



# U.S. Nuclear Regulatory Commission Office of Nuclear Reactor Regulation

## ***NRR OFFICE INSTRUCTION*** ***NRO OFFICE INSTRUCTION***

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### **Change Notice**

**Office Instruction No.:** LIC-401, R.3 (NRR) / REG-112, R.2 (NRO)

**Office Instruction Title:** NRR-NRO Reactor Operating Experience Program

**Effective Date:** June 3, 2013

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**Responsible Organizations:** NRR/DIRS/IOEB and NRO/DCIP/CAEB

**Summary of Changes:** This revision of LIC-401 (NRR) combines the guidance contained in NRO-REG-112 (NRO). The objective of this joint Office Instruction is to combine guidance for the NRR Operating Experience and NRO Construction Experience Programs to support the NRC's Center of Expertise (COE) for Operating Experience. The revision includes the addition of NRO Responsibilities and Authorities, adds and clarifies some definitions, and changes some screening terminology.

**Training:** None

**ADAMS Accession No.:** ML12192A058



NRR Office Instruction, LIC-401, R.3  
NRO Office Instruction, REG-112, R.2  
NRR-NRO Reactor Operating Experience Program

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## 1. **POLICY**

Management Directive (MD) 8.7, “Reactor Operating Experience Program,” sets forth the policy of the U.S. Nuclear Regulatory Commission for an effectively coordinated program to systematically review operating experience (OpE), assess its significance, provide timely and effective communication to stakeholders and apply OpE insights to regulatory decisions and programs affecting nuclear reactors. NRR-LIC-401/NRO-REG-112 is provided to implement this policy for the Office of Nuclear Reactor Regulation (NRR) and the Office of New Reactors (NRO). This office instruction also implements the policies, applicable to the NRR and NRO as described in MD 5.12, “International Nuclear Event Scale Participation,” MD 8.1, “Abnormal Occurrence Reporting Procedure,” MD 8.2, “NRC Incident Response Program, and MD 8.3, Incident Investigation Program.”

## 2. **OBJECTIVES**

This office instruction describes a systematic process to implement the NRR/NRO requirements of MD 8.7. The objectives of the agency’s OpE activities include the following:

- To *collect, evaluate, communicate, and apply* OpE information 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* OpE insights 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.

- To improve the effectiveness and efficiency of NRC decisions.
- To facilitate providing the public, Congress, and other external stakeholders with accurate, timely, and balanced OpE information, including actual or potential hazards to health and safety.

In support of the Reactor OpE Program, this procedure also presents the roles and responsibilities of the NRR and NRO staff and the process for fulfilling the requirements of MDs 5.12, 8.1, and 8.2.

Lastly, this procedure includes policy guidance on operating and construction experience that supports both the Operating Experience Branch (IOEB) within the Division of Inspection and Regional Support (NRR/DIRS) and the Construction Assessment and

Enforcement Branch (CAEB) within the Division of Construction Inspection and Operational Programs (NRO/DCIP).

### **3. BACKGROUND**

The term “operating experience” implies that the organization learns from OpE and applies those insights to its core regulatory programs. In itself, “operating experience” is a broad term that has evolved to describe the *evaluation* and use of operational and construction safety data by the NRC and licensees. In this context, OpE includes a wide range of information regarding events and conditions at nuclear plants from numerous sources. The NRC’s systematic collection and *evaluation* of such information play an important role in its mission to protect public health, safety, and the environment and to promote the common defense and security.

The NRR organizational approach to OpE evolved, following a significant agency strategic change that dissolved the Office of Analysis and Evaluation of Operational Data (AEOD) beginning in fiscal year 1999, and transferred its core long-term OpE functions to the Office of Nuclear Regulatory Research (RES) and its short-term OpE functions to NRR.

By mid-2002, both RES and NRR acknowledged that the post-AEOD OpE program needed reassessment. This acknowledgment, coupled shortly thereafter with findings of the Davis-Besse Lessons Learned Task Force which found substantial shortcomings in the agency’s OpE activities, led NRR and RES to jointly charter 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 make recommendations for improvement.

The ROETF completed its efforts and published its findings in November 2003. The ROETF final report (ADAMS Accession No. ML033350063), which establishes program objectives and attributes and makes 23 recommendations, forms the foundation for MD 8.7 and this Office Instruction.

On December 22, 2004, the NRR Director and RES Director jointly authorized implementation of the NRC Reactor OpE Program, as described in the draft policy, program, and procedural documents, in the form of a draft management directive MD 8.7, the associated MD 8.7 Handbook, and NRR Office Instruction LIC-401, “NRR Reactor Operating Experience Program” (ADAMS Accession No. ML043440295).

The directors authorized use of these draft policy, program, and procedural documents with the following actions to support finalizing these documents after their first year of use: (1) monitor performance and periodically report to senior management during the first year of implementation; (2) complete an overall assessment of the effectiveness of the program after one year of implementation; and (3) process the draft MD 8.7 and MD 8.7 Handbook for issuance following one year use in their draft form. Construction experience (ConE) is an essential part of the agency’s Reactor OpE Program described in MD 8.7.

In March 2009, the staff issued Office Instruction, NRO-REG-112, "New Reactor Construction Experience Program," to describe the ConE process for incorporating OpE insights from the design, construction, and operation of the international and domestic commercial nuclear reactors into the licensing, inspections, and construction of new reactors. A staff memorandum, issued March 28, 2012, to the Office of the Executive Director for Operations, "Centers of Expertise for Allegations, Operating Experience/Construction Experience, Electrical Engineering, and Vendor Inspection" (ADAMS Accession No. ML12031A191) describes OpE/ConE under one functional area and directs the creation of a Center of Expertise (COE) for each function area. This joint office instruction supports the OpE/ConE COE. Unless otherwise noted, the program description, guidance, roles and responsibilities for the OpE program apply to the implementation of the ConE program.

### **3.1 Definitions**

***Application (of or applying OpE information)*** – Taking actions, based on insights and/or recommendations resulting from OpE/ConE *evaluations*, that could involve *communicating* with internal and external stakeholders, taking regulatory actions, and/or influencing agency programs. *Applying* OpE Information in various forms is used throughout all four phases of the OpE process. The *application* phase is the last of the four phases that constitute the OpE process.

***Construction Experience (ConE) Program*** – The ConE Program is an integral component of the Reactor OpE Program that focuses on collecting, screening, and evaluating information, and insights applicable to new nuclear reactor design, construction, and pre-operational testing.

***Evaluation (of or evaluating OpE information)*** – A review of Level 2 screened OpE information by the *issue manager* and/or by NRR, NRO, RES, or Office of Nuclear Security and Incident Response (NSIR) staff to determine the significance of the information and to gain OpE insights that could be used for agency *communication* or *application*.

***Event(s)*** – Event(s) in this office instruction refers to a ConE or OpE issue of significance that warrants collection and screening.

***Issue manager*** – An individual within the *OpE Clearinghouse* responsible for tracking and project managing an *Issue for Resolution* through the *evaluation* and *application* phases of the OpE process.

***Issue for Resolution (IFR)*** – OpE information that receives a Level 2 screen and will be further processed for subsequent *evaluation*.

