

NRC INSPECTION MANUAL

IOEB

INSPECTION MANUAL CHAPTER 2523

NRC APPLICATION OF THE REACTOR OPERATING EXPERIENCE PROGRAM
IN NRC OVERSIGHT PROCESSES

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ATTACHMENT 1: Revision History Table

2523-01 PURPOSE

This Inspection Manual Chapter (IMC) describes the interfaces between the agency's reactor operating experience (OpE) program, Reactor Oversight Process (ROP), and Construction Reactor Oversight Processes (cROP).

2523-02 OBJECTIVES

02.01 To implement the applicable policies of Management Directive (MD) 8.7, "Reactor Operating Experience Program," dated February 1, 2018.

02.02 To emphasize the availability and applicability of OpE for use within the NRC's inspection and assessment activities.

02.03 To provide guidance on the integration of OpE into the NRC's oversight processes.

02.04 To provide guidance for communicating potentially generic items identified by regional and headquarter inspectors.

2523-03 APPLICABILITY

This IMC applies to those organizations within the NRC responsible for the development, maintenance, and application of the ROP and cROP; and to those organizations responsible for the collection, evaluation, and communication of OpE information. In addition, ROP and cROP will be referred to as NRC oversight processes throughout this IMC.

2523-04 DEFINITIONS

04.01 OpE Information. Various sources of OpE information include **but are not limited to** the following:

- Event Notifications (Title 10 of the *Code of Federal Regulations* (10 CFR) 50.72, "Immediate Notification Requirements for Operating Nuclear Power Reactors")
- Licensee Event Reports (10 CFR 50.73, "Licensee Event Report System")
- Regional daily event briefings
- NRC inspection findings
- Information and deficiencies associated with new nuclear facilities design, construction, and pre-operational testing.
- Reports from the International Atomic Energy Agency (IAEA) and Nuclear Energy Agency (NEA)
- Documents from the Institute of Nuclear Plant Operators (INPO)
- Reports under 10 CFR Part 21, "Reporting of Defects and Nonconformance" and 10 CFR 50.55(e), "Conditions of Construction Permits"
- Other internal and external studies
- Relevant non-nuclear events

2523-05 RESPONSIBILITIES AND AUTHORITIES

05.01 Director, Division of Reactor Oversight, Office of Nuclear Reactor Regulation (NRR/DRO).

- a. Coordinates the overall reactor OpE program activities and assesses its effectiveness in accordance with MD 8.7.
- b. Coordinates the overall application of OpE in the ROP through inspection policies, programs, and guidance.

05.02 Director, Division of Security Operations, Office of Nuclear Security and Incident Response, NSIR/DSO.

- a. Collect, evaluate, store, and disseminate security OpE information related to physical security activities and other events associated with security.
- b. As appropriate, incorporate significant lessons learned into licensing, inspection, rulemaking, and enforcement processes based on deficiencies identified from security OpE information that have generic implications.

05.03 Chief, Generic Communications and Operating Experience Branch (IOEB), NRR/DRO.

- a. Manages the OpE clearinghouse and analysis functions within a single organization to (1) collect, screen, prioritize, and distribute OpE to the NRC staff, (2) facilitate and track OpE evaluations, decisions, and applications, (3) help communicate OpE lessons learned, (4) assess and trend OpE, and (5) coordinate overall NRC OpE functions.
- b. Refers OpE to the Chief, ROP Inspection Branch (IRIB) or Chief, Vogtle 3 and 4 Project Office (VPO), when it appears to influence one or more NRC oversight process components.
- c. Approves OpE Smart Samples (OpESSs), in coordination with the Chief, IRIB, or Chief, VPO.
- d. Assigns IOEB staff members as OpE coordinators to serve as the main point of contact for each region

05.04 Chief, ROP Inspection Branch (IRIB), NRR/DRO.

- a. Decides when, in response to referred OpE, changes to one or more ROP inspection program elements are appropriate, including the development of, or revision of inspection guidance, and the approval of OpESSs.
- b. Supports the distribution, tracking, and communication of OpE to the inspection program staff and the inspection staff.

05.05 Chief, Vogtle Project Office (VPO), NRR/VPO.

- a. Decides when, in response to referred OpE, changes to one or more inspection program elements are appropriate, including the development of, or revision of inspection guidance, and the approval of OpESSs.
- b. Supports the distribution, tracking, and communication of applicable OpE to the inspection program staff and the inspection staff.
- c. Decides when, in response to referred OpE, it is appropriate to consider changes to one or more cROP components under VPO cognizance.

05.06 Chief, ROP Assessment Branch (IRAB), NRR/DRO.

Decides when, in response to referred OpE, it is appropriate to consider changes to one or more ROP components under IRAB cognizance.

