

# NRC INSPECTION MANUAL

IRIB

## INSPECTION PROCEDURE 71153

### FOLLOWUP OF EVENTS AND NOTICES OF ENFORCEMENT DISCRETION

EFFECTIVE DATE: January 1, 2020

PROGRAM APPLICABILITY: IMC 2515A, IMC 2201A, IMC 2600B

CORNERSTONES: ALL

INSPECTION BASES: See Inspection Manual Chapter (IMC) 0308, Attachment 2, "Technical Basis for Inspection Program"

**SAMPLE REQUIREMENTS:**

Sample Requirements		Minimum Baseline Completion Sample Requirements		Budgeted Range	
Sample Type	Section	Frequency	Sample Size	Samples	Hours*
Event Followup	03.01	When an event occurs that warrants a deterministic and/or probabilistic risk assessment under Management Directive (MD) 8.3, "NRC Incident Investigation Program"	As Required	1	1 Unit Site: 65  2 Unit Sites: 80 2-Unit AP1000: 40  3 Unit Sites: 100
Event Report	03.02	Review all licensee event report (LER) and security event report (SER) submittals**		3 to 9	
Personnel Performance	03.03	For significant planned nonroutine plant evolutions or for unplanned events and transients (e.g., unplanned reactor scram) that do not warrant an MD 8.3 determination		1	
Notice of Enforcement Discretion (NOED)	03.04	When a NOED is granted		0	
Reporting	03.05	When a potential reporting issue exists		0	

\* Hours may vary depending on the complexity and number of operational events, degraded conditions, LERs/SERs, personnel performance issues, and NOEDs at the site.

\*\* Upon receipt, screen and prioritize LER/SER reviews based on their risk significance and perceived importance to safety and security. LER/SER reviews should be completed within 1 year of receipt. Additional time may be required for LERs/SERs involving requests for additional information, task interface agreements, or investigations.

## 71153-01 INSPECTION OBJECTIVES

- 01.01 Evaluate licensee events and degraded conditions for plant status and mitigating actions and to provide input to determine whether an incident investigation team (IIT), augmented inspection team (AIT), or special inspection (SI) is warranted.
- 01.02 Verify the accuracy and completeness of written LERs/SERs and to determine the appropriateness of the corrective actions.
- 01.03 Review personnel performance during planned nonroutine plant evolutions and/or contribution to unplanned nonroutine evolutions, events, and transient operations.
- 01.04 Verify that licensee actions and obligations under granted NOEDs are met.
- 01.05 Verify that licensee notifications and reports are being appropriately submitted to the U.S. Nuclear Regulatory Commission (NRC).

## 71153-02 GENERAL GUIDANCE

MD 8.3 defines a significant operational event as radiological, safeguards, or other safety-related operational event at an NRC-licensed facility that poses an actual or potential hazard to public health and safety, property, or the environment. At power reactors, these events include significant unplanned degraded conditions identified by the licensee or the NRC.

The NRC staff uses MD 8.3 and IMC 0309, "Reactive Inspection Decision Basis for Reactors," to determine the appropriate NRC response to a significant operational event. The responding onsite inspectors provide details about plant status and performance of equipment and personnel to NRC management, event review staff, and NRC regional and Headquarters risk analysts. The details are used to determine the level of agency response, investigatory response if any (e.g., IIT, AIT, or SI), and any special resources and expertise needed for event followup.

Attachment 1 of this inspection procedure (IP) illustrates the relationship between event response and the Reactor Oversight Process (ROP). Attachment 2 provides guidance for limiting the NRC's impact on licensees during an event or transient operations. Attachment 3 provides guidance for plant response and event followup.

For each sample, conduct a routine review of problem identification and resolution activities using IP 71152, "Problem Identification and Resolution."