***OpE Center of Expertise*** – The OpE COE will be led by NRR. COE staff will reside in both NRO and NRR offices. Offices will continue to focus on knowledge sharing and coordination to systematically collect, screen, evaluate and communicate domestic and international reactor operating and construction experience, and to apply OpE insights.

**OpE Clearinghouse** – The centralized multi-office team that performs the key functions and activities of the Reactor OpE Program. The OpE Clearinghouse is a critical function of the OpE COE. Core duties include (1) collecting, storing, screening, prioritizing, and distributing OpE information to interested users; (2) conducting and facilitating OpE evaluation and application activities; (3) facilitating communication of OpE insights; and (4) coordinating NRC OpE activities among organizations performing OpE functions.

**OpE Information** – Various sources of OpE information include Daily Event Notifications (10 CFR 50.72), licensee event reports (LERs) (10 CFR 50.73), regional daily events briefings, NRC inspection findings, International Atomic Energy Agency (IAEA) and Nuclear Energy Agency (NEA) Incident Reporting System (IRS) reports, NEA Construction Experience Database (ConEx) reports, INPO documents, 10 CFR Part 21 reports, 10 CFR 50.55(e), and other internal and external studies. OpE information includes information and deficiencies associated with new reactor design, construction, and pre-operational testing. In this office instruction, OpE information is also used to refer to ConE information.

**Operating Experience Smart Sample (OpESS) Program** – the OpESS program is designed to provide NRC inspection staff a detailed synopsis of selected operating experience which the agency considers to potentially have generic safety implications. OpESSs are a method of integrating OpE information into the Reactor Oversight Process (ROP) inspection program and construction oversight programs. An OpESS is designed as an additional tool for agency staff during ROP baseline inspection preparation. The information and trends identified from OpESS inspections may provide further indication that a specific issue warrants additional agency action (such as issuance of a Temporary Instruction (TI) or a Generic Communication).

The intent of the program is to make operating experience more useful to NRC inspectors by providing sample items that may be inspected under the ROP and/or construction oversight baseline program (as routine baseline inspection samples). These OpESS documents are self contained information sources that supply relevant OpE for use under the ROP/construction oversight programs as either “voluntary” or on rare occasion, “required” baseline inspection sample items. Once selected and inspected, they are documented in the baseline inspection reports by an OpESS number as described in each OpESS.

Specific details on OpESS selection, development, formatting, approval and posting to internal and external web pages are contained in the internal Operating Experience Branch Staff Handbook (ADAMS Accession No. ML110070334).

**Screening** – The first review of OpE information that is entered into the OpE process as OpE input to determine its potential for significance based on risk assessment, generic applicability, and/or qualitative judgment that considers degradation in safety margin, defense in depth, or other safety or agency concerns. Screening results in dispositioning the OpE as either a Level 1 or 2 screen. The *screening* phase is the second of the four phases that constitute the OpE process.

**Technical Review Group (TRG)** – Each TRG is composed of members from across the agency and is led by a TRG lead who is a subject matter expert. Periodic reviews search the various OpE data streams, including licensee event reports, inspection findings, international reports, OpE communications (COMMs) posted on the Gateway, and Part 21 notifications. The reviews focus on identifying potential significant OpE and pieces of different OpE with a common theme that warrant further NRC review and application. Technical organizations are in the best position to do these focused reviews in their areas of expertise and to identify issues that may supplement the normal OpE clearinghouse process.

#### 4. **BASIC REQUIREMENTS**

Unless otherwise noted, the program description, guidance, roles and responsibilities for the OpE program apply to the implementation of the ConE program. In addition, the IOEB Handbook (ADAMS Accession No. ML110070334) and CAEB Construction Experience Handbook (ADAMS Accession No. MLML13023A203) supplement this procedure with branch-specific guidance.

The functional elements of the Reactor OpE Program and its process involve identifying safety issues, assessing their significance, taking actions to address the issues, and communicating this information to internal and external stakeholders throughout the OpE process. The actions, or application of OpE insights from OpE evaluations, could involve further communication to internal and external stakeholders, taking regulatory action, and/or influencing agency programs. To be effective, the functional elements must support and work in concert with NRR's and NRO's licensing, reactor oversight, and rulemaking process, NSIR's incident response program; and RES OpE programs. The following basic requirements are defined below:

Attributes of the Reactor Operating Experience Program: To accomplish the program objectives, the NRC has adopted the following seven attributes for the functional elements of the agency's Reactor OpE Program activities:

- (1) Clearly defined and communicated roles and responsibilities.

Management expectations are clearly articulated and communicated, and organizational roles and responsibilities are clearly defined. Organizational responsibilities include *collection, screening, evaluation, applying*, and follow-up activities. Responsibilities for internal and external coordination and communications are also clearly defined, including the interfaces between the organizations reviewing OpE information and the inspection, licensing, and research organizations.

A single point of contact is established to provide overall coordination for OpE information responsibilities distributed throughout the agency

- (2) Efficient *collection*, storage, and retrieval of OpE information.

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.

- (3) Effective *screening* of OpE information for follow-up evaluation.

OpE information is promptly *screened* for follow-up using appropriate criteria and thresholds to determine whether the OpE information 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 information.

- (4) Timely communication of OpE information to stakeholders for information or *evaluation*.

OpE information 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.

- (5) Timely and thorough evaluations of OpE information to identify trends, recurring events, or significant safety issues for appropriate follow-up actions.

Timely and thorough evaluations of OpE information 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.

- (6) Timely decisions on implementation and appropriate follow-up resulting from the review of OpE information.

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 follow-up in response to a regulatory determination. The OpE program integrated with ongoing inspection and oversight processes, as well as its own overview and analysis processes, assesses the effectiveness of regulatory and licensee actions taken in response to a lesson learned from the OpE program.

- (7) 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. Focused OpE self-assessments are part of this process.

It is a fundamental premise that a properly constructed and implemented OpE program based on these attributes will ensure that the objectives are met.

#### **4.1 Reactor OpE Program Overview**

Numerous organizations within the NRC, including NRR, NRO, RES, NSIR, Office of Information Services (OIS), Office of Enforcement (OE), Office of the Chief Human Capital Officer (OCHCO), and the regions, have substantial responsibilities in meeting the objectives of the agency's Reactor OpE Program. The agency has designated the COE's OpE Clearinghouse within NRR as the focal point for implementing and coordinating the elements of the OpE process that are described in OpE program attributes 2 through 6. The OpE Clearinghouse provides a centralized function within the agency to collect, store, screen, prioritize, and distribute OpE information to interested users; facilitate and track OpE evaluation and application activities; assist the communication of OpE insights; and coordinate NRC OpE activities among organizations performing OpE functions. The OpE Clearinghouse resides in NRR/DIRS/IOEB and functions, in coordination with other NRC organizations, to ensure that activities necessary to achieve the program objectives and attributes are effectively implemented.

