

5.1.2 Providing Effective Federal Oversight

Issue

The Department must provide effective federal safety oversight to ensure it fulfills safety responsibilities at all levels of the Department.

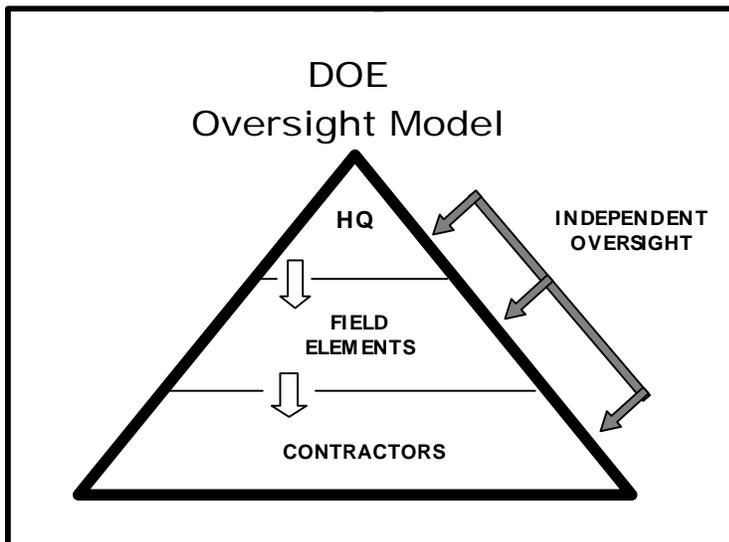
Basis

DOE officials may delegate safety authorities. These delegations do not relieve the delegating officials of their responsibilities for safety. Fulfilling the original safety responsibilities demands that delegations of authority and delegated work must be reviewed to ensure that it is being done consistent with expectations. In recent years, the consistency and rigor of the Department's line management oversight processes have declined. The Department's Oversight Policy, P 450.5, has not been fully implemented throughout the DOE organization. In particular, line oversight by DOE program offices at headquarters has not been well defined and implemented to ensure that field office safety functions are being effectively performed. As a general principle, multiple levels of oversight provide a degree of redundancy that is necessary for safety in highly complex, high-hazard operations.

Resolution Approach

The Department's oversight model is based on four tiers:

- Contractors
- DOE field elements
- DOE Headquarters line management organizations
- Independent Oversight



Headquarters line management oversight is focused on the DOE field elements and also looks at contractor activities to evaluate the implementation of HQ expectations and the effectiveness of field element line management oversight. Field element oversight is focused on Contractors. Independent oversight looks at all levels. Self-assessments are done at each level. The CTAs will maintain awareness of operational activities and conditions that affect nuclear safety and, as executives within the line

management chain, will work to continually strengthen and improve the line management's safety oversight capability and performance. This awareness will be maintained through such activities as monitoring applicable reports and performance metrics, reviewing various site-specific and complex-wide documents, technical discussions, and occasional site visits.

Key principles for effective oversight include:

- DOE Line oversight programs include operational awareness by the facility representatives and safety system oversight personnel, periodic safety oversight assessments, for-cause reviews, self-assessments, and monitoring and evaluation of operational occurrences, performance measures, and other operational data and information.
- Oversight programs should clearly define areas for periodic safety oversight assessments.
- Periodic safety oversight assessments should be performed using Criteria and Review Approach Documents (CRADs) based on clearly defined performance objectives, derived from DOE directives, standards, and expectations.
- Oversight should be performed by personnel who have demonstrated technical capability in both technical areas and oversight methods.
- A base level of oversight and minimum periodicity should be defined for each oversight review area; oversight can increase with poor performance, but cannot reduce below the base level and minimum periodicity.
- Oversight programs should consider the level of hazard involved, and provide increased focus and attention on high-hazard, nuclear operations.
- Redundancy in oversight is necessary and appropriate for operations that can result in high-consequence accidents.
- Oversight findings should be reviewed for accuracy, addressed by corrective action plans, tracked to completion, and verified to be effectively resolved.