05.07 Chiefs, Technical and Inspection Branches (e.g., Vendor Inspection, License Renewal, and other Technical Branches).

- a. Advise technical and inspection staff on how OpE information may impact current and planned inspection activities.
- b. Ensure that technical staff and inspectors communicate potentially generic items to IOEB staff.

05.08 Directors, Division of Reactor Projects (DRP), Division of Reactor Safety (DRS), Division of Construction Oversight (DCO), Regional Offices.

- a. Advise regional inspection staff on how OpE information may impact current and planned inspection activities.
- b. Assigns a regional staff member as an OpE coordinator to serve as the main point of contact for each region

05.09 Headquarters and Regional Operating Experience Coordinators. Provide support to regional inspection staff and management by communicating OpE and providing information on OpE tools and processes, allowing for staff consideration in the planned inspection activities. Coordinators also help staff identify potentially generic issues for OpE consideration.

05.10 Regional and Headquarters Inspection Staff. Consider OpE information during the planning and performance of inspection activities. Forward information concerning potentially generic items to Headquarters and/or Regional OpE Coordinators.

2523-06 OPERATING EXPERIENCE PROGRAM OVERVIEW

The NRC's systematic collection and evaluation of OpE plays an important role in its mission to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.

In 2002, the Davis-Besse Lessons Learned Task Force identified substantial shortcomings in agency OpE activities. As a result, the NRC chartered an interoffice Reactor Operating Experience Task Force (ROETF) to formally assess the agency's OpE activities, establish objectives and attributes for the agency's OpE efforts, and recommended improvements.

The NRC developed guidance documents based on the recommendations of the ROETF to provide agency-level guidance for implementation of the OpE program. Since then, the OpE program has become part of the NRC's Strategic Plan, serving a foundational role in ensuring that the agency meets its safety and security strategies to fulfil the agency's mission. Operating experience helps support agency decision making and risk inform our oversight process and is an input in the development of NRC regulations and guidance.

For additional information, see Management Directive 8.7, "Reactor Operating Experience Program;" Office Instruction (OI) LIC-401, "NRR Reactor Operating Experience Program;" and the NRC Strategic Plan.

2523-07 APPLICATION OF OPERATING EXPERIENCE

07.01 Inspection Activities. NRC inspection observations and findings provide vital input to the OpE program. OpE information can also inform NRC inspection activities at other sites. NRC inspectors should consider relevant OpE information in preparing for, conducting, and documenting inspection activities. Regional OpE coordinators and IOEB staff can assist with filtering OpE information to those items relevant to the planned inspection activities. The [internal IOEB SharePoint page](#) lists contacts.

- a. IOEB Sharepoint Page. Provides an effective method of gathering pertinent OpE information for an inspection from various sources.
- b. OpE COMMs. Provide a repository of emergent and/or processed OpE information. OpE COMMs are useful for explaining events of potential interest in more detail than is possible in the screening summary, allow attachment of diagrams, photos, or drawings which help to clarify issues, and provide a searchable database for events of past significance. NRC inspectors should consider subscribing to, or performing a historical review of, the OpE COMM group(s) associated with their current inspection activities. Inspectors may also propose to IOEB staff that an OpE COMM be developed for new or updated OpE.
- c. OpE Smart Samples. The OpESS program is designed to provide an additional tool that may be used to support inspections (e.g. ROP baseline inspections). OpESSs contain examples of inspection samples for existing inspection procedures based on current trends in relevant operating experience. They contain a detailed synopsis of selected OpE that the agency considers as having generic safety significance and that can be applied to baseline inspection activities. Approved OpESSs are posted on the [NRC public website](#) and are linked to in the listing of inspection procedures. OpESSs are developed and approved by IOEB, in coordination with IRIB and VPO as appropriate.

When an OpESS is performed as part of the baseline inspection program, the applicable section of the pertinent NRC inspection report should reference the OpESS

by number in the corresponding sample description and in the description section of any associated finding. IMC 0611, "Power Reactor Inspection Reports," includes additional guidance and examples for documentation.

NOTE: OpESSs may contain security related, proprietary, or otherwise non-public information (i.e., OpECOMMs, INPO documents, security information). Unredacted OpESSs are posted on the internal [IOEB SharePoint site](#). Versions posted on the [NRC public website](#) may be redacted.