OpE inputs consist of new information depicting a recent event or condition at a plant(s) or analyzed OpE information stemming from detailed reports or studies providing longer term analyses and evaluation. RES conducts studies that directly address OpE-related issues, as well as studies that contain OpE-related information. The Reactor OpE Program consists of a process for handling OpE information from the time that it first becomes available, to the final action of applying significant OpE information to the agency's regulatory activities. As shown in Figure 1, the facilitation of this process involves four phases, discussed in detail in subsequent sections, to accomplish this purpose:

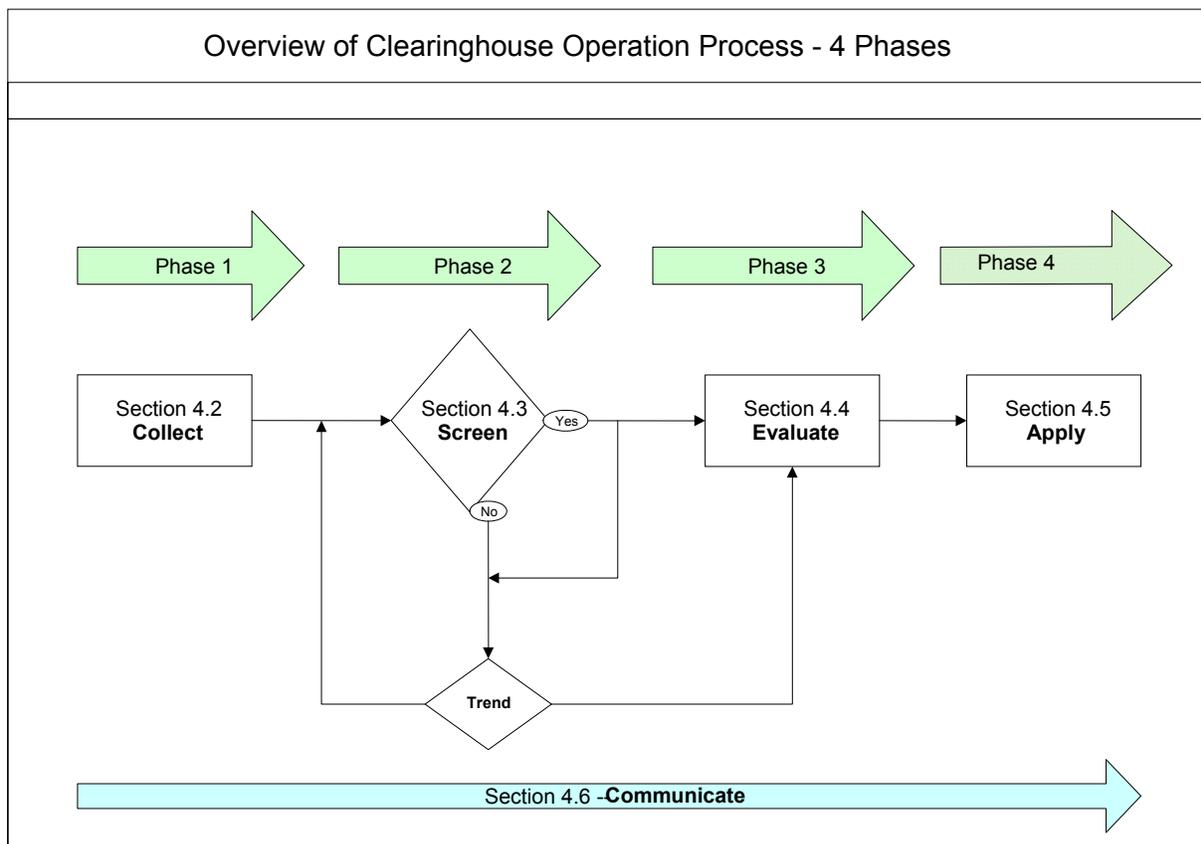
- (1) collecting, storing, and making available new OpE information
- (2) screening, trending, and communicating OpE information
- (3) evaluating OpE information and communication
- (4) applying OpE insights from the evaluations

Trending is performed by the analysis team as the study of historical data and grouping of similar events to identify and evaluate related issues or negative trends. The IOEB Analysis Team focus is typically on shorter term, periodic, and specific topic-based analysis and trending products.

The task of communicating appropriate OpE information to internal stakeholders at various points along the OpE information process is paramount. Internal stakeholder communication is intended to promptly inform appropriate staff and/or management of significant OpE information and to share details, insights, and OpE insights from events in a timely manner. These activities include briefing the NRR Executive Team/Leadership Team, promptly communicating relevant OpE information to agency management and technical experts (e.g., RES, NSIR, NRR, NRO and the regions) involved in the OpE process, issuing OpE overview and analysis reports, and providing appropriate operating events briefings on topics of sufficient interest. Communication tools such as OpE Daily Screening Summary e-mails, Plan of the Week, and Executive Director for Operations (EDO) Daily Notes, as appropriate, are used to inform internal stakeholders of OpE generic communications before their release.

The [OpE Gateway](#), an NRR intranet Web page that specializes in OpE Program topics and search tools, contains COMMs that are developed and posted in defined categories to alert users of emergent and processed OpE information. COMMs are intranet postings that contain a summary of an event or issue with an assortment of useful related links to inspection reports, related documents, and generic communications. Many COMMs contain very descriptive attachments or photographs provided for viewing purposes. COMMs should be updated or revised if related events or issues occur where a separate COMM is not necessary.

**Figure 1 - Overview of the Reactor OpE Process**



COMMs are brief and factual, and use references as necessary to minimize the burden of generating new text.

The RES OpE staff meets periodically with the IOEB and CAEB staff to update it on the efforts of RES to provide distilled results of OpE-related studies and tailored evaluations of other RES studies (not directly related to OpE) that contain OpE-relevant information. These periodic meetings include the exchange of ideas and lessons-learned from the various OpE *evaluations* or other important OpE information.

Examples of external stakeholder communications activities include: coordination and development of generic communications, preliminary notifications, and notifications made available through the Web coordination of NRR and NRO input to the Abnormal Occurrence program reports, the international nuclear event scale (INES) ratings/Incident Reporting System (IRS) and ConEx reports, assessment and reporting of the INES ratings for all power reactor event notification (EN) reports, development and reporting in accordance with the International Atomic Energy Agency (IAEA) IRS.

#### **4.2 Reactor OpE Process—Collect**

The first phase of the OpE process involves collecting, storing, and making available OpE information to NRC staff. The OpE information then serves as input to the Reactor OpE Program information process. In addition, three categories of OpE information are available to every NRC staff member on the NRR intranet website: [OpE Gateway](#).

The first category of OpE information includes those inputs considered new information that depict recent events or conditions at a plant(s). The event notifications and the LER, provided by licensees in response to reporting requirements in Title 10, Section 50.72, "Immediate Notification Requirements for Operating Nuclear Power Reactors," of the *Code of Federal Regulations* (10 CFR 50.72) and 10 CFR 50.73, "License Event Report System," respectively, are the most notable sources through which this category of OpE information is provided to the staff. Other sources include reports under 10 CFR Part 21, "Reporting of Defects and Noncompliance," preliminary notifications, Region II construction inspection debriefs, morning conference calls between the NRR Division of Operating Reactor Licensing (DORL) management and regional management, foreign reports (INES events, IRS and ConEx), and headquarters operations officer (HOO) security reports. The information collected from these sources is typically preliminary and requires gathering of additional data to assess its significance.

The second category of OpE information is previously analyzed OpE information that typically contains insights to a specific OpE topic. Sources of this type of OpE information include generic communications (e.g., information notices, regulatory issue summaries), inspection findings (from inspection reports), Institute of Nuclear Power Operations (INPO) SEE IN reports (1980-2010) and INPO event reports (2010-present), and numerous reports and studies generated by RES that are germane to reactor OpE (e.g., Accident Sequence Precursor reports and system studies). Consideration should also be given to other significant events with potential for OpE insights that may have instructive value for the nuclear industry or the NRC.