## 71153-03 INSPECTION SAMPLES

### 03.01 Event Followup Sample

**Evaluate licensee events and degraded conditions for plant status and mitigating actions and to provide input to determine whether an IIT, AIT, or SI is warranted.**

## Specific Guidance

- a. Monitor plant status/security posture and obtain an understanding of plant status, equipment/personnel performance, and plant management decisions to assist NRC management in making an informed evaluation of plant conditions. Observe plant parameters and status for mitigating systems/trains and fission product barriers. Information sources include drawings, system descriptions, control board indications, plant logs, computer data, recorders, and licensee personnel. Refer to Attachment 3 for additional specific guidance for pressurized-water reactors, boiling-water reactors, and post transient response. For security events, review security event logs, alarm station logs, and associated security video camera footage; conduct field observations of the event location(s); and interview security personnel directly involved in the event.
- b. Evaluate the performance of mitigating systems, security systems, compensatory measures, and licensee actions. Evaluate whether the licensee has appropriately resolved event issues before restart, where applicable, such as by attending Plant Oversight Review Committee meetings. For security events, evaluate whether the licensee has appropriately implemented applicable compensatory measures to ensure the continued efficacy of the physical protection program and protective strategy.
- c. Confirm that the licensee properly classified the event in accordance with emergency action level procedures and made timely notifications to the NRC and State/county governments as required (Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, "Standards for Protection against Radiation"; 10 CFR 50.9, "Completeness and Accuracy of Information"; 10 CFR 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors," (for sites that have adopted 10 CFR 50.69); 10 CFR 50.72, "Immediate Notification Requirements for Operating Nuclear Power Reactors"; and 10 CFR 50.73, "Licensee Event Report System"). For security events, confirm that the licensee evaluated the event and made appropriate notifications to the NRC consistent with site security plans, implementing procedures as required by 10 CFR 73.71, "Reporting of Safeguards Events"; 10 CFR 73.77, "Cyber Security Event Notifications"; and Appendix G, "Reportable Safeguards Events," to 10 CFR Part 73, "Physical Protection of Plants and Materials."
- d. Communicate details about the event to management, risk analysts, and others in the region and at NRC Headquarters as input to determining the need for an IIT, AIT, or SI. Provide the information needed to assess the event against the deterministic criteria in MD 8.3 and IMC 0309.

If probabilistic risk input is required for the event, provide risk assessment input related to equipment malfunctions/unavailabilities and operator errors. In providing such input, consider likely core damage and large early release sequences associated with the event that include known equipment failures, operator errors, remaining mitigation capability, and mitigation equipment that could contribute to increased risk if unavailable. Work with the risk analysts to complete the risk assessment.

- e. Retain observations related to performance issues and contributing factors for potential followup by the IIT, AIT, SI, or appropriate ROP baseline inspection. *Inspectors should provide the followup inspection team leader with any information on potential contributing factors that may assist the followup assessment of the event. Information should include any issues noted with components of safety culture as described in*

*IMC 0310, "Aspects within the Cross-cutting Areas." Information about observing a safety-conscious work environment is contained in IP 71152, "Problem Identifications and Resolution." The information is provided for followup by IIT, AIT, SI, or ROP baseline inspection(s). The staff assigned to review the event as the agency response is responsible for documentation in accordance with the procedure governing the activity.*  
[C1]

### 03.02 Event Report Sample

**Review written LER and SER submittals and verify the accuracy and completeness of the information provided and the appropriateness of the corrective actions.**

#### Specific Guidance

- a. Review written LERs/SERs, including any revisions, and related documents and verify the accuracy and completeness of the submitted information. For example, inspector observations during the conduct of an SI may be used to substantiate the accuracy and completeness of the information provided in the submitted report. Do not review telephone notifications to the NRC Operations Center for invalid safety system actuations, as allowed in 10 CFR 50.73, "License Event Report System."

Violations identified in an LER/SER submittal, including minor violations, are to be dispositioned and documented using IMC 0611, "Power Reactor Inspection Reports."

- b. Verify that the written LER/SER submittals satisfy applicable regulations, security and emergency plans, and implementing procedures.

Verify the appropriateness of corrective actions taken and planned. Assess whether generic issues were appropriately identified, such as the applicability of the requirements in 10 CFR Part 21, "Reporting of Defects and Noncompliance."

For those LERs/SERs that involve operator errors, additionally review the personnel performance aspects under Section 03.03 as part of the "Event Report Sample." Do not count this review as a "Personnel Performance Sample." Determine whether corrective actions adequately address any identified operator errors.

