Written Reponse to DNFSB Lines of Inquiry
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DNFSB Public Meeting
Oversight of Complex, High-Hazard Nuclear Operations

1. Expectations of the senior Department leadership with respect to safety philosophy and safety management approach.

LOI 1.1, *What are your nuclear safety goals?*

Secretary of Energy Notice 35-91, *Nuclear Safety Policy*, established nuclear safety goals for DOE. The goals in this notice have not been updated or revised since its publication. The notice states:

> DOE has adopted two quantitative safety goals to limit the risks of fatalities associated with its nuclear operations. These goals are the same as those established for nuclear power plants by the Nuclear Regulatory Commission (NRC) and, like the NRC goals, should be viewed as aiming points for performance. The goals are:
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> > The risk to an average individual in the vicinity of a DOE nuclear facility for prompt fatalities that might result from accidents should not exceed one-tenth of one percent (0.1%) of the sum of prompt fatalities resulting from other accidents to which members of the population are generally exposed. For evaluation purposes, individuals are assumed to be located within one mile of the site boundary.
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> > The risk to the population in the area of a DOE nuclear facility for cancer fatalities that might result from operations should not exceed one-tenth of one percent (0.1%) of the sum of all cancer fatality risks resulting from all other causes. For evaluation purposes, individuals are assumed to be located within 10 miles of the site boundary.
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> In striving to reach these goals, DOE nuclear facilities and activities shall be designed, constructed, operated, and decommissioned with: a)appropriate barriers to prevent or minimize potential radioactive releases; b) engineered safety features to minimize potential releases; and, c) procedural controls to mitigate the effects of potential releases. These goals shall be addressed for both new and existing facilities. Proposed modifications to existing facilities to achieve these goals shall be prioritized along with other proposed modifications based on their safety significance. DOE shall pursue the evolution of additional potential safety goals for plant and co-located workers to support enhanced safe operations of its facilities.

DOE recognizes there are large uncertainties in the data and available methods for assessing risk levels, especially with respect to potential health effects from nuclear facility operations. Therefore, reasonable analyses based on available data using standardized approaches may be employed while more rigorous approaches and better data are developed.

DOE safety goals are aiming points and are not substitutes for compliance with DOE directives and nuclear safety-related rules.

The adoption of safety goals should not be construed as a requirement to conduct probabilistic risk assessments.

In practice, these safety goals are implemented through the development and implementation of safety bases that comply with Title 10 of the Code of Federal Regulation, Part 830, Subpart B, *Nuclear Safety Management*, and implementing directives. These directives promote as a practical goal that the results of a reasonably conservative calculation of the mitigated off-site radiological consequences of an accident at a nuclear facility should be in the rem-range; that is, a small fraction of the 25 rem evaluation guideline that is used as a basis for designating controls as 'safety class.' Quality requirements are established for the most significant controls, and basic requirements for safety systems such as fire protection are established. The Department employs multiple layers of controls, or barriers to release, of radiological material in its nuclear facilities, as well as supporting safety management programs, including emphasis on formality of operations and qualification of key personnel, to ensure that the established controls remain effective. These measures, in aggregate, provide a qualitative assurance that the goals established in SEN 35-91 are met.

***LOI 1.2**, What is your overarching nuclear safety strategy?*

The fundamental basis of NNSA's safety philosophy is that safety is integral to all the phases of work planning, execution, and control. Safety is not just a check in the box, but it is the way we do business. Our processes for assuring that safety is adequately addressed in all phases of work rely heavily upon our Integrated Safety Management program. The overarching nuclear safety strategy is to apply the principles of Integrated Safety Management to support a safety culture within the Department, while enforcing nuclear safety requirements as set forth in Departmental regulations and directives.

- The fundamental principles of Integrated Safety Management (ISM) remain the Department's guiding safety philosophy and safety management approach.
    - The principles are briefly stated as: 1) Line management responsibility for safety, 2) Competence commensurate with responsibility, 3) Clear roles and responsibilities, 4) Balanced Priorities, 5) Identification of standards and requirements, 6) Controls tailored for the hazards, and 7) Operations Authorization.
    - Along with the ISM principles are five ISM functions associated with conducting operations safely: 1) Plan the work, 2) Identify the hazards, 3) Identify and implement hazard controls, 4) Perform the work within the controls, and 5) Feedback and continuous improvement.