The third category includes OpE information or concerns initiated by the staff. NRC staff members can bring any OpE-related issue not captured by (or inadequately addressed in) the first two general categories of OpE information sources as an input to the OpE process for *screening*. This is initiated by communicating the issue with any OpE Clearinghouse staff participant. These OpE inputs are expected to have sufficient background information and written bases expressing the OpE concerns at hand.

OpE information that is obtained from international sources could fall into one, or both, of the first two general categories of OpE. The agency actively participates in several international efforts to promote OpE and, in some cases, as with the International Nuclear and Radiological Event Scale (INES), the agency has formal reporting commitments. The details of these commitments are beyond the scope of this document. Interested readers are directed to the IOEB Staff Handbook for further information. For the purposes of this document, the generalized “international OpE” or “foreign reports,” will be used to signify OpE originating from nuclear installations outside of the U.S.

Table 1 below provides a list of sources through which OpE information is made available to the staff. Other sources will be added or reviewed on an as needed basis. All content generated by these OpE information sources is reviewed on a routine basis as input to the overall OpE process. The OpE information sources listed in Table 1 also contain data that are relevant to plant events and conditions. The agency provides other OpE-related products that may provide this type of information; however, they primarily serve as databases (e.g., Common Cause Failure Database, the INPO Equipment Performance and Information Exchange System (EPIX)) or analytical tools (e.g., Sapphire, standardized plant analysis risk or SPAR models) to assist the staff in *screening* or *evaluating* OpE information. The OpE *Clearinghouse* does not review these databases and analytical tools on a routine basis, but these tools and information sources are available to the staff for OpE analyses.

The OpE Clearinghouse is responsible for ensuring that these sources of OpE information, with the exception of verbal sources, are made available to the NRC staff through a centralized Web Gateway available on the NRC’s Intranet or through other electronic media.

#### **4.3 Reactor OpE Process—Screening Decision**

The *OpE Clearinghouse* meets regularly to make screening decisions to determine if further *evaluation* is warranted. The *OpE Clearinghouse* screens new reactor event notifications, preliminary notifications, 10 CFR Part 21 notifications, information from periodic regional calls to the NRR project management staff, and Region II construction inspection debriefs. Other sources of OpE, including licensee event reports (LERs) and NRC inspection report findings, can be screened by one team member with a peer review rather than by the whole *OpE Clearinghouse*. Since there are limited resources, the intent of the OpE program is to use resources commensurate with the safety significance and generic applicability of the issue.

The OpE Clearinghouse screens OpE into one of two categories, or levels. A **Level 1** screen results in an internal communication via an e-mail. This may be simply for information only in the OpE Clearinghouse summary, or forwarded to NRC staff that has expertise in the area of OpE. For items that may have more significance, the screening may also result in a formal “Knowledge Management” item to be developed (currently an OpE COMM). In most cases, these will also be forwarded via e-mail to the NRC staff that has expertise in the area of OpE.

**Table 1. OpE Information Sources**

Defined Scope of OpE Information Sources		
New OpE Information	Analyzed OpE Information	Staff Initiatives
Event Notifications (10 CFR 50.72)	Generic Communications —Information Notices —Regulatory Issue Summary	Individual staff concerns (brought to the attention of the OpE Clearinghouse)
Licensee Event Reports (10 CFR 50.73)	—Generic Letters —Bulletins	Staff concerns supported by branch chief-level or higher management (e.g., staff concerns raised through task interface agreement (TIA) that are germane to OpE, or other management items to be considered under the screening process)
Preliminary Notifications	Inspection findings	
10 CFR Part 21 Reports	INPO documents	
HOO security reports	RES feeds (RES reports that have been distilled and packaged as inputs to the process)	
Foreign reports —INES events —IRS/ConEx reports	— ASP reports — Component and system studies	OpE insights from ConE Technical Assistance Requests (TAR). TARs are a construction oversight tool used between NRO and Region II to document the resolution of a technical issue (e.g. answer an inspection/licensing question); request ITAAC closure verification or inspection support.
Daily morning conference calls with regions	— Generic Safety Issues — Various other research studies	
Region II construction inspection debriefs	— Significant non-nuclear event OpE insights	

A **Level 2** screen is a Level 1 screen where it was subsequently determined that the issue is potentially safety significant and generic. A Level 2 screen normally requires a detailed, formal evaluation as an Issue for Resolution (IFR). It is a good practice for the OpE Clearinghouse to record the basis for any issues that receive a Level 2 screen. A member of the OpE staff is assigned the task of project managing the IFR through the remaining

phases of the OpE process. The assigned issue manager gathers additional information, as necessary, in preparation for the next phase evaluation. Generally, the Agency decision to dispatch an augmented inspection team (AIT) per MD 8.3, will result in a Level 2 screen and the opening of an IFR.

At the time of initial screening (Level 1), it may be determined that a later re-evaluation is needed as more information becomes available; or that additional staff should review the item for screening. The item should be preliminarily screened by identifying it as “continue to follow” in the reactor operating experience (ROE) database. Periodically, the item should be brought back to the OpE Clearinghouse to determine if it should continue to be followed, or if sufficient information is available to make a final screen decision. The item should be annotated in ROE when the final screening decision is completed and the reason why the item is no longer “continue to follow” is known.

Sound judgment is employed in applying these screening guidelines. This judgment considers the significance of the issue and the agency resources that may be required for further evaluation and possible application of OpE insights. The OpE program is not expected to address and resolve issues of low safety significance. However, events of low safety significance may be reviewed to identify common trends. If there are differences of opinion at the OpE *Clearinghouse* meeting, the team leader should conduct a poll to identify the screening team’s recommendations on whether or not an issue receives a Level 2 screen. In addition, an NRO representative should concur with the screening results for any OpE information screened Level 2 for the construction experience program.

There will be instances where issues and events that are being provided to the OpE Clearinghouse for screening are also being addressed by another agency program. An important part of the initial screening should include action to determine if the candidate issue is being handled by another part of the agency. Some issues and events only receive a Level 1 screen on the basis that other programs or processes within the agency are currently or will be resolving them. In these cases, it may be appropriate to capture the data in the ROE database and to consider issuing a COMM to capture and communicate the key operating experience.

In making a Level 2 screening decision, the OpE *Clearinghouse* should consider the following criteria:

- (1) Potential safety significance based on risk or other quantitative factors-
  - a. risk factor<sup>1</sup>—conditional core damage probability (CCDP)  $\geq 1E^{-6}$  or an increase in core damage probability<sup>2</sup> ( $\Delta$ CCDP)  $\geq 1E^{-6}$ , or a change in large early release

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<sup>1</sup>Whenever these or other risk metrics are used to depict the quantitative assessment of safety significance, the associated dominant sequences and dominant cut sets should also be identified. In addition, assumptions applied in the analysis should be identified. Risk measures based on a sensitivity analysis are acceptable if sufficient information is not available to support assumptions applied in the analysis.

