

SUBJECT: DOE CORPORATE OPERATING EXPERIENCE PROGRAM

1. **PURPOSE.**

- a. To institute a Department of Energy (DOE) wide program for the management of operating experience complex-wide to prevent adverse operating incidents and facilitate the sharing of good work practices among DOE sites, while enabling tailored local operating experience programs based on the nature of work, hazards, and organizational complexities. Operating experiences can be found in all disciplines.
- b. To provide the systematic review, identification, collection, screening, evaluation, and dissemination of operating experience from U.S. and foreign government agencies and industry, professional societies, trade associations, national academies, universities, and DOE and its contractors.
- c. To define the DOE Corporate Operating Experience Program so that it can be integrated into major management programs—reinforcing the core functions and guiding principles of DOE’s Integrated Safety Management System (ISMS)—and enhance mission accomplishment, quality assurance, safety and reliability.

2. **CANCELLATION.** DOE O 210.2, *DOE Corporate Operating Experience Program*, dated 6-12-06.

Cancellation of a directive does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with the directive. Contractor Requirements Documents (CRDs) that have been incorporated into a contract remain in effect throughout the term of the contract unless and until the contract or regulatory commitment is modified to either eliminate requirements that are no longer applicable or substitute a new set of requirements.

3. **APPLICABILITY.**

- a. **Departmental Applicability.** Except for the exemptions in paragraph 3c, the provisions of this Order apply to all Departmental elements.

The National Nuclear Security Administration (NNSA) Administrator will ensure that NNSA employees comply with their respective responsibilities under this Order. Nothing in this directive will be construed to interfere with the NNSA Administrator’s authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary.

- b. **DOE Contractors.** Except for the equivalencies/exemptions in paragraph 3.c. the Contractor Requirements Document (CRD), Attachment 1, sets forth

requirements of this Order that will apply to contracts that include the CRD. The CRD must be included in contracts for the operation, management, maintenance, construction, demolition, or remediation of a DOE facility.

- c. Equivalencies/Exemptions. Equivalencies and exemptions to this Order are processed in accordance with DOE O 251.1C, *Departmental Directives Program*.
 - (1) Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at Title 50 United States Code (USC) sections 2406 and 2511 and to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this Directive for activities under the Director's cognizance, as deemed appropriate.
 - (2) Exemption. Consistent with Secretarial Delegation Order Number 00-033.00B to the Administrator and Chief Executive Officer, Bonneville Power Administration (BPA), this Order does not apply to BPA.

4. REQUIREMENTS.

In order to prevent adverse operating incidents, DOE managers and employees are expected to share and use good practices and lessons learned from operating experience.

- a. Departmental Elements, including Headquarters and Field Elements, must develop and implement an Operating Experience (OE) Program and identify and designate an OE Program Coordinator. The OE Program will use a graded approach when addressing the applicability of the following requirements and the basis for this approach must be documented based upon the review and analysis of the hazards and risks for the program and its operational activities.
- b. Each organization must submit lessons learned from operating experience to the DOE Corporate Lessons Learned Database when both (1) the operating experience has relevance to other DOE facilities, sites, or programs; and (2) the information has the potential to help avoid adverse operating incidents, for performance improvements, or for cost savings.
- c. The DOE Corporate Operating Experience Program has the following requirements:
 - (1) A formal process must be established to review and evaluate operating experience from DOE and related government or industry programs, technologies and facilities. Internal sources of operating experience are the DOE Corporate Operating Experience Program documents from DOE contractors and DOE Headquarters and Field Elements (see Appendix A). External sources of operating experience, as applicable, are U.S. and foreign industry; other Federal agencies such as the Chemical Safety and

Hazard Investigation Board, the National Transportation Safety Board, the National Aeronautics and Space Administration (NASA); the Nuclear Regulatory Commission, and the Environmental Protection Agency; foreign government and foreign industry experience; and international agencies involved with energy issues such as the International Energy Agency and the International Atomic Energy Agency. This requirement may be satisfied by regular participation in the review of external events conducted by the Operating Experience Committee (OEC).

- (2) Each organization's OE program, in particular the designated DOE Corporate Operating Experience Program Lead Office, must routinely screen and assess internal and external operating experience to identify significant issues and lessons learned that may be of safety significance or have a bearing on the success of DOE missions and to make them available to the DOE complex.
- (3) Operating experience must be centrally collected, stored, and retrieved to allow ready access to and communication of collected information on a timely, unimpeded basis by all DOE elements. The DOE Corporate Operating Experience Program Lead Office, which is responsible for operating this collection of information, must:
 - (a) Ensure that operating experience is sufficiently comprehensive and of sufficient quality to meet DOE needs.
 - (b) Develop, promulgate, and maintain support systems needed to implement and sustain an effective OE Program.
- (4) The Designated DOE Corporate Operating Experience Program Lead Office must produce and disseminate operating experience issues through actionable or informative operating experience documents, as defined in Appendix A.
- (5) Line managers must routinely review OE Program data and determine appropriate actions to resolve any identified risks or vulnerabilities.