- These common-sense principles and functions remain the foundation of the Department's safety management philosophy and approach.
- The Department leadership expects our personnel and contractors to implement the principles and functions of ISM.

LOI 1.3, *What is your view of the functions, roles, and responsibilities of the Federal offices in the conduct of environment, safety, and health oversight with regard to defense nuclear facilities? How are personnel in positions with nuclear safety responsibilities held accountable for their actions?*

The safety functions, roles and responsibilities for Federal offices, including both site offices as well as at headquarters, are established in the Departmental and NNSA Functions, Responsibilities and Authorities Manuals (FRAMs). In general, our Management and Operating Contractors have primary responsibility for operating our facilities safely. They are held accountable through contract mechanisms such as incentives and earned fees, which generally include a subjective element that allows the Site Offices to address overall performance. Price Anderson enforcement actions are also available and can be effective in dealing with specific safety performance issues.

Site Offices have the primary responsibility for managing the contract and overseeing the contractor. I hold the Site Office managers accountable for that function through a variety of means including performance reviews as well as more visible formal assessments of Site Office performance in areas that affect nuclear safety.

Headquarters organizations such as the Office of Nuclear Safety and Operations (NA-17) provide oversight of the Site Offices to ensure that they have the understanding, resources and competence needed to execute their functions. Headquarters personnel are held accountable through personal interactions with me as well as through the performance appraisal process.

LOI 1.4, *How do you determine the appropriate balance between "mission" and "safety"? How do you monitor this balance?*

Defense Programs considers mission requirements and safety-related improvements in an integrated manner with other factors (such as security) to ensure that the mission is accomplished safely, effectively, and efficiently.

The Department has established nuclear safety requirements and goals that provide the end state that we intend to achieve for our operations. Our nuclear safety requirements define the acceptable safety envelope within which to accomplish our mission; thus, meeting our safety requirements is mission-enabling and is treated as such when balancing competing priorities. Our requirements include sufficient flexibility to allow us to adapt them to situations where a specified approach can not be met but no "undue risk" (meaning safety or environmental risk) would be created by following an alternative approach.

Although not requirements, meeting our safety goals takes us to an appropriate, long-term safety posture for our operations while we accomplish our essential mission. Meeting our safety goals

typically involves projects or activities that improve or upgrade existing capabilities, or build new facilities. These projects and activities are prioritized based on their importance to safety, and appropritately compete for resources against goals such as security upgrades and other mission-enhancing activities. Funding decisions are based on a careful evaluation of available resources and a strategy that maximizes our ability to accomplish our mission safetly, effectively, and efficiently.

Monitoring the balance between mission and safety occurs as part of our ongoing planning, programming and budgeting process, where the need for all projects, including safety-related projects, is evaluated and balanced against available resources.

LOI 1.5, *Dating back to SEN-35-91, it is DOE policy to establish a "safety culture." Are you committed to building and strengthening DOE's safety culture? If so, what are the keys to strengthening DOE's safety culture?*

Of course, we remain committed to building and strengthening DOE's safety culture.

The Department drives continuous improvement in safety culture by reinforcing the importance of the principles of Integrated Safety Management through multiple venues, including but not limited to:

- Building the principles and functions into our work processes
- Evaluating implementation as part of readiness and other reviews
- Annual ISM verification activities
- Annual workshops that share lessons learned (about 900 people attended the most recent of these in Knoxville)

The Department drives the safety culture through its emphasis on continuous improvement, by funding identified safety upgrades that exceed requirements, and by taking steps such as the recent publication and implementation of DOE Standard 1189, *Integration of Safety into the Design Process.* This standard, which is invoked as a requirement for significant nuclear facilities, represents an active step to ensure that safety is integrated throughout the design process.

LOI 1.6, *On January 16, 2009, Acting Deputy Secretary Kupfer issued a Memorandum that said taking ISM to the next level required building a "safety culture." What are your thoughts on the needs/benefits of building a safety culture?*

The safety programs and controls we put into place can only be effective in protecting workers and the public if we continue to nurture and grow a robust safety culture. A safety culture is needed to ensure that safety programs and controls are not seen by the people who implement them as burdensome add-ons that get in the way of the mission, but are accepted as essential elements of achieving the mission. A strong safety culture is essential to the effectiveness of our safety programs and controls.