<sup>2</sup> $\Delta$ CCDP is also known within the agency as incremental conditional core damage probability (ICCDP). This metric is used to assess the risk associated with a change in plant conditions (typically

frequency ( $\Delta\text{LERF}$ )  $\geq 1\text{E}^{-7}/\text{yr}$

- b. other quantitative significance— Reactor Oversight or Construction Reactor Oversight Process Significance Determination finding of white or higher (i.e., yellow, red), violations of severity level III or higher (i.e. II, I), or INES rating of 1 or higher

(2) Qualitative judgment of significance based on the following guidelines:

- a. degradation of important SSCs that could lead to a determination of a loss of safety function
- b. transients that result in unexpected plant response or cause damage to equipment important to safety
- c. transients that involve inappropriate operator actions or equipment performance that affect reactor safety
- d. potential degradation of fission product barriers (this includes latent design, construction, and fabrication events that if left undetected and uncorrected, could cause such a degradation)
- e. reactor scram with potential complications from equipment failure, inappropriate operator actions, or external conditions
- f. programmatic breakdown in the areas of design, analysis, or equipment maintenance that will contribute to the degradation of plant response to transients
- g. unplanned radiation dose or radiation dose exceeding administrative or regulatory limits
- h. any reactor release of radioactive material from an operating reactor that exceeds regulatory limits
- i. potential adverse trend—potential existence of a pattern of similar or recurring events/conditions being observed
- j. potential new or novel failure mode, system interaction, material condition or degradation, or other phenomena that may have instructive value for the NRC or the industry

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caused by a failure or unavailability of a piece of equipment or a combination of equipment relied on to mitigate an initiating event), but not the occurrence of an initiating event. Specifically, a calculated  $\Delta\text{CDP}$  depicts an increased difference in the core damage probability caused by a failure/unavailability of such equipment (or a combination thereof) from the nominal core damage probability (for which the same equipment/combination is presumed to be available) for the period/duration of the unavailability.

- k. other potential agency issues or concerns—potential concerns related to heightened public, media, congressional, and/or governmental interest, or other factors
- l. other potential agency issues or concerns regarding test and research reactors, licensee renewal, security, or emergency planning/incident response issues (note: these issues may require input from the appropriate contacts for Research and Test Reactor Oversight Branch (NRR/PRPB), Division of License Renewal (NRR/DLR) and/or the Office of Nuclear Security and Incident Response (NSIR) at the OpE Clearinghouse screening meeting.
- m. other significant events with the potential for OpE insights that may have instructive value for the nuclear industry or the NRC (examples include aviation, chemical, oil, transportation industry, NASA, Navy reactors, cyber-security events, etc.)
- n. potential new or novel items that result in deficiencies with development and implementation of programs for new reactor analysis, design, manufacture, fabrication, quality assurance, placement, erection, installation, modification, inspection, or testing
- o. potential for an important to safety item to be counterfeit or fraudulent or a deficiency in safety-related component to be caused by a counterfeit or fraudulent item<sup>3</sup>
- p. upon request by a subject matter expert from the cognizant organization or branch for the issue

The OpE Clearinghouse has wide discretion when making screening decisions to be able to select safety significant issues that are also generic. If a reactive inspection will be performed, it may be more prudent to wait until the inspection team has completed the inspection and developed inspection findings prior to making a screening decision. If more information is necessary to make a screening decision, the issue should be placed on hold until the additional information is gathered either through the respective NRR or NRO project manager, interfacing with the appropriate technical staff or by contacting the regional office. After the screening decision is made, the OpE Clearinghouse team decides if the information should be communicated to internal stakeholders by issuing a communication (COMM) or an informal e-mail to the interested staff members [including the affected plant project manager (PM)]. Items that are screened should be documented in the IOEB OpE Clearinghouse Screening Summary that is issued following each OpE Clearinghouse meeting.

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<sup>3</sup>Care should be taken with counterfeit, fraudulent, or suspect items (CFSI) as these concerns may be forwarded to the Allegation Review Board or the Office of Investigation for assessment of potential willful aspects. Information associated with CFSI should be forwarded to the appropriate TRG for further assessment.

#### **4.4 Reactor OpE Process—Evaluate**

After OpE information receives a Level 2 screen and is communicated to various internal stakeholders in the process, it is then evaluated to clearly determine the significance of its impact on plant operation, new reactor construction and design, and safety and generic applicability.

This evaluation also includes a determination of how to apply this information within agency activities.

The evaluation of OpE information has two objectives. The first is to assess the significance of the subject OpE or ConE to glean important agency OpE insights. The second is to make recommendations, if any, on the *application* of the OpE insights. The evaluation should assess, as applicable, attributes that are similar to those considered for the screening guidelines. These include a determination of the risk significance and/or a qualitative determination of other safety or agency concerns for the subject OpE information, as described in this office instruction.

Regardless of whether the OpE information is evaluated for a reactive inspection, an evaluation is conducted to glean insights that could be applied toward agency action. An issue manager is assigned by the respective IOEB or CAEB branch chief who then owns the IFR and has the responsibility to ensure that the evaluation is performed within schedule. The issue manager is expected to serve as the lead project manager for any assigned IFRs.

When evaluating quantitative risk associated with OpE information, the following, at a minimum, should be reported:

- risk metric(s)/measures
- dominant sequences and cutsets
- assumptions applied in the analysis (sensitivity analysis is acceptable if sufficient information is not available to support analytical assumptions)

The issue manager has the overall responsibility for packaging and delivering the evaluation to IOEB and CAEB management. For cases where technical expertise or capability beyond that of the Issue manager or the OpE Clearinghouse staff is necessary, the IFR Manager may request technical expert staff residing in NRR, NRO, RES, or NSIR to provide an evaluation. If technical experts are requested to provide an evaluation(s), they should submit their input through their branch chief in a report to the Issue manager that includes, as necessary, recommendations for applying insights from such information in future regulatory activities. The issue manager should then develop an independent evaluation that considers the technical evaluations, but looks at the issue as a whole. This evaluation should take inputs from technical experts into consideration when developing final recommendations for addressing the issue. Final recommendations should be included in a closure memorandum addressed to IOEB and CAEB management (as

appropriate) with the evaluation from the issue manager and any technical evaluations included as enclosures (refer to the IOEB Handbook and CAEB Construction Experience Handbook for IFR guidance).

If the issue manager’s recommendation is that no further action is needed, this should be noted in the issue manager’s evaluation and the closure memorandum, including a basis for the recommendation to close the evaluation with no further action.

**4.5 Reactor OpE Process—Apply**

The issue manager completes the evaluation of OpE information and then submits an IFR closure report containing the evaluation, findings, and recommendations for future activities to the appropriate technical lead for concurrence. The issue manager’s branch chief decides, in consultation with other appropriate NRC managers when necessary, whether to adopt the recommendations for applying the subject OpE information.

OpE issues that evolve into separate, higher level initiatives outside the scope of the Reactor OpE Program and are better handled by other agency processes are transferred to those respective programs or processes for further evaluation and application as appropriate (refer to the IOEB Handbook and CAEB Construction Experience Handbook for handoff). An inspection finding that is greater than green is an example where a significant time delay can occur before IOEB/CAEB can screen and make a recommendation. In these cases, other programs outside of the reactor OpE program may have the lead to take agency level action. Among these programs and processes are the agency’s generic issues program, the TIA process, and the rulemaking program.

