

### ***5.2.2 Comprehensive Operating Experience Program***

#### **Issue**

The Department's comprehensive operating experience program needs to be upgraded to ensure systematic, timely attention to identify, evaluate, and implement applicable lessons from both internal and external events.

#### **Basis**

The need for an effective comprehensive operating experience program is one of the key lessons from both the Columbia and the Davis-Besse events. The Board's Recommendation 2004-1 and other feedback from several sources within the Department have led to the conclusion that the Department needs to make substantial improvement in this area. Effective safety cultures learn from experience, regardless of whether the experience is their own or that of others. A strong questioning attitude and the ability to learn from experience are attributes consistently evident in HROs. These organizations are learning organizations, which have implemented systems and processes to facilitate continuous learning and continuous improvement.

### Resolution Approach

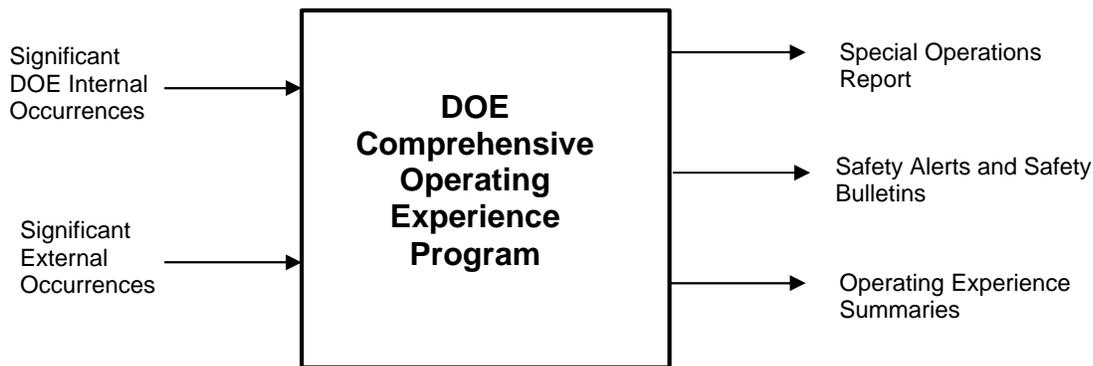
To resolve this issue, the Department will enhance its comprehensive operating experience program to include key elements used in the commercial nuclear industry's operating experience program, established and run by the Institute of Nuclear Power Operations (INPO). The Department's existing program is defined by DOE-STD-7501-99, *The DOE Corporate Lessons Learned Programs*. This program will be significantly upgraded and necessary requirements will be added to the directives system. This program is one of many elements supporting the "feedback and improvement" function of the Department's ISM system.

The program will be modeled after the INPO Significant Event Evaluation – Information Network (SEE-IN) Program. The DOE Operating Experience Program will be comprised of four levels of operating experience with corresponding action

1. Special Operations Report – issued by the Deputy Secretary to inform the DOE complex of the most significant events or trends of concern to management and require senior management action to verify that performance expectations are met.
2. Safety Alert – issued by the Assistant Secretary for EH to inform the DOE complex (or affected sites) of a safety issue that can adversely affect operations. Examples include an immediate conduct of operations problem, suspect/counterfeit parts, or defective items that require near-term action and management response. A Safety Alert also requires feedback to EH from all DOE sites whether or not they found the problem.
3. Safety Bulletins – issued by the Assistant Secretary for EH when analysis of operating experience data shows a trend that warrants senior Headquarters and Field Manager attention. Safety Bulletins recommend specific corrective actions.
4. Operating Experience Summaries – biweekly (every 2 weeks) publications targeted to first-tier supervisors, work planners, and crafts personnel that contain DOE-wide occurrence information and lessons-learned from which sites can benefit. These summaries include substantive analysis of reported events, root and contributing causes, similar events, and corrective actions.

The INPO operating experience program is a cornerstone of the commercial nuclear industry's approach for learning from experience. INPO sends out noteworthy operating experience, sorted into two levels of importance. The more important items require responses describing review and actions taken. The less important items still require review and action, but do not require submittal. Regardless of importance level, when no action is taken, organizations are required to describe and document why no actions are applicable or necessary. Implementation of the operating experience program is reviewed annually to ensure that sites are performing adequate reviews and taking appropriate corrective actions as warranted. EH will analyze and identify those operating experiences and safety issues that need attention, and identify the level of importance/action, with the concurrence of line management representatives from ESE and NNSA. Program offices and field elements will be responsible for verifying implementation for all levels of operating experience reports through line management oversight. EH will provide feedback to NNSA and the

ESE program officers on program level implementation using appropriate protocols established in the Operating Experience program directives. EH will perform annual self-assessment reviews on the effectiveness of its program to guide ongoing program improvement.



The addition of the INPO-like elements to the Department’s existing lessons learned/operating experience program will enhance the Department’s operating experience program. Once fully established, the Department’s comprehensive operating experience program will accomplish the following functions:

- Increase integration and collective analysis of the results of various feedback systems to identify adverse trends or areas where increased attention is needed
- Identify and review internal occurrences, accidents, and other events of interest
- Identify and review external events of interest
- Determine the level of Department response appropriate for each occurrence
- Promote general awareness of operating experiences through various regular communications vehicles
- Require action on the part of line management in response to certain occurrences; action may include review, analysis, identification and implementation of corrective actions. Depending on the severity of the operating experience, actions will be taken at the local level, and subject to later reporting, verification and oversight.
- Provide briefings and training sessions to promote general awareness and valuing of operating experience, and to promote understanding and actions on specific high-profile operating events
- Maintain a searchable lessons learned database
- Perform annual self-assessments of the effectiveness of the operating experience program, including benchmarking of other programs, and solicitation of feedback from users, to continue to improve program effectiveness

The Department’s Comprehensive Operating Experience Program will include all of these attributes and issue appropriate Department requirements and guidance.

The Department will also initiate annual site training sessions on operating experience. Implementation will be verified periodically as part of ongoing line oversight reviews, as described

in Section 5.1.2. The Department will develop specific CRADs for oversight of field element Operating Experience Programs to review analysis of applicability of operating experience information, identification of response actions, and follow-on completion and effectiveness reviews of these actions. These CRADs will be included in the Safety Oversight Manual.

Deliverables/Milestones

**Commitment 18: Develop Comprehensive DOE Operating Experience Program.**

Lead Responsibility: EH-1

Deliverable: DOE Directive on Operating Experience, approved and issued by the Deputy Secretary, along with implementation direction and a schedule to complete implementation.

Due Date: January 2006

**Commitment 19: Demonstrate Performance of DOE Operating Experience Program.**

Lead Responsibility: Applicable Program Secretarial Officers and Field Element Managers

Deliverable: Line oversight review reports on the implementation of the operating experience program at the line program's sites.

Due Date: Eighteen months after issuance of the DOE directive on Operating Experience, per Commitment 18. [July 2007]

Integration with ISM system

This topic is clearly focused on improving consistency and completeness of implementation of ISM Core Function #5 – Feedback and Improvement. Operating experience is one form of feedback available to improve performance. The organization must act effectively to turn feedback into long-term performance improvement.