LOI 1.7, *What do you consider to be your primary indicators of the state of safety and health programs at the Department's complex, high-hazard operations?*

We have instituted nuclear safety requirements that are designed to help ensure that our operations are conducted safely. Periodically, we assess the implementation of those requirements through both internal and external evaluations. These evaluations also assess the implementation of Integrated Safety Management and the extent to which the intent of the requirements are being met. The results of those evaluations are a key indicator of the state of safety of our operations. We also carefully monitor information from our contractors' assurance systems. We expect these assurance systems to provide us with transparent, reliable indications of the state of safety and health programs and each of our sites.

2. Assessment of the progress made in implementing Recommendation 2004-1.

LOI 2.1, *How do you ensure adequate resources are assigned to meeting commitments made in response to a Board Recommendation?*

When we review a recommendation and develop an implementation plan, one consideration is the resource impacts. However, for many commitments, the costs cannot be evaluated until an analysis is performed to determine what exactly must be accomplished to complete the commitment. This often cannot occur until the commitment is being implemented, particularly if a need is identified for an additional requirements document, or changes to existing requirements documents, during implementation. When there are significant costs associated with meeting a commitment, those costs are factored into our budgeting process and compete for funding along with other programmatic needs.

LOI 2.2, *Are there elements of the Implementation Plan for Recommendation 2004-1 that you would propose to change to adjust for present day circumstances? Discuss the rationale for any proposed changes.*

There are no elements of the 2004-1 Implementation Plan, as it currently exists, that we would change at this time, other than the due dates on some of the deliverables that have taken longer to complete than anticipated. The following is a summary of the status of the implementation plan deliverables.

- The Department has made significant progress in implementing the recommendation. Forty-seven of 53 commitments in the Implementation Plan have been completed. Of particular note is the establishment of effective Central Technical Authorities and their staffs, who provide a senior level of oversight for the Department's high hazard nuclear operations.
- Six Implementation Plan commitments remain open. Two relate to finalizing a Nuclear Safety Research and Development (NSR&D) Program with Defense Programs as the lead responsible organization. Two involve creating a DOE Safety Oversight Guide with HS-10 as the lead responsible organization. The remaining two commitments are effectiveness reviews of completion of commitments with HS-60 as the lead responsible organization.

- For the NSR&D commitments, the following status is provided:
  - A DOE-wide NSR&D Coordination Group and NNSA specific NSR&D Working Group have been established for DOE and NNSA NSR&D integration and coordination. The NNSA Working Group has annually reported all NSR&D in NNSA. Beyond work funded through programmatic activity, NNSA has provided $1M in FY09 and $1.5M will be available for FY10, with $4M planned for subsequent years. These resources will be used to support about ten NSR&D projects that could reduce the conservatism in authorization basis controls, which ultimately could result in cost savings. An example of this research is the air release fraction studies at Y12. Proposal solicitation is accomplished through the annual budgeting process. In addition, the Department invests $10M each year into a criticality safety program that includes criticality safety R&D.

  - In 2009, NNSA completed the first annual NSR&D National Forum, attended by many federal and contractor people across the DOE complex, to share results of recent NSR&D activities. Proceedings from this forum were published. Also, development began of a database that will promote coordination of and collaboration in ongoing and planned NSR&D work across DOE/NNSA and facilitate the dissemination of the results of NSR&D work.

  - Defense programs continues to press forward toward the completion of Commitment #7 to document that adequate processes and technical capabilities for the nuclear safety research function are in place and providing the basis for this declaration. Commitment #8 to document that the nuclear safety research function has been fully implemented and providing the basis for this declaration is due in February 2010. A draft response to both commitments has been prepared.

3. Application of the principles of Integrated Safety Management as the foundation for safety management approach.

LOI 3.1, *DOE and NNSA have been using Integrated Safety Management as the institutionally-endorsed and mandated safety management approach for nearly 15 years. What successes and flaws in the implementation of Integrated Safety Management have you observed? What actions have you taken or plan to take to reinforce successes? What actions have you taken or plan to take to learn from and correct flaws?*

We have continued to progress in establishing an ISM culture throughout the enterprise. Since 2005, there have been several successes:

- The establishment of a headquarters ISM system description and the strengthening of system descriptions at all the site offices;
- Capable oversight of federal functions in nuclear safety through the NNSA biennial reviews and the resultant improving trends from four (4) years of reviews;
- Maturing implementation of line management responsibilities for safety of our operations through Functions, Responsibilities and Authorities Manuals and attendant implementing processes, including a systematic process for delegation of safety responsibilities;

- Maturing implementation of training and qualification programs for personnel with safety related responsibilities at headquarters and site offices, including the Nuclear Executive Leadership Training (NELT) for senior managers;
- Maturing implementation of operations authorization by federal entities for approval activities involving readiness reviews, safety basis, and safety management programs.
- Defense Programs is in the process of verifying the ISM system and its implementation for the new M&O Contractor at Lawrence Livermore National Laboratory (LLNL).