Independent Oversight is performed by DOE organizations that do not have line management responsibility for the activities being reviewed. Independent oversight performance evaluations provide an independent perspective on the effectiveness of DOE line management and contractors in ensuring that HQ and site operations are performed safely, securely, and in compliance with applicable requirements. OA performs most of the Department's independent safety oversight reviews under the direct authority of the Office of the Secretary of Energy with results provided to DOE line management and other interested parties.

DOE Policy 226.1, "DOE Oversight," has been developed and is expected to be approved for use in June 2005. It identifies terminology, general policy, and attributes of effective oversight. The Policy 226.1 is consistent with this Implementation Plan, Revision 1, and no immediate changes to this Policy are needed. The Department expects to revisit the Policy after two to three years of implementation experience to make any beneficial clarifications, expansions, or other changes.

The Department is in the process of responding to comments to draft DOE Order 226.1, "Implementation of DOE Oversight Policy," to ensure that program office comments are properly incorporated. These directives will provide the foundation for oversight of a broad range of activities including environment, safety, and health; safeguards and security; cyber security;

emergency management; and other disciplines. They are being developed and will be maintained in accordance with the Department's directive process, which allows all programs to provide review and concurrence. Many programs will be involved in developing this directive: (1) EH will have primary responsibility for safety policy; (2) the Chief Information Officer will be responsible for cyber security policy, (3) the Office of Security and Safety Performance Assurance will be responsible for safeguards and security policy, and (4) NNSA will be responsible for emergency management policy. Due to the number of offices involved, OA-1 will serve as the Office of Primary Interest for these directives.

With publication of the new DOE Order on Oversight, the previous DOE Line Management Oversight Policy 450.5 will be cancelled. This is based on the results of a cross-walk that showed where the critical elements of DOE Policy 450.5 would be continued in DOE Policy and Order 226.

Additional requirements for safety oversight are being developed as part of the 2004-1 implementation plan. The Department will develop a new DOE Safety Oversight Manual to provide expectations for conducting periodic oversight assessments of nuclear operations. If no additional requirements are needed beyond those contained in DOE Order 226, the Department will consider making the Safety Oversight Manual into a handbook. The Manual will formalize oversight expectations and will include the following:

- Establish the set of review areas for conducting periodic safety oversight assessments
- Define the purpose, scope, and requirements for each review area
- Establish the expectations for developing a safety oversight assessment plan that defines the following
 - Minimum review periodicity for a core set of review areas and a process for increasing the review frequency based on safety performance
 - Guidelines for selecting additional discretionary review areas to be included in the safety oversight assessment plan such as availability and results of previous assessment information
 - Expectations for planning, conducting, and documenting periodic assessments including the requirement to use a CRAD for conducting each scheduled assessment
 - Expectations for categorizing assessment findings, developing and tracking corrective actions to closure, and verifying effectiveness of finding resolutions
 - Expectations for periodically updating and revising the safety oversight assessment plan based on site specific performance trends or external significant operational experience information
- Establish expectations for ensuring an integrated approach to oversight including the evaluation of the effectiveness of ISM during each review area assessment and a balanced emphasis on performance and compliance
- Establish expectations for developing and executing a Headquarters review/interface process
- Establish performance metrics for measuring the effectiveness of periodic oversight assessments, such as resolution of oversight findings.

The Safety Oversight Manual will include an appendix of standard CRADs for the core set of review areas. These standard CRADs are for use by DOE Headquarters and field elements to provide for consistent implementation and effectiveness of periodic safety oversight assessments. These CRADs are intended to be tailored as appropriate based on the specific scope of the review,

the applicability to the site/office, and any specific contractual requirements. The CRAD for a specific review area will include:

- Performance objective, acceptance criteria, and approach for assuring that the program requirements have been accurately translated into a program description document and/or procedures;
- Performance objective, acceptance criteria, and approach for assuring that the program implementation is consistent with expectations laid out in the program description documents; and
- Performance objective, acceptance criteria, and approach for assuring that DOE site and headquarters elements are providing adequate oversight.

Each individual performance objective will include acceptance criteria for evaluating the effectiveness of the applicable ISM guiding principles for the review area. This will help ensure that the assessment results include an evaluation of the effectiveness of the integration of various programs within the applicable contractor or DOE ISM systems description.