- d. Generic Communications. Generic Communications disseminate OpE information to licensees and interested stakeholders, including the public. More information about each type of Generic Communication is available on the [NRC public website](#).
- e. Feedback. Information on potentially generic safety questions may derive from NRC inspection activities. Inspection reports are reviewed as part of the OpE process, and inspection staff are encouraged to forward information they obtain on any other potentially generic safety questions and potentially generic construction deficiency reports to the Regional OpE Coordinators or IOEB for further consideration. Where possible, this should include a clear description of the concern, any information used to determine the issue likely involves other NRC facilities, any information describing how the issue was identified, and whether or not any vendors or manufacturers involved may have been notified. The regional office should identify a regional staff member knowledgeable about the issue to serve as a communication link between the regional office and IOEB staff to assist in evaluating the issue.

If counterfeit, fraudulent, or suspect items (CFSI) are identified and there is potential for wrongdoing, these should be treated as allegations. The Allegation Review Board will decide whether to engage the Office of Investigation to investigate potential willful aspects.

07.02 Inspection Program Guidance Revisions. OpE can provide valuable insight for potential changes to inspection program guidance.

- a. Items that may warrant changes to existing inspection program guidance documents include the following:
 - 1. Additional guidance on sample selection or existing inspection activities. The additional guidance would allow inspectors to better inform the current inspection scope or sample selection process (e.g., directing the consideration of specific structures, systems, or components based on OpE).
 - 2. New inspection samples or activities not currently covered by the inspection program.
 - (a) In keeping with the bases of the NRC oversight processes, newly proposed inspection samples or activities should be risk informed and should generally review the licensee's current performance.
 - (b) New inspection samples or activities generally require additional resources. Proposals for new samples or activities should also include

recommended areas to reduce inspection to offset the associated resource change.

- b. Consideration should be given to whether an OpESS or TI would be appropriate before revisions are made to existing inspection program guidance to determine whether, or what type of, changes should be made.
- c. The formal review process discussed in IMC 0307, Appendix B, "Reactor Oversight Process Self-Assessment Baseline Inspection Program Monitoring and Comprehensive Review" directly addresses the need to consider OpE in the periodic evaluation of baseline IPs.
- d. An IFR evaluation could result in a recommendation to revise one or more inspection program guidance documents. Issue Managers should present IFRs to IRIB and IRAB to help determine whether revisions may be appropriate.
- e. The annual cROP Self-Assessment discussed in IMC 2522 "Construction Reactor Oversight Process Self-Assessment Program" directly addresses the need to consider OpE in reviewing IMCs or IPs for adequate scope, focus, and guidance.

07.03 Annual Assessment Activities. Regional offices are directed to consider OpE as part of the end-of-cycle assessments discussed in IMC 0305, "Operating Reactor Assessment Program," and in IMC 2505, "Periodic Assessment of Construction Inspection Program Results."

- a. During these reviews, regionwide OpE and emerging trends should be evaluated to determine whether any general areas of concern might be identified. If specific information is necessary, Regional offices should consider requesting assistance from IOEB.
- b. The Region should use relevant OpE, current OpESSs, and emerging trends to inform inspection planning and the selection of focused inspection **activities.**
- c. Any areas of concern **associated with OpE** should be communicated to IOEB through the Regional OpE coordinators, **the IOEB Branch Chief, or any IOEB staff member.**

2523-08 REFERENCES

IMC 0040, "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual"

IMC 0305, "Operating Reactor Assessment Program"

IMC 0307, Appendix B, "Reactor Oversight Process Self-Assessment Baseline Inspection Program Monitoring and Comprehensive Review"

IMC 0350, "Oversight of Reactor Facilities in Shutdown Condition due to Significant Performance and/or Operational Concerns"

IMC 0611, "Power Reactor Inspection Reports"

IMC 0801, "Inspection Program Feedback Process"

IMC 2505, "Periodic Assessment of Construction Inspection Program Results"

IMC 2507, "Construction Inspection Program: Vendor Inspections"

IMC 2515, "Light-Water Reactor Inspection Program – Operations Phase"

IMC 2522, "Construction Reactor Oversight Process Self-Assessment Program"

MD 8.7, "Reactor Operating Experience Program"

MD 8.18, "NRC Generic Communications Program"

LIC-401, "NRR Reactor Operating Experience Program"

[IOEB SharePoint page](#) (This internal page contains preliminary and predecisional information)

END

ATTACHMENT 1

Revision History for IMC 2523

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Numbers (Pre-Decisional, Non-Public Information)
N/A	ML11242A061 11/16/11 CN 11-035	Initial issuance. Researched commitments for 4 years and found none.	N/A	ML11298A202
N/A	ML12332A099 06/19/2013 CN 13-014	Incorporates construction experience and construction oversight processes	N/A	ML13036A367
N/A	ML20321A083 01/15/21 CN 21-005	Periodic Update. Updated to reflect changes in office organization. Eliminated discussion of IOEB and OpE actions to develop OpE products. Updated references and links to current guidance and removed obsolete references. Updated to reflect changes in office organization.	N/A	ML20322A383