5. RESPONSIBILITIES.

- a. Deputy Secretary. Approves Operating Experience Level 1 (OE-1) reports, as needed, to inform the DOE complex of the most significant events or trends of events in accordance with Appendix A.
- b. NNSA Administrator and Program Secretarial Officers.
 - (1) Designate OE Program coordinators to fulfill responsibilities of this Order.

- (2) Develop and promulgate relevant operating experience through the DOE Corporate Operating Experience Program, including identified cross-cutting issues and trends, and lessons learned following completion of major program missions and contract transitions.
- (3) Ensure appropriate coordination and response for DOE Corporate Operating Experience Documents, in accordance with Appendix A.
- (4) Ensure that operating experience is incorporated into applicable activities and processes.
- (5) As part of self-assessments conducted to evaluate organizational performance in Integrated Safety Management (ISM), include an assessment of the effectiveness of the organization's operating experience program.
- (6) Consistent with DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, perform appropriate contractor oversight, and performance trending analysis.

c. Office of Health, Safety and Security.

- (1) As the designated DOE Corporate Operating Experience Program Lead Office, maintains and continuously improves the program and associated databases (e.g., the DOE Corporate Lessons Learned Database).
- (2) Develops, promulgates and maintains program guidance materials.
- (3) Assists DOE elements in implementing this Order.
- (4) Collects and analyzes internal operating experience information (e.g., from occurrence reports, accident investigations, and site-specific input) to identify and communicate significant-crosscutting issues and trends.
- (5) Collects and analyzes external operating experience information (e.g., from other government agencies, industry organizations, or professional groups) to identify and communicate significant issues and lessons learned applicable to DOE.
- (6) Develops and communicates performance trending and analysis information from operating experience (e.g., daily occurrence summaries, weekly reports, periodic safety management meeting materials, and occurrence trend reports).
- (7) Develops and distributes DOE Corporate Operating Experience Program documents in accordance with Appendix A.

- (8) Promotes and manages the DOE OEC, whose members perform in-depth reviews of DOE and external operating experience to determine its relevance and share both internal and external lessons learned.
 - (9) Performs annual self-assessment reviews on the effectiveness of the OE Program to guide ongoing program improvement.
- d. Heads of Field Elements and Contracting Activities; Heads of Government-Owned/Government-Operated (GOGO) Sites; and Heads of Sites Not Under the Cognizance of a DOE Field Element.
 - (1) Designate OE Program coordinators who have access to senior management to fulfill the responsibilities assigned by this Order.
 - (2) Develop and promulgate relevant operating experience through the DOE Corporate Operating Experience Program, including lessons learned following completion of major program missions and contract transitions, and submit lessons learned to the DOE Corporate Lessons Learned Database.
 - (3) Ensure appropriate coordination and responses for DOE Corporate Operating Experience Documents, in accordance with Appendix A
 - (4) Ensure that operating experience is incorporated into applicable activities and processes
 - (5) Identify contracts to which the CRD should apply and notify the cognizant contracting officers.
 - (6) As part of self-assessments conducted to evaluate organizational performance in Integrated Safety Management (ISM), include an assessment of the effectiveness of the organization's operating experience program.
 - (7) Consistent with DOE O 226.1A, *Implementation of DOE Oversight Policy*, perform appropriate contractor oversight, and performance trending analysis.
- e. Operating Experience Program Coordinators.
 - (1) Serve as the point-of-contact for the DOE Corporate Operating Experience Program.
 - (2) Support Program, Field Office, or Government Site Managers, as requested, in implementing, managing, and overseeing the OE Program.

- (3) Determine, with the help of subject matter experts, the applicability and significance of internal and external operating experiences and distribute products, as applicable, for review, analysis, and potential action.
 - (4) Apprise senior management of any emergent operating experience issues or adverse trends that need management attention.
 - (5) Participate in the OEC and OEC activities and tasks.
- f. Contracting Officers. Incorporate the CRD into contracts in a timely fashion upon notification of its applicability.