**NOTE:** For sites that have adopted 10 CFR 50.69, RISC-3 and RISC-4, SSCs are not subject to 10 CFR 21, 10 CFR 50.72, and 10 CFR 50.73. RISC-1 and RISC-2 SSCs are still subject to the provisions and have additional reporting requirements outlined in 10 CFR 50.69(g).

- c. For LERs reporting operation or condition which was prohibited by the plant's Technical Specifications, verify that future or current operation is supported by a reasonable assurance that Technical Specification Limiting Conditions for Operation will be met throughout the surveillance interval. That is, completed corrective actions and past surveillance history supports a reasonable conclusion that the next surveillance will demonstrate operability. Consider additional follow-up under IP 71111.15, "Operability Determinations and Functionality Assessments" as warranted.

### 03.03 Personnel Performance Sample

**Review personnel performance during planned nonroutine plant evolutions. Determine whether personnel performance contributed to unplanned events and transients.**

#### Specific Guidance

Review appropriate operator/security logs, computer data, recorder data, procedural requirements, nonroutine evolution plans, briefings, contingency plans, video footage, **working hour records to evaluate for fatigue (see IP 93002, “Managing Fatigue” for additional information)**, and related training to aid in the assessment of personnel response. When appropriate, interview staff involved in the event. Determine whether the personnel response and performance were consistent with site operating procedures, security/emergency plans, and training, and determine whether the licensee’s evaluation appropriately assessed operator performance.

### 03.04 Notice of Enforcement Discretion Sample

**Verify that licensee obligations under a granted NOED are met and determine whether a violation of NRC requirements was involved.**

#### Specific Guidance

- a. Review any NOED and related documents to verify the accuracy of licensee oral assertions and provided information.
- b. Verify the proper implementation of any required compensatory measures and commitments.
- c. Assess the adequacy of licensee corrective actions and cause determinations.
- d. Determine whether NRC requirements were violated and specifically whether the requested NOED was the result of a violation or a failure to meet a licensee self-imposed standard.

Refer to [IMC 0410, “Notices of Enforcement Discretion,”](#) for additional information on the NOED process.

### 03.05 Reporting Sample

**Verify that event reporting determinations comply with reporting requirements.**

#### Specific Guidance

This sample is used to follow up on potential reporting issues and focuses on whether reports, which the NRC relies on to perform its regulatory oversight function, are being correctly submitted when required. This is not an evaluation of the accuracy of submitted reports, as this is accomplished in Section 03.02.

NUREG-1022, “Event Reporting Guidelines: 10 CFR 50.72 and 50.73,” contains additional guidance, and the Operating Experience Branch of the Office of Nuclear

Reactor Regulation's Division of Inspection and Regional Support is available to provide technical support.

When appropriate, review event notification retractions and event report cancellations to understand the reasons behind the initial submittal and subsequent retraction or cancellation.

NOTE: For sites that have adopted 10 CFR 50.69, RISC-3 and RISC-4, SSCs are not subject to 10 CFR 21, 10 CFR 50.72, and 10 CFR 50.73. RISC-1 and RISC-2 SSCs are still subject to the provisions and have additional reporting requirements outlined in 10 CFR 50.69(g).

#### 71153-04 REFERENCES

Cross Reference of Generic Communications and Inspection Resources:  
<http://drupal.nrc.gov/nrr/ope/34026> (nonpublic)