The Department began development of the CRADs by reviewing and evaluating various historical methods for establishing a complete list of safety oversight review areas, such as Board Technical Report 5, the Safety/Requirements Identification Documents functional areas, the Nuclear Regulatory Commission’s Inspection and Enforcement Manual, and the Board’s safety orders of interest. This evaluation was completed and resulted in the identification of a comprehensive set of review areas that address all aspects of safety to the public, worker, and environment. The review areas will be categorized as functional areas with topical areas as needed within each functional area. The functional areas will be organized in a logical manner to ensure effective integration within the review areas.

The CRADs associated with these review areas were divided into three groups to facilitate their development.

<p style="text-align: center;">CRADS TO BE DEVELOPED FOR THE NUCLEAR SAFETY OVERSIGHT MANUAL</p>

<p><u>GROUP A CRADs</u></p>

- | |
|--|
| <ul style="list-style-type: none">• Integrated Safety Management, including: annual ISM system review and ISM description update; effectiveness of ISM continuing core expectation implementation; identification and flow-down of requirements including safety management Functions, Responsibilities, and Authorities; feedback and improvement mechanisms including Occurrence Reporting, issues management, corrective action program, and Operating Experience program; and activity level work planning and control.• Nuclear Safety Management Rule requirements, including development, review, approval, and implementation of documented safety analyses, technical safety requirements, and un-reviewed safety question programs.• Nuclear Facility Safety Design, including identification, review and approval of facility and |
|--|

system design requirements and integration with the development and approval of the preliminary documented safety analysis and integration with project critical decisions.

- Fire Protection Program
- Criticality Safety Program
- Readiness Review Program
- Nuclear Explosive Safety Program
- On-site Packaging and Transportation Program

GROUP B CRADs

- Quality Assurance Program, including review and approval of QA program plans, and implementation of QA program elements.
- Radiation Protection Program
- System Engineering, including Contractor Cognizant System Engineer Program, Configuration Management Process, Safety System Operability, Safety System Modification Design requirement development, review and approval
- Maintenance Program, including review and approval of the maintenance implementation plan and additional topical areas for selected elements of a maintenance program.
- Conduct of Operations Program, including review and approval of conduct of operations applicability matrix, and additional topical areas for selected elements of a conduct of operations program.
- Training and Qualification Program, including implementation of nuclear facility training program for contractor personnel and implementation of Technical Qualification Program requirements for federal personnel, and implementation of Facility Representative and Safety System Oversight Program requirements (for DOE only)
- Emergency Management Program, including implementation of Accident Response Group and Radiological Assistance Program
- Radioactive Waste Management Program
- Nuclear Material Management

GROUP C CRADs

- Worker Safety and Health Program, including Occupational Exposure and Employee Concerns Programs, and topical areas such as electrical safety, construction safety, explosive safety, firearms safety, chemical safety, etc.
- Decontamination and Decommissioning Activities
- Environmental Protection/Restoration Activities
- Safeguards and Security Interface with Safety

Finalization of the DOE Oversight Manual will not delay issuance and use of the oversight CRADs. These will be issued for use and comment as soon as they are useful to the organizations performing oversight. Additionally, as part of feedback and improvement, existing lines of inquiry and other available review tools for each functional/topical area will be collected from the field following

completed reviews. These checklists and lines of inquiry will be validated and provided as guidance in developing and tailoring specific functional/topical area CRADs.

Deliverables/Milestones

Commitment 4: Issue DOE Policy and Order on Oversight.

Lead Responsibility: OA-1

Deliverable A: DOE Policy 226.1 on Oversight, approved and issued by the Secretary

Due Date A: June 2005

Deliverable B: DOE Order 226.1 on Oversight, approved and issued by the Secretary

Due Date B: June 2005

Commitment 5: Issue DOE Safety Oversight Manual.

Lead Responsibility: EH-1

Deliverable A: Draft DOE Safety Oversight Manual, including CRADs, ready for Board review and comment.

Due Date A: July 2006

Deliverable B: Approved DOE Safety Oversight Manual

Due Date B: Three months after draft Manual is provided for Board review and comment (per commitment 5A). [September 2006]

Integration with ISM system

This topic is clearly focused on improving consistency and completeness of implementation of ISM Core Function #5 – Feedback and Improvement.