6. DEFINITIONS.

- a. Actions. Responses to lessons learned. Examples are:
 - (1) Corrective actions in response to occurrence analysis
 - (2) Preventive actions to preclude the recurrence of a negative event
 - (3) Improvement actions based on good work practices or innovative approaches.
- b. DOE Corporate Operating Experience Program Documents. Publications defined in Appendix A, DOE Corporate Operating Experience Program Documents.
- c. Good Work Practice or Best Practice. A positive example of work processes with the potential to be the basis for significant operational improvements or cost savings.
- d. Lesson Learned. A good work practice or innovative approach that is captured and shared to promote repeat application or an adverse work practice or experience that is captured and shared to prevent recurrence.
- e. Operating Experience. Information that relates to the methods by which work is planned and conducted and an organization's missions are performed. Operating experience provides the basis for knowledge and understanding that fosters development of lessons learned and improvement of operational performance.
- f. Subject Matter Expert (SME). An individual with qualifications and experience in a particular field or work process; an individual who by education, training, and/or experience is a recognized expert on a particular subject, topic, or system.

7. REFERENCES. (Note: DOE directives are available on line at www.directives.doe.gov/directives/current.html.)

- a. Institute for Nuclear Power Operations, INPO 94-001, Significant Event Evaluation and Information Network (SEE-IN) Program Description
 - b. Institute for Nuclear Power Operations, INPO 97-001, Guidelines for the Use of Operating Experience
 - c. Nuclear Regulatory Commission, NUREG-0737, "Clarification of TMI Action Plan Requirements," Item I.C.5, "Procedures for Feedback of Operating Experience to Plant Staff"
 - d. Nuclear Regulatory Commission, NUREG-0933, "Resolution of Generic Safety Issues," Task I.E, "Analysis and Dissemination of Operating Experience (Rev. 3)"
 - e. Defense Nuclear Facilities Safety Board, Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*, dated 05-21-04
 - f. U.S. Department of Energy Implementation Plan to Improve Oversight of Nuclear Operations, Revision 2, dated October 2006
 - g. DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*, dated July 31, 2007
8. CONTACT. Questions concerning this order should be addressed to the Office of Corporate Safety Analysis, Office of Health, Safety and Security at 301-903-3393.

BY ORDER OF THE SECRETARY OF ENERGY:



DANIEL B. PONEMAN
Deputy Secretary

Appendix A
DOE Corporate Operating Experience Program Documents

| Operating Experience Document | Purpose | Developed By | Distrib. Vehicle | Issued By | Issued To | Who Takes Action | Actions | Follow-up Reports |
|--|--|---|--|---|---|--|---|--|
| Operating Experience Level 1 (OE-1) | To inform DOE complex of most significant events or trends of concern to DOE management, including assessments and required actions with close-out verification in a formal response. | Operating Experience (OPEX) Lead Office and working group of subject matter experts (SMEs) from across DOE. | Formal Correspondence Lessons Learned(LL) Webpage | Deputy Secretary (Dep Sec) | National Nuclear Security Administration (NNSA) and DOE Under Secretaries (Under Sec) For Action Registered persons are notified when posted on Internet. | As directed | Assessments; decision of applicability; actions taken or planned with dates; verification of close-out. | Formal response required through Under Secs to Dep Sec (copy to OPEX Lead Office) with consolidated report of actions taken and affirmation that expectations are met or will be met by required date. |
| Operating Experience Level 2 (OE-2) | To inform DOE complex (or affected sites) of potentially significant safety issues (e.g., Conduct of Operations (CONOPS); Suspect/Counterfeit or Defective items (S/CI-D). Must include a statement of actions required (or recommended for NNSA) and formal method of feedback. | OPEX Lead Office and working group of SMEs from across DOE | Formal Correspondence LL Webpage | Chief, Health, Safety and Security Office | NNSA Principal Deputy Administrator and Program Secretarial Offices (PSOs) For Action Registered persons are notified when posted on Internet. | DOE, including Government Owned/ Government Operated (GOGO), Elements and Contractors, as applicable | Review issue (e.g., CONOPS or Purchasing for S/CI-D) and take appropriate action. | Formal response required from NNSA Principal Deputy Administrator and PSOs to DOE Office of Health, Safety and Security with consolidated report of actions taken or non-applicability. |

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Appendix A
A-1

DOE Corporate Operating Experience Program Documents

| Operating Experience Document | Purpose | Developed By | Distrib. Vehicle | Issued By | Issued To | Who Takes Action | Actions | Follow-up Reports |
|--|---|------------------|---|---------------------------------------|--|--|----------------|-------------------|
| Operating Experience Level 3 (OE-3) | To inform Senior HQ and Field Management when an event(s) or a trend(s) warrants attention by Senior HQ or Field Management, but the issue does not warrant an OE-1 or OE-2 report. Highlights important environment, safety, and health issues for senior management's attention and potential action. | OPEX Lead Office | LL Webpage | Office of Health, Safety and Security | NNSA Principle Deputy Administrator and PSOs. Registered persons are notified when posted on the internet. | DOE, including (GOGO), Elements and Contractors, as applicable | As appropriate | None |
| Operating Experience Summary (OES) | To inform DOE complex of DOE or external operating experience from which sites could benefit. Consists of a compilation of informative operating experience-based articles. | OPEX Lead Office | Operating Experience Summary webpage and blog | OPEX Lead Office | Internet distribution only. Registered users are notified when posted on the internet. | DOE, including (GOGO), Elements and Contractors, as applicable | As appropriate | None |