We understand that there remains and always will remain opportunities to better integrate this culture at all levels. Some of the ongoing challenges to a fully integrated ISM culture include:

- Defense Programs Headquarters continues to implement DOE M 450.4-1.
    - The ISM effectiveness review performed at Defense Programs Headquarters in June 2009 determined that ISM needs improvement;
    - Site Office effectiveness reviews and declarations have not been performed in some cases nor reviewed by Defense Programs and forwarded to the Central Technical Authority (CTA); and
    - ISM Performance Objectives, Measures and Commitments have not been defined at the HQ level with flow down to Site Offices.
- The Office of Safety has recently assigned an ISM technical lead (October 2009) and an implementation plan to fully address ISM within Defense Programs Headquarters will be in place in January 2010.

Continuous improvement and application of lessons learned is essential for established work processes and requirements to maintain a safe work place. Examples include but are not limited to:

- The Pantex Plant continues to gain perspective on the appropriate level of detail to include in procedures for weapons dismantlement, learning that both too much and too little detail in our procedures can be problematic; the current procedures, while still not perfect, have adopted a much more balanced approach;
- Though we have made progress, the concept of being able to grade Operational Readiness Reviews, even though it has been successfully demonstrated (most recently at Building 334 at the LLNL) continues to be perceived by some as only appropriate for large, complicated startups and restarts. In addition to direct participation with site offices to executed graded ORRs, we have taken measures to expand the Readiness Assessment process to apply to some activities where compliance with requirements for Operational Readiness Reviews had historically been difficult to enforce. This and other process improvements have been captured in a new revision to the readiness order;
- DOE nuclear safety directives continue to improve and, though effective, DOE continues to look for means to present a systematic and consistent approach to nuclear safety management. Defense Programs has increased its focus on the maintenance and integration of safety requirements.

LOI 3.2, *Have you assessed the implementation of ISM system descriptions developed for the Federal offices, and do you find the implementation to be adequate?*

The seven (7) nuclear site offices and Defense Programs Headquarters have been assessed through a biennial review process that addresses many functional areas, including ISM. All of the federal offices have also accomplished self-assessments in the ISM functional area. Site Offices provide oversight of the Management and Operating (M&O) contractors' ISM system descriptions. In all cases, issues have been identified and corrective actions have been initiated and are being tracked to closure. We consider our implementation of ISM at our federal offices to be adequate, but, as evidenced in our numerous assessment and self-assessment reports in this area, we are always striving for continuous improvement.

LOI 3.3, *What changes to ISM might bring about improvements in safety?*

The principles and functions of ISM are fundamentally sound. For the NNSA enterprise, further improvements in safety will come from continuous improvement in safety culture and the attendant improvements in implementation as the principles and functions become more deeply ingrained.

One of the most effective means to foster continuous improvement is the DOE ISM Champion concept as discussed in response to LOI 3.5.

LOI 3.4, *Do you view ISM as a hindrance or an advantage?*

ISM is clearly an advantage in our goal to perform work safely.

LOI 3.5, *Provide your view of how of the ISM Champions, which has been in existence for almost two years, is working and how the Deputy Secretary is using this group in furtherance of reinvigorating the whole Integrated Safety Management system in the Complex. Describe what steps are being taken to increase its effectiveness.*

ISM Champions actively work to establish areas of emphasis and priorities for ISM across the department. This is accomplished through Departmental outreach activities including the annual ISM Workshop; quarterly calls with ISM Champions; and interfaces with the Energy Facilities Contractor Group (EFCOG). Examples of these efforts are outlined below:

- Improving communications and sharing between DOE organizations regarding ISM implementation,

- Early involvement and input on development and revision of DOE Directives and Standards related to safety, and

- Promoting and facilitating continued learning about safety management from both inside and outside the DOE community. This is accomplished through various outreach activities such as working with the Institute for Nuclear Power Operations (INPO), the commercial sector, and state and federal entities to share good practices and state-of-the-art tools to improve performance and identify safety management programs and practices that are exemplary and worthy of benchmarking.