The options for applying the OpE insights from operating experience include, but are not limited to:

- (1) communicating these lessons to various internal and/or external stakeholders, (i.e. internal OpE COMMS or via generic communications to external stakeholders
- (2) taking a regulatory action to require responses from the licensees pursuant to 10 CFR 50.54(f) or issuing orders for actions, and/or generic letters or bulletins
- (3) influencing agency programs including those shown in the following table:

Rulemaking
Regulatory Guides
Standard Review Plan
Technical Specifications
Generic Safety Issues
Inspections
Enforcement Actions
Research or Long Term Studies
New Reactor licensing and Construction Inspection
License Renewal Activities

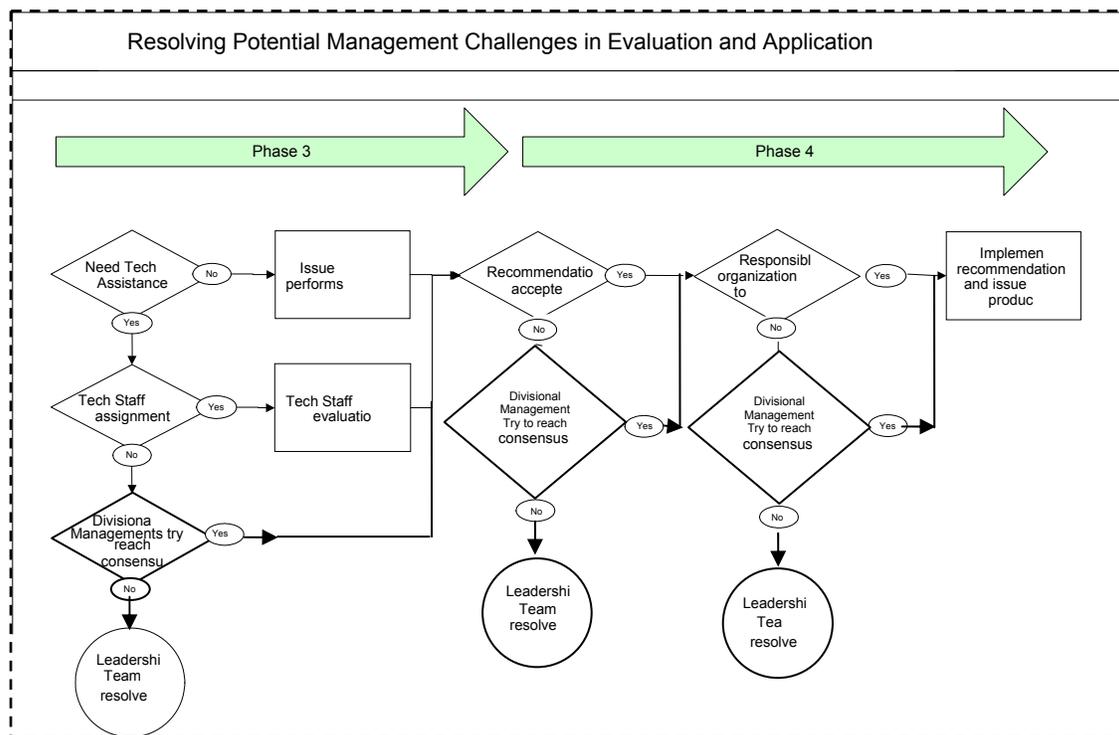
#### 4.6 Communications

To support the agency’s communications of significant reactor OpE information, the OpE Clearinghouse coordinates with the HR Technical Training Center and agency/office of information technology staff to develop methods for OpE knowledge transfer. As needed, IOEB/CAEB staff members provide OpE information that has been evaluated and determined useful to support knowledge transfer via an appropriate training medium.

#### 4.7 Resolving Potential Management Challenges in Evaluation and Application

The evaluation of OpE Information and application of OpE insights from the evaluations (i.e., Phases 3 and 4) may involve expertise and human resources beyond the control or influence of the OpE Clearinghouse staff. It may also involve independent evaluations that proceed in parallel and outside of the OpE Clearinghouse process. Since OpE evaluation is by its nature, reactive, conflicts related to resource and schedule management could arise. Resources needed to execute evaluations and to apply proposed recommendations may not be readily available. Additionally, responsible managers may not always agree on the need to provide an evaluation report requested by the OpE Clearinghouse; similarly, disagreements could arise with respect to the application of OpE insights. To handle these situations in a formal and systematic way, the model shown in Figure 2 should be used to address and resolve these potential management challenges in Phases 3 and 4.

**Figure 2 - Resolving Potential Management Challenges in Evaluation and Application**



## **5. RESPONSIBILITIES AND AUTHORITIES**

### **5.1 Director, Office of Nuclear Reactor Regulation**

- Leads the agency's Reactor OpE Program.
- Serves as a sponsor for the communication of OpE through the Web and other information technology, in coordination with the Office of Information Services (OIS), as necessary; and ensures review and approval of information technology applied in OpE in accordance with the agency management policy for Capital Planning and Investment Control (MD 2.2).

### **5.2 Director, Office of New Reactors**

- Leads the agency's new reactor ConE Program as part of the agency's Reactor OpE Program.
- Assigns a senior manager as a single point-of-contact to coordinate overall ConE Program activities, including its interface with the OpE Clearinghouse, and to measure its effectiveness.
- Provides resources to ensure that OpE Information is appropriately evaluated and applied in support of core office programs such as licensing, inspections, rulemaking, and enforcement. This includes processes to support other offices, as needed.
- Ensures that lessons learned from international reactor construction activities are incorporated into the Reactor OpE Program.

### **5.3 Deputy Director for Reactor Safety Programs, Office of Nuclear Reactor Regulation**

- Provides oversight for all NRR OpE international activities.
- Adequately funds the Technical Issue Resolution Planned Accomplishment to ensure that OpE issues, that are safety significant or are of other regulatory importance, can be efficiently and effectively resolved through technical staff *evaluation* and recommendation.
- Ensures that the OpE Clearinghouse Issue for Resolution recommendations are being considered by NRR program owners (rulemaking, licensing generic communications, oversight, etc.)

### **5.4 Director, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation**

- Serves as the single point-of-contact to coordinate overall Reactor OpE program

activities and to measure effectiveness per MD 8.7.

- Provides the OpE *Clearinghouse* to facilitate communication of OpE information and project manage *evaluation* and *application* decisionmaking.
- Manages changes to the inspection program that are necessary as a result of evaluations and associated recommendations for *application*.
- Coordinates with NSIR, as necessary, to identify reactor OpE information that could impact nuclear security.
- Coordinates with NRO, as necessary, to identify reactor OpE information that could impact new reactors and new reactor construction events/experience that could impact nuclear safety at existing (operating) nuclear plant.

**5.5 Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation**

- Directs changes to the licensing program that are necessary as a result of *evaluation* and associated recommendations for *application*.
- Provides resources to facilitate obtaining additional information from licensees that may be necessary to support *evaluations*.

**5.6 Director, Division of Engineering, Office of Nuclear Reactor Regulation**

- Provides technical support for the *evaluation* and *application* of applicable OpE information.
- Recommends agency *application* as a result of *evaluations* performed by the Division of Engineering including evaluations conducted through the Technical Review Group (TRG) process.

