them in a timely manner. DOE oversight effectiveness assessments should periodically determine if DOE has the proper balance between proactive, supplemental, and reactive oversight. An evaluation criterion to consider would be to assess whether there were reasonable proactive oversight activities that could have precluded the need to perform reactive oversight.

- EA-30 does not have a well-defined baseline level of oversight in its planning process. EA Protocol 31-01, *Office of Nuclear Safety and Environmental Assessments Protocol for Site Leads*, describes a qualitative, expert-based approach for selecting topical areas for assessments. Appendix A of EA-31-01 lists examples of operational awareness information for site leads to continuously evaluate regardless if a formal assessment is selected. There are no prescriptive operational awareness requirements for site leads, but this provides some guidance for operational awareness expectations as a baseline. The process for selecting a formal assessment considers a variety of factors including the number of formal EA assessments conducted at the site in the last five years. The staff review team also noted that some EA-30 site leads are responsible for multiple sites. Each site lead can perform three to four assessments per year on average. The staff review team noted that some sites have gone a year or two without a formal EA assessment in the past, and some topical areas (e.g., fire protection) may not be selected for many years at a particular site. This is because the EA Protocol currently lists 20 topical areas for consideration meaning that some areas may not be a priority. EA-30 self-assessments of its oversight effectiveness should continue to evaluate what would be an indication that the frequency and rigor of oversight in these topical areas are not sufficient.

All DOE offices do an excellent job of risk-informing their oversight activities. The higher risk assessments are generally prioritized and are staffed first. However, without well-defined baseline oversight requirements, DOE may prioritize high-risk reactive and supplemental oversight activities to the detriment of proactive baseline oversight. DOE could better identify its staffing needs if DOE defined the baseline oversight activities needed to perform all its FRA responsibilities. In addition, DOE oversight effectiveness assessments should periodically

determine if DOE has the proper balance between proactive, supplemental, and reactive oversight.

Safety Issues Management—DOE does not have an effective safety issues management system. As a result, identified issues may not be fully resolved and similar issues can occur. DOE's issues management system needs to be improved to ensure timely and effective tracking, trending, and closure of issues. DOE had already self-identified these issues and is procuring new software tools to help mitigate these concerns. The staff team's findings include:

- EM-3.1 and NA-51 are planning to improve issue tracking systems based on their needs. EM 3.1 is currently relying on spreadsheet tracking while NA-51 uses various ad-hoc processes to capture and track issues as noted in the past two CDNS reviews. DOE-EA findings are tracked on a spreadsheet while deficiencies and other minor trends may be tracked in staff field notes. CBFO is transitioning to Devon Way software in hopes of improving several previously identified issues management concerns. NA-LA has transitioned away from ePegasys. Ineffective DOE tracking tools have contributed to the lack of timely and effective correction of safety issues.
- NPO conducted an oversight self-assessment and identified a management concern related to not addressing previously identified issues. Similar concerns were identified during the NA-LA CDNS review. CBFO recently worked through correcting a backlog of longstanding contractor issues. The staff review team believes a key contributor to the lack of timely and effective correction of identified safety issues is the lack of DOE "safety issue follow-up" as a planned oversight activity and the staffing to support those activities.
- CDNS biennial reviews have done a good job at identifying issues related to field office safety oversight. However, there are many examples of the safety issues management system not driving the needed corrective actions to preclude recurrence. For example, the 2009 CDNS assessment at NA-LA documented that there were substantial weaknesses in the site office, including the lack of formal processes, documented and controlled procedures, issues management, nuclear safety staffing, and safety oversight. These issues were corrected before the 2012 CDNS assessment. Shortly after this 2012 CDNS assessment, there was significant turnover at the lab such that the next CDNS review was not conducted until 2017. The 2017 CDNS Assessment Report documented substantial inadequacies in business processes and oversight formality like those found in the 2009 review. The 2020 CDNS report noted some improvement from 2017 but continued to highlight deficiencies in oversight procedures and their implementation, issues management, and staffing. It's important that the issues management system effectively resolves all identified issues in a timely manner.
- The WIPP Accident Investigation Board (AIB) cited inadequate CBFO staffing as a contributor to the 2014 release event. The AIB report recommended that 95 FTE were needed at CBFO. Subsequently, DOE performed another analysis and determined that 75 FTE would be sufficient. When the staff review team conducted their review of

CBFO, there were 28 vacancies out of 75 authorized federal positions. CBFO acknowledged that it had been operating understaffed for many years. While this is a staffing concern discussed earlier in the report, it also highlights the failures of the safety issues management system to drive the timely effective closure of an identified issue.

In summary, safety issues may not be fully resolved, or similar issues can occur, without an effective DOE process to track issues and identify trends. Many of the FRA oversight responsibilities and planned oversight activities focus on identifying issues. The staff review team believes that correcting previously identified safety issues should be emphasized as a safety oversight responsibility to ensure that there is sufficient staffing to evaluate whether safety issues are effectively resolved.

Conclusion. DOE should improve its safety oversight approach in the four safety areas outlined in this report. DOE's safety oversight approach relies on CASs being effective without a sufficient, documented federal assessment basis to justify that CASs are reliable and effective. For federal oversight responsibilities, there is also a lack of documented DOE effectiveness reviews to validate that federal safety oversight is effective. In addition, DOE has not clearly documented how its current staffing levels are sufficient to ensure effective oversight. Proactive baseline oversight for operating facilities is limited to a small set of required assessments in various DOE directives and relies heavily on expert-based operational awareness activities with no required frequency. DOE lacks timely and effective correction of previous safety issues and is currently replacing several of its safety issues management software tools to help assist this concern.

The concerns enumerated exist at multiple DOE offices across the complex, but not all the DOE offices had concerns in these areas, and the extent of concern was not the same among all DOE offices that the staff reviewed. Some best practices have been identified and shared in this report. For example, one field office has a systematic process for evaluating and leveraging CAS effectiveness and applying that information to other oversight functional areas. Also, some offices systematically link their basis for staffing needs to specific safety oversight responsibilities in their FRA document. Therefore, each DOE office should independently evaluate the applicability of each observation to its safety oversight responsibilities.

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