



U. S. Nuclear Regulatory Commission

Volume: 8 Licensee Oversight Programs

NRR

Reactor Operating Experience Program Management Directive 8.7

Policy

(8.7-01)

It is the policy of the U.S. Nuclear Regulatory Commission (NRC) to have an effective coordinated program to systematically review operating experience (OpE) of the nuclear power industry and non-power reactors, assess its significance, provide effective communication to stakeholders, and apply the lessons-learned to regulatory decisions and programs affecting nuclear reactors.

Objectives

(8.7-02)

The objectives of the agency's reactor OpE program are as follows:

- OpE information is collected, evaluated, communicated, and applied to support the agency goal of ensuring safety. This objective is the primary focus of the agency's reactor OpE program. To accomplish this objective, the agency will have an effective, coordinated program to systematically collect and evaluate OpE, identify and resolve safety issues in a timely manner, and apply lessons learned from OpE to support the agency goal of ensuring safety. The agency will share OpE information with the nuclear industry in a timely manner so the industry can ensure safety.

Objectives

(8.7-02) (continued)

- OpE information is used to improve the effectiveness, efficiency, and realism of NRC decisions. Evaluations of OpE provide fundamental information necessary to improve safety assessments and the realism of NRC decisions. Lessons learned from OpE evaluations will be used to improve NRC regulatory programs, including licensing and inspection.
- The public, Congress, and other external stakeholders are provided with accurate, timely, and balanced information regarding operational experience, including actual or potential hazards to health and safety. Timely sharing of OpE information with the public, Congress, and other external stakeholders will enhance their understanding of the performance of licensed plants.

To accomplish these objectives, the reactor OpE program should have the following attributes:

- Clearly defined and communicated roles and responsibilities. Management expectations are clearly articulated and communicated and organizational roles and responsibilities clearly defined. Organizational responsibilities include collection, screening, evaluation, corrective action, and followup activities. Responsibilities for internal and external coordination and communications are also clearly defined, including the interfaces between the organizations reviewing OpE and the inspection, licensing, and research organizations. A single point of contact is established to provide overall coordination for responsibilities distributed throughout the agency.

Objectives

(8.7-02) (continued)

- Efficient collection, storage, and retrieval of OpE. Sources of OpE for collection, storage, and retrieval are identified. These sources include OpE from industry and foreign sources, as well as agency-generated information. The sources of OpE are sufficiently comprehensive and of sufficient quality to meet specific user needs and the collection and storage minimize duplication by multiple organizations. Data systems provide user-friendly retrieval capabilities for a wide range of users.
- Effective screening of OpE for followup evaluation. OpE is promptly screened for followup using appropriate criteria and thresholds to determine whether the OpE is, or could be, risk significant; has, or could have, generic implications; or is, or could be, important from a public confidence perspective. Priority is assigned for evaluation commensurate with the overall significance of the OpE.
- Timely communication of OpE to stakeholders for information or evaluation. OpE is communicated to stakeholders in a timely manner for information or evaluation. The communication clearly and concisely identifies the issue of concern and puts its significance in proper perspective.

Objectives

(8.7-02) (continued)

- Timely and thorough evaluations of OpE to identify trends, recurring events, or significant safety issues for appropriate followup actions. Timely and thorough evaluations of OpE will involve both short-term and long-term efforts to identify trends, recurring events, or significant safety issues. Timely short-term evaluations are necessary to promptly initiate regulatory actions aimed at resolving immediate safety issues and precluding or correcting similar conditions at other facilities. Long-term evaluations to assess safety performance typically use a broader range of OpE input, including reports on individual events and conditions, performance measures, and retrospective information. Long-term evaluations also identify trends and safety issues and their implications for NRC programs. Evaluations are sufficiently thorough to understand the event or condition, contributing factors, root causes, safety significance, and generic implications. Appropriate internal and external organizations are involved, as necessary, to ensure evaluations are complete and accurate.
- Timely decisions on implementation and appropriate followup resulting from the review of OpE. Timely decisions and actions are taken in response to short-term and long-term evaluations of OpE. The decisions address the need for externally directed regulatory actions as well as appropriate changes to NRC programs. The OpE program identifies activities or actions necessary to ensure timely implementation and followup in response to regulatory determinations. The OpE program also assesses the effectiveness of regulatory and licensee actions taken in response to lessons learned from the OpE program.