DOE Corporate Operating Experience Program Documents

| Operating Experience Document | Purpose | Developed By | Distrib. Vehicle | Issued By | Issued To | Who Takes Action | Actions | Follow-up Reports |
|--|---|------------------|--|------------------|---|--|----------------|-------------------|
| Suspect/Counterfeit or Defective Items (S/CI-D) Data Collection Sheet (DCS) | To provide information on S/CI-Ds with potential impact to DOE operations. Developed from review of occurrence reports, the Government/ Industry Data Exchange Program (GIDEP), the Institute of Nuclear Power (INPO), and other sources. | OPEX Lead Office | S/CI-D web pages A limited number sent by push mail to a registered users list. | OPEX Lead Office | Internet distribution only. Registered users are notified when posted on the internet. | DOE, including (GOGO), Elements and Contractors, as applicable | As appropriate | None |
| DOE Lessons Learned (LL) Report | To provide feedback communications on identified program/mission-specific lessons learned across the DOE complex. | DOE Complex-wide | DOE Corporate LL Database | OPEX Lead Office | Internet distribution only. Registered users are notified when posted on the internet. | DOE, including (GOGO), Elements and Contractors, as applicable | As appropriate | None |

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Appendix A
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CONTRACTOR REQUIREMENTS DOCUMENT
DOE O 210.2A, DOE CORPORATE OPERATING EXPERIENCE PROGRAM

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this Contractor Requirements Document (CRD) and flowing down CRD requirements to subcontractors at any tier using a graded approach based on risk to the extent necessary to ensure contractor compliance

The contractor must meet the following requirements.

1. REQUIREMENTS.

- a. Establish an Operating Experience Program tailored to the nature of the work, hazards, and organizational complexities to:
 - (1) Develop lessons learned that focus on preventing adverse events, trends, and reliability related events, and on performance improvement or cost savings.
 - (2) Screen, distribute, and review DOE Corporate Operating Experience Program documents and external operating experience documents for site-specific relevance, risks and vulnerabilities, and take appropriate actions. DOE Corporate Operating Experience Program documents are:
 - (a) Operating Experience Level 1 – To inform the DOE complex of the most significant events or trends that concern DOE management, including assessments and required actions with close-out verification in a formal response.
 - (b) Operating Experience Level 2 – To inform the DOE complex (or affected sites) of potentially significant safety issues, including a statement of required actions and a formal feedback method.
 - (c) Operating Experience Level 3 – To inform the DOE complex when an event or a trend warrants management attention.
 - (d) Operating Experience Summary – To inform the DOE complex of DOE or external operating experience which could benefit sites.
 - (e) Suspect/ Counterfeit or Defective Items Data Collection Sheet – To provide information on Suspect/ Counterfeit or Defective Items with potential impact to DOE operations.
 - (f) DOE Lessons Learned Report – To provide information on identified program/mission-specific lessons learned across the DOE complex.

- b. Share contractor-specific lessons learned from operating experience with the DOE complex, through the DOE Corporate Lessons Learned Database, when both (1) the operating experience has relevance to other DOE facilities, sites, or programs; and (2) the information has the potential to help avoid adverse operating incidents, for performance improvements, or for cost savings.
- c. Designate an Operating Experience Program Coordinator who can raise operating experience issues to senior contractor management and will:
 - (1) Serve as the point-of-contact for the DOE Corporate Operating Experience Program and the Operating Experience Committee.
 - (2) Support the contractor managers in implementing, managing and overseeing the Operating Experience Program.
- d. Incorporate operating experience into contractor activities and processes.
- e. As part of self-assessments conducted to evaluate organizational performance in Integrated Safety Management (ISM), include an assessment of the effectiveness of the organization's operating experience program.

NOTE: Requirements for performance trending are addressed in DOE O 226.1A, *Implementation of Department of Energy Oversight Policy*.

2. DEFINITIONS.

- a. Good Work Practice or Best Practice. A positive example of work processes with the potential to be the basis for significant operational improvements or cost savings.
- b. Lesson Learned. A good work practice or innovative approach that is captured and shared to promote repeat application or an adverse work practice or experience that is captured and shared to prevent recurrence.
- c. Operating Experience. Information that relates to the methods by which work is planned and conducted and an organization's missions are performed. Operating experience provides the basis for knowledge and understanding that fosters development of lessons learned and improvement of operational performance.
- d. Operating Experience Committee. A committee that performs in-depth reviews of industry operating experience to determine its relevance to DOE and shares both internal and external lessons learned.