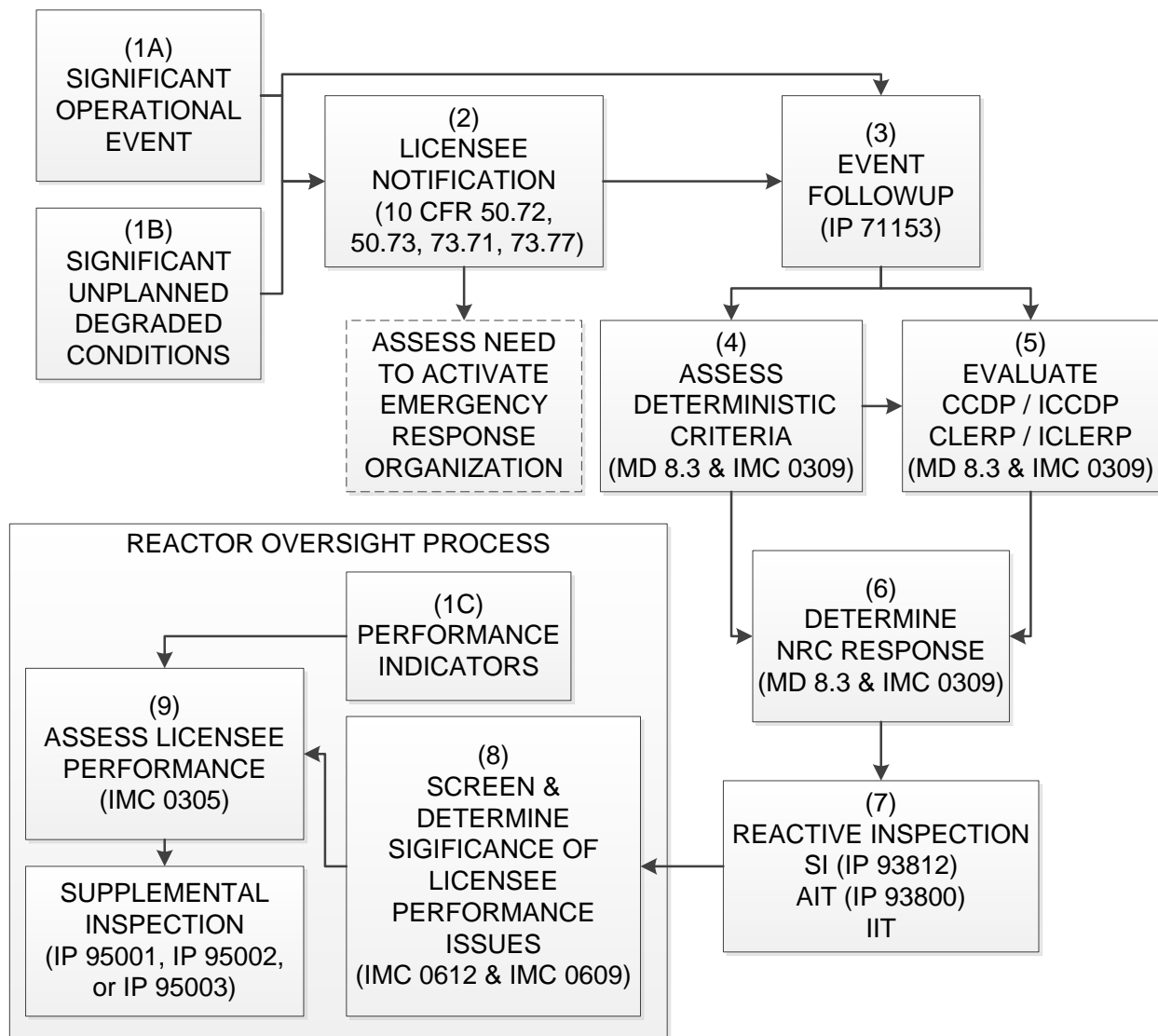
Operating Experience Gateway:  
<http://drupal.nrc.gov/nrr/ope> (nonpublic)

IHS Codes and Standards:  
<http://www.internal.nrc.gov/TICS/library/standards/ih.html> (nonpublic)

NRC Technical Library:  
<http://www.internal.nrc.gov/TICS/library/index.html> (nonpublic)

END

Attachment 1  
Relationship of Event Followup to Reactor Oversight Process



**BLOCK 1A**—A significant operational event is a radiological, safeguards, or other safety-related operational event that poses an actual or potential hazard to public health and safety, property, or the environment.

**BLOCK 1B**—Significant unplanned degraded conditions may be identified by the licensee or the NRC. Plant configurations resulting solely from planned maintenance need not be considered.