Objectives

(8.7-02) (continued)

- Periodic assessments of the OpE program to determine its effectiveness and to identify needed improvements. Periodic assessment of the OpE program is conducted to determine how effective the agency has been in using OpE to reduce the severity or recurrence rate of industry events. An effectiveness review provides feedback from stakeholders to agency management and recommends corrective actions to address identified deficiencies.

Organizational Responsibilities and Delegations of Authority

(8.7-03)

The Commission

(031)

Acts on the most serious reactor events or conditions that are brought to its attention after an OpE review determines that the significance of the event or the condition impacting or potentially impacting public health and safety, common defense and security, and protection of environment requires the immediate attention of the Commission.

Advisory Committee on Reactor

Safeguards (ACRS)

(032)

Reviews, as necessary, significant reactor OpE events and conditions and staff's OpE-related studies and advises the Commission with regard to impact on public health, safety, environment, and common defense and security at proposed or existing reactor facilities.

**Organizational Responsibilities and
Delegations of Authority**

(8.7-03) (continued)

**Director, Office of International
Programs (OIP)**

(033)

- Serves as the principal contact for the establishment and administration of formal arrangements between NRC and the agencies of foreign countries and international organizations for the exchange and collection of nuclear plant OpE information.
- Serves as the formal contact for obtaining international OpE information and transferring it to the OpE Clearinghouse for further processing.

Executive Director for Operations (EDO)

(034)

- Oversees the agency's interoffice Reactor OpE Program and directs appropriate office roles and responsibilities.
- Directs actions, as necessary, to the appropriate office(s) in response to significant reactor OpE events or conditions.
- Manages and updates, as necessary, portions of the Memorandum of Agreement between NRC and Institute of Nuclear Power Operations (INPO) that are germane to OpE.

Organizational Responsibilities and Delegations of Authority

(8.7-03) (continued)

Chief Information Officer (CIO)

(035)

- Manages the agency's Agencywide Documents Access and Management System (ADAMS) to capture and store OpE information.
- Supports, as necessary, the offices of NRR, RES, NSIR, and regions in providing efficient information technology solutions to the agency's OpE program.

Director, Office of Nuclear Reactor Regulation (NRR)

(036)

- Leads the agency reactor OpE program.
- Provides a senior manager as a single point of contact to coordinate overall reactor OpE program activities and measure effectiveness.
- Directs prompt review and analysis of significant domestic and international OpE.
- Oversees the OpE Clearinghouse to facilitate the reactor OpE Program.
- Provides resources to ensure that OpE information is appropriately evaluated and applied in support of core office programs: licensing, oversight, rulemaking, and incident response.

**Organizational Responsibilities and
Delegations of Authority**

(8.7-03) (continued)

**Director, Office of Nuclear Reactor
Regulation (NRR)**

(036) (continued)

- Serves as sponsor for the communication of OpE through the web and other information technology, in coordination with OCIO as necessary, and ensures that IT technology applied in OpE is reviewed and approved in accordance with the agency management policy for capital planning and investment control.
- Provides process for ensuring OpE is properly incorporated into regulatory programs, e.g., oversight, licensing, rulemaking, and incident response.
- Provides for program metrics aligned with the strategic plan and the OpE program attributes to measure internal reactor OpE program effectiveness.
- Provides for periodic assessment of OpE program.
- Provides program for assessing external effectiveness of OpE program, e.g., ensuring generic communications are effective.
- Coordinates with NSIR to identify reactor OpE information that could impact nuclear security, or security events that could impact nuclear safety.

Organizational Responsibilities and Delegations of Authority

(8.7-03) (continued)

Director, Office of Nuclear Regulatory Research (RES)

(037)

- Directs the long-term reviews and analyses of significant domestic and international OpE.
- Supports near-term reviews, conducts analyses, and develops products based on significant domestic and international OpE.
- Conducts OpE *evaluations* to identify trends, recurring events, or safety issues for appropriate followup actions and develops lessons learned to provide feedback to the regulatory programs.
- Provides evaluations of RES studies directly related to reactor OpE by distilling insights and lessons-learned along with recommendations for application and packaging the information to be fed into the OpE information process.
- Provides evaluations of RES studies that are not directly related to OpE, but could provide insight into OpE related matters by distilling OpE-related information from the studies and packaging the information to be fed into the OpE information process.
- Coordinates with NRR to verify adequate resolution of issues of concern arising from OpE *evaluations*.