**5.7 Director, Division of Safety Systems, Office of Nuclear Reactor Regulation**

Provides technical support for the *evaluation* and *application* of applicable OpE information.

- Recommends agency *application* as a result of *evaluations* performed by the Division of Safety Systems (DSS) including evaluations conducted through the TRG process.

**5.8 Director, Performance and Resource management Staff (PRMS), Office of Nuclear Reactor Regulation**

- Ensures that the office is adequately staffed and budgeted to fulfill the Web development and information technology requirements of MD 8.7 and this office

instruction.

- Ensures that best practices for Web development, information technologies, and knowledge management practices are applied to assist the DIRS OpE Clearinghouse in making OpE information available to the entire NRC staff and, to the extent appropriate, the public. The director coordinates with OIS as necessary.

**5.9 Director, Division of License Renewal, Office of Nuclear Reactor Regulation**

- Ensures that activities that involve license renewal issues that may warrant license renewal program changes or applications (such as generic communications) are appropriately provided as inputs to the OpE Clearinghouse or consideration. Directs changes to the license renewal program that are necessary as a result of *evaluations* and associated recommendations for *application*.

**5.10 Director, Division of Safety Systems and Risk Assessment, Office of New Reactors**

- Provides technical support for the *evaluation* and *application* of applicable OpE information.
- Recommends agency application as a result of evaluations performed by the Division of Safety Systems and Risk Assessment.

**5.11 Director, Division of Construction Inspection and Operational Programs, Office of New Reactors**

- Serves as the NRO point-of-contact to coordinate the ConE component of the Reactor OpE Program with Region II, NRR, and other offices on program implementation, including oversight and enforcement.
- Leads the development of temporary instructions (TIs) and other changes to inspection procedures and provides support for any training needs identified through the *evaluation* of applicable OpE information.
- Provides NRO staff support for the OpE *Clearinghouse*.

**5.12 Director, Division of New Reactor Licensing, Office of New Reactors**

- Directs changes to the large, light-water reactor licensing program that are necessary as a result of *evaluation* and associated recommendations for *application*.
- Ensures that the closure process for generic communications addresses any changes necessary to the core NRO programs.
- Provides resources, as necessary, to facilitate obtaining additional information from licensees that may be necessary to support *evaluations*.

**5.13 Director, Division of Engineering, Office of New Reactors**

- Provides technical support for the *evaluation* and *application* of applicable OpE information.
- Recommends agency application as a result of evaluations performed by the Division of Engineering.

**5.14 Director, Division of Site Safety and Environmental Analysis, Office of New Reactors**

- Provides technical support for the *evaluation* and *application* of applicable OpE information.
- Recommends agency application as a result of evaluations performed by the Division of Site Safety and Environmental Analysis.

**5.15 Director, Division of Advanced Reactors and Rulemaking, Office of New Reactors**

- Directs changes to the advanced reactors licensing and rulemaking programs that are necessary as a result of *evaluation* and associated recommendations for *application*.
- Ensures that the closure process for generic communications addresses any changes necessary to the core NRO programs.
- Provides resources to facilitate obtaining additional information from licensees that may be necessary to support *evaluations*.

**5.16 Director, Performance and Resource management Staff (PRMS), Office of New Reactors**

- Ensures that an efficient work control process is provided to help facilitate NRO's support of the *evaluation* and *application* phases of the Reactor OpE Program.

**5.17 Chief, Operating Experience Branch, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation**

- Assists in resolving responsibility issues with respect to *evaluation* and *application* of OpE information.
- Manages the OpE *Clearinghouse* and analysis functions within a single organization to collect, *screen*, prioritize, and distribute OpE information to the NRC staff; facilitate and track OpE *evaluations*, decisions, and *applications*; assist the communication of OpE insights; assess and trend OpE; and coordinate overall NRC OpE functions.

- Coordinates the implementation of MD 8.7 and this office instruction.
- Responsible for effectiveness assessment and periodic process self-assessment. This shall include periodic inter-office effectiveness reviews of the reactor OpE process including NRR OpE branch and other agency offices such as the regional offices, RES, NRO, and NSIR.

**5.18 Chief, Reactor Inspection Branch, Division of Inspection and Regional Support, Office of Nuclear Reactor Regulation**

- Decides when it is appropriate to change the ROP as a result of OpE and directs those changes to be made. Changes to the inspection component of the ROP as a result of OpE will generally involve (1) a modification to the inspection procedures or use of an OpE Smart Sample (OpESS), (2) development of a TI, and (3) education of inspection staff and/or inspection program staff. Changes to the performance indicator program as a result of OpE insights should also be considered.

**5.19 Chief, Center for Planning and Analysis Branch, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation**

- Provides a work control system to assist in the transfer of responsibilities.
- Provides IT support to enable the OpE Clearinghouse to efficiently and effectively track OpE decisionmaking and effectively search OpE sources.

**5.20 Chief, Information Technology Branch, Program Management, Policy Development and Analysis Staff, Office of Nuclear Reactor Regulation**

- Ensures that best practices for Web development, information technologies, and knowledge management are applied to assist the DIRS *Clearinghouse* in making OpE information available to the entire NRC staff and, to the extent practical, the public. The chief coordinates with OIS as necessary.
- Supports the OpE *Clearinghouse* by providing the IT systems/solutions necessary to process OpE information throughout the OpE process.

**5.21 Chief, Generic Communications and Power Uprate Branch, Division of Policy and Rulemaking, Office of Nuclear Reactor Regulation**

- Ensures that the closure process for bulletins, generic letters, and regulatory issue summaries, as appropriate, address any changes necessary to the core NRR programs (i.e., licensing, oversight, rulemaking, and incident response). Ensures that the timely processing of generic communications (i.e., bulletins, generic letters, and regulatory issue summaries), as appropriate, to address *evaluations* and associated recommendations for *application*.

**5.22 Chief, Construction Assessment and Enforcement Branch,  
Division of Construction Inspection and Operational Programs, Office of New  
Reactors**

- *Manages the implementation of the ConE Program as part of the Reactor OpE Program.*
- *Coordinates the evaluation and application of new reactor applicable IFRs. Assigns an issue manager for IFR management and approves IFR closure memoranda.*
- *Responsible for the Reactor OpE Program effectiveness, assessment, and documentation in NRO.*
- *Coordinates the processing of generic communication within NRO.*

**5.23 Chief, Licensing Processes Branch, Division of Policy and Rulemaking, Office  
of Nuclear Reactor Regulation**

- *Ensures that activities that involve OpE, such as the task interface agreement (TIA) program (completed TIAs), are appropriately provided as inputs to the OpE Clearinghouse.*

**6. PRIMARY CONTACTS**

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**7. RESPONSIBLE ORGANIZATIONS**

NRR/DIRS/IOEB and NRO/DCIP/CAEB

**8. EFFECTIVE DATE:**

June 3, 2013

**9. REFERENCES**

- MD 5.12, "International Nuclear and Radiological Event Scale (INES) Participation," January 30, 2012.
- MD 8.2, "NRC Incident Response Program," June 16, 2006.