**BLOCK 1C**—Some performance indicator (PI) thresholds are in units of change in annualized core damage frequency (delta annualized CDF). Some events, such as reactor trips, may also be counted in PI data.

**BLOCK 2**—Licensee notification generally occurs. Inspectors may follow up on suspected failures to appropriately notify and report.

BLOCK 3—Licensee notifications in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.72, “Immediate Notification Requirements for Operating Nuclear Power Reactors,” are one means of activating Inspection Procedure (IP) 71153, “Follow-Up of Events and Notices of Enforcement Discretion,” initial event followup by onsite U.S. Nuclear Regulatory Commission (NRC) inspectors. If an onsite inspector is not immediately available, this responsibility transfers to the Headquarters Operations Officer until regional personnel can respond.

BLOCK 4—Management Directive (MD) 8.3, “NRC Incident Investigation Program,” Part I, and Inspection Manual Chapter (IMC) 0309, “Reactive Inspection Decision Basis for Reactors,” include deterministic criteria. Events meeting criteria that are not risk informed may result in incident investigation teams (IITs), augmented inspection teams (AITs), or special inspections (Sis). Power reactor events/degraded conditions meeting risk informed criteria are evaluated for conditional core damage probability (CCDP)/incremental conditional core damage probability (ICCDP) or conditional large early release probability (CLERP)/incremental conditional large early release probability (ICLERP).

BLOCK 5—For events, risk analysts use the NRC’s Standardized Plant Analysis of Risk (SPAR) models and other available tools to estimate CCDP, which accounts for all equipment unavailability, regardless of cause. For degraded conditions, ICCDP is used for risk significance. Initial estimates of CCDP/ICCDP may be made within 4–8 hours of receiving relevant information. Inspectors support risk analysts by providing event details such as equipment malfunction/unavailability, operator errors, and equipment out of service for maintenance. Inspectors verify availability of mitigation equipment or containment function that was not required during the event, but which could contribute to increased risk if unavailable. Plant-specific Systems Analysis Programs for Hands-on Integrated Reliability Evaluations (SAPHIRE) and site-specific SPAR models are used to gain qualitative event risk insights when available.

BLOCK 6—IMC 0309 and MD 8.3, Part I, list appropriate power reactor operational event response options (IIT, AIT, SI) as a function of CCDP (or ICCDP). This determination considers the uncertainty of influential assumptions and their effect on risk significance.

BLOCK 7—SIs, AITs, and IITs are performed to promptly disseminate the facts, conditions, circumstances, and causes of significant events and to identify appropriate followup actions. Licensee performance issues are evaluated during or shortly after the reactive inspection.

BLOCK 8—Licensee performance issues are screened using IMC 0612, “Issue Screening,” and any resultant findings are evaluated using the significance determination process to assign a significance color (i.e., Green, White, Yellow, Red) to the finding.

BLOCK 9—White, Yellow, and Red findings and PI inputs are assessed using the Action Matrix described in IMC 0305, “Operating Reactor Assessment Program,” in order to determine the appropriate agency response.



Attachment 2  
Limiting NRC Impact during Events

I. Inspector Control Room Conduct

For plant events, inspectors must perform sufficient inspection to develop an independent assessment of plant conditions, which will be used in making decisions on the U.S. Nuclear Regulatory Commission's (NRC's) responses to an event. Activities that form the basis for this assessment may include independent measurements, verifying the accuracy of information, control board walkdowns (to observe annunciators, process parameters, switch positions, and other instrumentation), or assessment of licensed operator performance during ongoing activities.

The NRC's goal is to monitor and assess with as little impact on the licensee as possible and to ensure NRC evaluations are timely and accurate. During plant events, timely and independent inspector assessments are crucial; however, the degree of interaction with operators may be limited in light of ongoing control room activities. The inspector must use judgment in establishing a balance between obtaining necessary information and not being intrusive in licensee response activities. The appropriate balance involves numerous variables, including safety significance of the event, complexity of the event, time constraints, and available staff.