**Organizational Responsibilities and
Delegations of Authority**

(8.7-03) (continued)

Director, Office of Nuclear Regulatory

Research (RES)

(037) (continued)

- Coordinates with NRR to provide OpE information through web and other information technology. Provides Licensee Event Report (LER) search system.
- Responsible for coordination with INPO for Equipment Performance Information and Exchange System (EPIX) data.
- Implements the agency's Generic Issues Program.
- Oversees development of risk analysis tools and models.

**Director, Office of Nuclear Security &
Incident Response (NSIR)**

(038)

- Manages the Incident Response Division which provides the program to receive and disseminate OpE information reported to the agency's Operations Center.
- Coordinates the agency's emergency response to significant reactor operating events.
- Coordinates with other NRC program offices as necessary to identify security related issues that could impact reactor safety or reactor safety events that could impact security.

Organizational Responsibilities and Delegations of Authority

(8.7-03)

Regional Administrators (RA)

(039)

- Provides for prompt reviews of plant-specific events and conditions, including onsite followup and provides the information to the OpE Clearinghouse.
- Coordinates regional efforts with other NRC offices that share responsibility for evaluating OpE that has been identified as sufficiently significant, applying lessons learned from OpE evaluations to improve regulatory programs and activities, and providing feedback on the effectiveness of the application of OpE information to improve reactor operations and regulatory programs and activities.
- Identifies reactor safety issues that would likely require evaluation by the OpE program.
- Provides resources to support the OpE program in obtaining additional information necessary to facilitate OpE screening or evaluation.
- Provides feedback on the effectiveness of OpE communication tools.
- Specifies regional needs with respect to OpE program.
- Provides designated representatives to support the OpE program.

**Organizational Responsibilities and
Delegations of Authority**

(8.7-03) (continued)

Director, Office of Administration (ADM)

(0310)

- Provides translation services for foreign documents associated with operational safety data to NRC offices, as requested.
- Provides for prompt security support when requested or, as appropriate, in the review, handling, and protection of classified or sensitive unclassified documents on operational safety data in accordance with agency Management Directives.

Director, Office of Human Resources (HR)

(0311)

- Oversees the Technical Training Center (TTC) which supports the NRR OpE Clearinghouse and other program offices for providing knowledge transfer of significant OpE through training.
- Through the TTC, supports the OpE Program and other program Offices for providing knowledge transfer of significant OpE through training.
- Assists in developing knowledge transfer tools to support the OpE program.

Applicability

(8.7-04)

The policy and guidance in this directive and handbook apply to all NRC employees.

Handbook

(8.7-05)

Handbook 8.7 describes activities involved in the processing of OpE information and provides guidelines to facilitate coordination of the activities of the NRC offices responsible for review of OpE

References

(8.7-06)

Code of Federal Regulations, Title 10, "Energy."

Energy Reorganization Act of 1974, as amended, Section 208, Abnormal Occurrence Reporting (42 U.S.C. 5801 et seq.).

Management Directive 2.2, "Capital Planning and Investment Control."

--- 3.7, "Unclassified Staff Publications in the NUREG Series."

--- 3.12, "Handling and Disposition of Foreign Documents and Translations."

--- 3.14, "U.S. Nuclear Regulatory Commission External Web Site."

--- 3.50, "Document Management."

--- 8.1, "Abnormal Occurrence Reporting Procedure."

--- 8.2, "NRC Incident Response Plan."

--- Volume 12, "Security."

NRC "Statement of Principle and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs," 62 FR 46517, September 3, 1997.

Management Directive 6.4, "Generic Issues Program....."

NUREG-0933, "A Prioritization of Generic Safety Issues."

References

(8.7-06) (continued)

Reactor Operating Experience Task Force Report, November 26,
2003, ADAMS No. ML 033350063

LIC-401, "NRR Reactor Operating Experience Program"

RES procedure on reviewing RES studies to distill and package
OpE information to provide as input to the core OpE process - under
development