The annual ISM workshop has been an excellent forum for DOE, M&O contractors and external stakeholders to share expectations, guidance, disseminate best practices/lessons learned, develop work products, and continue to promote ISM and a robust safety culture. Some examples of initiatives that the ISM Champions helped shape for the 2009 ISM Workshop was the importance of assimilating several thousand new American Reinvestment and Recovery Act (ARRA) workers into DOE's safety culture, and the importance of Employee Wellness. Additional tracks at the workshop included activity level work planning and control, human performance improvement, and safety culture. All of these areas were strongly endorsed by the Deputy Secretary.

Defense Programs is a big supporter of the institutional memory of ISM and nuclear safety by the senior leaders who participate as trainers and students in the Nuclear Executive Leadership Training (NELT) course. NNSA senior leadership (Administrator, Central Technical Authority, Chief Defense Nuclear Safety and ES&H Senior Advisor) have been both supportive and engaged with NNSA ISM Champions to further improve ISM implementation across the Nuclear Security Enterprise.

4. Implementation of contractor assurance models and the appropriate level of Departmental oversight for these activities.

LOI 4.1, *Describe how the management system known as the Line Oversight and Contractor Self Assurance System is proactive in identifying safety issues; can you cite examples where LOCAS has been particularly effective in this regard?*

We expect each of our contractors to develop assurance systems that effectively monitor safety performance and drive continuous improvement in a manner that ensures the contractor is meeting contract requirements. These systems are expected to identify any existing issues and to monitor for performance problems that may indicate emerging issues on a proactive basis. Along with these assurance systems, we expect to tailor our federal oversight processes in a way that allows us to hold our contractors accountable for their performance while not minimizing our own responsibility for the safety of operations.

Defense Programs is currently evaluating the status of each of our contractor's assurance systems. However, we believe the increased emphasis on contractor accountability and responsibility is already contributing to improved performance at a number of our sites, including Pantex and Lawrence Livermore National Laboratory.

LOI 4.2, *What is the expectation for DOE and NNSA contractors to establish the balance between mission and safety?*

See LOI 1.4.

LOI 4.3, *Is it appropriate to create performance incentives that are particular to resolving safety issues?*

The use of performance incentives for our site management and operating contractors to improve safety performance is a key tool. What is important is what gets paid attention, and performance incentives draw attention to areas that are significant. Performance Incentives also allow the DOE to focus attention on critical issues and ensure action is taken in those areas.

LOI 4.4, *Are lessons learned from NNSA Site Office actions to correct contractor performance deficiencies as well as examples of best practices shared across NNSA and DOE program offices?*

NNSA has incorporated lessons learned and best practices in a number of different ways, including:

- NNSA is actively involved in the DOE Corporate Operating Experience (OPEX) Program. The Office of Safety recently assigned an OPEX Coordinator and developed an OPEX program procedure to enhance our ability to share and promote Lessons Learned within Defense Programs;
- Technical "communities of practice" are being promoted within Defense Programs to maintain operational awareness and share lessons learned and best practices across the Nuclear Security Enterprise (NSE). These technical "communities of practice" are led by NNSA Headquarters' subject matter experts, and include criticality safety, fire protection systems and programs, nuclear safety basis, integration of safety in design, nuclear quality assurance, startup and restart of nuclear facilities, integrated safety management and work control, explosives safety, and radiation protection;
- NNSA has embraced Human Performance Improvement (HPI) as an effective tool for reducing human error in high risk activities. HPI provides the first-line supervisor the opportunity to identify error likely situations and error-precursors as well as understand elements of an organization's culture which can adversely influence worker performance and behavior. Defense Programs established a working group to share lessons learned and best practices for implementing human performance improvement initiatives across NNSA sites in February 2009. The working group membership consists of NNSA and contractor personnel who are familiar with HPI implementation at their site. The HPI Working Group meets quarterly, and is expected to provide a report in the Fall of 2010; and
- As a result of significant construction problems at the Highly Enriched Uranium Facility (HEUMF) project, the Y-12 Site Office developed lessons learned, shared them with the NSE, and performed a workshop at the Los Alamos National Laboratory with Federal Project Directors from across the NSE.