- MD 8.3, “NRC Incident Investigation Program,” March 27, 2001.
- MD 8.7, “Reactor Operating Experience Program,” September 27, 2012.
- Memorandum from the Executive Director for Operations to the Commission, “Notification of the Revised Charter of the Committee to Review Generic Requirements (CRGR),” November 8, 1999. (Note: Attached to this memorandum is the CRGR Charter, Revision 7, dated November 7, 1999.)
- IMC 0309, “Reactive Inspection Decision Basis for Reactors,” October 28, 2011.
- IMC 0514, “NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants,” August 26, 1988.
- IMC 0970, “Potentially Generic Items Identified by Regional Offices,” December 11, 2000.
- IMC 1120, “Preliminary Notifications,” June 9, 2009.
- IMC 2523, “NRC Application of Operating Experience in the Reactor Oversight Process,” November 16, 2011.
- NRR Office Instruction LIC-502, “Procedure for Development, Implementation, and Management of Actions Plans.”
- NRR Office Instruction LIC-503, “Generic Communications Affecting Nuclear Reactor Licensees.”
- Reactor Operating Experience Task Force Report, November 26, 2003, ADAMS Accession No. ML033350063.

**Enclosures:**

1. Technical Review Group Process
2. Appendix - Change History

## Technical Review Group Process

Technical Review Groups (TRGs) provide a valuable evaluation and feedback role for the Office of Nuclear Reactor Regulation (NRR) Operating Experience (OpE) branch and Office of New Reactors (NRO) Division of Construction Inspection and Operational Programs (DCIP), Construction Assessment and Enforcement Branch (CAEB). It is important to have a systematic process for TRG members to gather applicable OpE. In addition, it is beneficial for TRG results to be submitted in a consistent and timely manner back to the OpE branch. Finally, OpE branch members should have a well-defined process for compiling TRG results, communicating recommendations, and tracking their completion. The purpose of this appendix is to define each of these three processes.

### **Gathering of OpE Information by the TRGs**

TRG members are expected to be familiar with the OpE Gateway Web site. This familiarity enables them to quickly and thoroughly search for OpE related to their particular area of responsibility. While the amount of focus on each source of OpE will vary between the different TRGs, all are expected to search the following data sources:

- Licensee Event Reports
- IAEA Incident Reporting System Database
- 10 CFR Part 21 Reports
- 10 CFR Part 50.55(e) Reports
- OpE and Construction Experience (ConE) and Issues for Resolution (IFRs)
- OpE COMMunications (OpE COMMS)
- Inspection Findings
- Informal emails sent to TRG leads as a result of the daily OpE Clearinghouse meeting
- Other data sources (NUREGs, regulatory guides, industry reports, etc), as appropriate
- Each TRG lead has latitude in how they wish to supervise the gathering and submission of OpE in their area of expertise. Suggestions for a successful and thorough TRG review include:
  - TRG lead communicates with team members to ascertain their specific areas of expertise and experience
  - TRG lead disseminates informal OpE Clearinghouse emails based on team members' areas of expertise.
  - TRG lead assigns a specific team member to review each dataset (LERs, Findings, etc.) and provide feedback in a consistent format (see "Annual Submission of OpE Information" below for suggested format).
  - TRG members provide list of documents reviewed, any significant deficiencies or negative trends, and recommendations for agency action to the TRG lead.
  - TRG lead discusses findings and recommendations with members and compiles final submittal.

## **Annual Submission of OpE Information**

TRG reports are due to the OpE branch point-of-contact by June 15<sup>th</sup> of each year. In order to facilitate the compilation and follow-up of recommendations, the following format is suggested:

- Introduction
  - Briefly describe the review approach used by the TRG
  - Discuss different datasets that were used as sources for the review
  - Discuss search methods used (i.e. keywords used, etc)
  
- Findings
  - Describe the results of the TRG review
  - Identify issues of potential or actual safety significance, trends, and recurring issues
  - Determine the need for specific applications of OpE and ConE or staff follow-up activities that have been taken or are underway
  - Identify any applicability of the issue to new reactor designs and construction activity.
  
- Recommendations
  - Document specific recommended actions, and their status if already begun
  - Clearly and explicitly label recommendations for ease of tracking

## **Compilation of Results and Recommendations**

The OpE branch compiles all TRG annual reports into one document for publication on the OpE Gateway Web site. During this process, the staff shall review each recommendation made by the TRGs and ascertain its status. Recommendations and their status shall be compiled into a separate table for tracking by the OpE branch and posted to the OpE Gateway Web site.

The OpE branch chief will draft an annual memorandum from the Director, Division of Inspection and Regional Support to transmit TRG results to the directors of NRR, NSIR, NRO, RES, and each Regional Administrator. The memorandum shall include as attachments the TRG annual reports and the table listing TRG recommendations and status.

The OpE branch chief will track TRG recommendations throughout the year. Recommendations that receive a Level 2 screen by the OpE Clearinghouse will be tracked using NRR's Work Planning system. Recommendations that do not receive a Level 2 screen and still considered significant by the OpE branch can be ticketed for action and formal tracking.

**Appendix - Change History  
Office Instruction LIC-401  
NRR Operating Experience Program**

<b>LIC-401 Change History - Page 1 of 2</b>			
<b>Date</b>	<b>Description of Changes</b>	<b>Method Used to Announce &amp; Distribute</b>	<b>Training</b>
03/31/2003	This office instruction is an initial issuance of LIC-401 (Draft), which is intended to describe the requirements, roles, and responsibilities associated with the current NRR operating experience program activities. It is being issued in draft in light of the ongoing overall review of the agency's operating experience program. This office instruction depicts the various activities of the Operating Experience Branch (IOEB) of the Division of Regulatory Improvement Programs (DRIP), including screening, review, and follow-up of operating experience (OpE) information. Further, it contains current other IOEB activities that are important for NRR implementation of the agency's OpE program.	E-mail to NRR staff	None
05/17/2005	This procedure replaces draft LIC-401 (issued on March 31, 2003), which provided operating experience (OpE)-related guidance before the work of the Reactor Operating Experience Task Force (ROETF) and the development of Management Directive (MD) 8.7. Draft LIC-401 had integrated, converted, and streamlined Office Letters/Instructions 503, 1301, 1302, and LIC-403.	E-mail to NRR staff	None
03/27/2007	This procedure replaces the current version of LIC-401 (issued on May 17, 2005), which provided operating experience (OpE)-related guidance before the work of the Reactor Operating Experience Task Force (ROETF) and the development of Management Directive (MD) 8.7.	E-mail to NRR staff	None
11/05/2010	This revision includes the addition of the Operating Experience Smart Sample (OpESS) process; adds screening criteria for Large Early Release Frequency (LERF) and numerous other minor changes.	E-Mail to NRR Staff	None Self-study for IOEB staff

LIC-401 Change History - Page 2 of 2

<b>Date</b>	<b>Description of Changes</b>	<b>Method Used to Announce &amp; Distribute</b>	<b>Training</b>
05/23/2013	This revision of LIC-401 (NRR) incorporates the guidance contained in NRO-REG-112 (NRO). The objective of this joint Office Instruction is to combine guidance for the NRR Operating Experience and NRO Construction Experience Programs to support the NRC's Center of Expertise for Operating Experience. The revision includes the addition of the Responsibilities and Authorities, adds and clarifies some definitions, and changes some terminology for screening items.	E-mail to NRR Staff	None