5. Maintenance of functions, authorities, and responsibilities for personnel with key safety management roles during organizational change.

LOI 5.1, *Have the minimum necessary levels of dedicated staff support for key safety functions, such as the Central Technical Authorities, Chief of Nuclear Safety, Chief of Defense Nuclear Safety, and line management oversight programs been defined. Are they at this staffing level? If not, when will the minimum necessary level of dedicated staff be achieved?*

Roles and responsibilities for nuclear safety are crucial to all the preceding activities that we have discussed. Without the minimum staffing levels for key safety functions such as Central Technical Authority and line management oversight programs, we will not be able to effectively manage these safety programs. We are in the process of both establishing and maintaining these critical staffing requirements. The NNSA Central Technical Authority (CTA) is supported for nuclear safety by the office of the Chief of Defense Nuclear Safety (CDNS). The NNSA Administrator is currently acting as the CTA until a Principal Deputy Administrator is appointed and confirmed.

- When the NNSA CTA function was declared to be fully implemented, the CDNS had 8 technical staff positions. The CDNS is currently authorized eight excepted service positions, of which four are currently filled, and two are expected to be filled within the next few months. Full staffing will be restored in 2010.
- In the interim, the CDNS is relying on matrix support from the Office of Safety in Defense Programs, as well as support from the NNSA Service Center, to support essential functions such as review of exemption requests, implementation of safety in design and construction, and development/dissemination of expectations and guidance.
- All essential CDNS and CTA functions are being accomplished, however, full functionality depends upon completion of impending hiring actions.

Line Management Oversight at the Headquarters level is primarily the responsibility of the Office of Safety (NA-171) within the Office of Nuclear Safety and Operations (NA-17). The Office is currently authorized ten technical positions (including the Office Director), eight of whom are on board. Efforts to hire the open positions are underway. This staffing level is supplemented by 4 detailees from the military: 3 nuclear navy officers and one health physicist from the Air Force. The Office is also supported as necessary by detailees from Site Offices and detailees / task support from the Service Center. Although this staffing level is less than envisioned when the Office of Safety was created, experience during the past year has indicated that the current level, while not ideal, is adequate to support the most critical line management oversight functions.

LOI 5.2, *When reorganization is contemplated, is there a review process to ensure that critical safety functions, as defined in DOE Directives, are properly preserved and that continuity of the functions is ensured?*

It is incumbent upon the personnel leading the planned reorganization to evaluate the responsibilities of the organization and to ensure that the organization is aligned and resourced to meet those responsibilities.

As part of the Defense Programs reorganization in 2008, the mission and function statements of the various offices were carefully evaluated to ensure that all critical functions of the organization were properly preserved. In addition, Defense Programs completed a self-assessment earlier this year to evaluate how well critical safety functions are being executed under the new organization.

6. Actions taken to stimulate continuous safety improvement.

LOI 6.1, *Does DOE/NNSA line management proactively seek worker involvement to participate in continuous safety improvement?*

DOE/NNSA line management proactively seeks worker involvement in continuous safety improvement. DOE/NNSA line management personnel have embraced efforts such as Human Performance Improvement initiatives that rely heavily on worker involvement and participation.

LOI 6.2, *There continue to be large uncertainties in the data and available methods for assessing risk levels especially with respect to potential health effects from nuclear facility operations. What efforts are underway to promote more rigorous approaches with better data to reduce these known uncertainties?*

On November 3rd, the Secretary forwarded to the board the DOE's 'Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 2009-1, *Risk Assessment Methodologies at Defense Nuclear Facilities*.' In this plan, a set of activities are described that address the Board's recommendations for improving the Department's quantitative risk assessment methodologies.

LOI 6.3, *How is continuous safety improvement encouraged by senior managers in carrying out DOE and NNSA's missions?*

There are a variety of ways that senior managers encourage continuous improvement in nuclear safety. NNSA senior leadership disseminates safety information through quarterly Technical Bulletins, and our senior managers direct self assessments to drive continuous improvement in safety. Through the Biennial Review process, senior managers evaluate site performance and take any necessary actions to improve performance in any areas where weaknesses are noted. Specific actions have been taken to address site performance on at least two occasions in the last cycle. Site managers also share lessons learned through the monthly site office managers meeting. This meeting provides a venue for discussion of best practices, events, and lessons learned. The Office of Safety routinely provides presentations at the meetings to focus attention on and drive improvements in safety performance.