The following guidance is provided to establish consistency for inspector conduct in the control room. When the NRC activates its emergency response plan, inspectors should follow the guidance in the applicable emergency response procedure. This guidance is intended for use in situations where the NRC has not activated its emergency response plan, but an abnormal event has happened at the plant. Inspectors should note that some of the guidance, such as inspector location in the control room and not interrupting operators, applies to all emergency situations. While this guidance deals mainly with event responses, specific attributes are applicable to inspector interaction with operators during normal conditions both inside and outside the control room.

- a. During the initial response to events, the assigned senior resident inspector (SRI) or the inspector acting in this capacity is in charge of all other NRC inspectors. These inspectors will take their direction from the SRI.
- b. The number of inspectors in the control room at any given time should be the minimum number needed to accomplish the agency's work. Typically, only one inspector should be in the control room during an event, unless special circumstances warrant additional inspectors. If several inspectors or other NRC personnel are in the control room during an event, the SRI or resident inspector will be in charge of them and will determine and communicate to the other inspectors and personnel what, if any, assistance is needed.
- c. Inspectors will adhere to the licensee's established administrative policies on entry into the restricted or "at the controls" area of the control room. For example, the inspector may need to ask the control room senior reactor operator or reactor operator for permission to enter the restricted area. Under no circumstances should the inspector demand entry into the restricted area. If entry is denied and access is deemed necessary by the inspector, the inspector should escalate the request to the licensee's management and inform NRC management. For general access to the control room, the licensee's policy should recognize that inspector access will be unannounced.

Inspectors who do not routinely enter the control room should identify themselves to the operators when they enter the control room.

- d. While observing ongoing activities in the control room, the inspector should be in a location that is out of the way of operators and does not obstruct their view of the reactor controls and instrumentation, yet provides the inspector with a broad view of the control room. An acceptable location outside the restricted "at the controls" area is preferable. It is recognized that short amounts of time in the restricted area may be necessary at appropriate stable time periods to verify significant parameters.
- e. Operators should not be interrupted, questioned, or otherwise distracted from performing their duties while responding to an event or while performing other duties for which their attention must be focused on the task at hand. Also, inspectors should not interfere, interrupt, or otherwise disturb communications between operators and communications between operators and their supervisors.
- f. If an inspector identifies and needs to urgently address a significant problem or question about plant or operator safety, then he or she should discuss it quickly and quietly with the shift supervisor or emergency response manager at a time when it will not interrupt ongoing operator actions. However, it may be appropriate to interrupt the operator if the inspector feels that an operator action may endanger plant personnel or the plant. Inspectors should hold their nonurgent questions for a more appropriate time.
- g. NRC personnel communicating with offsite organizations should generally do so from outside of the control room. Communication is possible from the NRC phone in the Technical Support Center or from other telephones outside the control room that have been agreed to with the licensee. It is acceptable for the inspector to make a telephone call from the control room provided the licensee agrees to the use of the telephone and the telephone conversation will not disrupt control room activities.
- h. Because of the authoritative role of the NRC, licensees listen carefully to inspectors and may interpret statements, side remarks, or observations as directives or requirements. Consequently, open, clear, and direct communications between inspectors and licensees are particularly important during events.

## II. Conference Calls with Licensees during Ongoing Event

When initially responding to an event, the NRC depends on information provided by licensees and inspectors at the plant (typically resident inspectors). This information is used for initially assessing events and making decisions about how to respond to the event. The NRC typically gets this initial information from licensees through their notification to the NRC Operations Center pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.72, "Immediate Notification Requirements for Operating Nuclear Power Reactors," or from conference calls between the NRC staff and the licensee. The NRC values conference calls as an efficient method of obtaining accurate and timely information. Such calls promote a mutual understanding of the facts and any concerns.

Caution is needed in scheduling and conducting conference calls when they take place during an ongoing event or situation where heightened licensee attention is being directed to a plant evolution. Although information obtained in a conference call is extremely valuable to the

NRC's overall understanding of a plant event, the overriding goal is that the call will not interfere with or detract from the licensee's ability to safely operate the plant. The following guidance should be used for conducting conference calls with licensees during abnormal plant conditions, such as the declaration of a Notification of Unusual Event or the use of an emergency operating procedure:

- a. NRC management should decide whether a conference call with the licensee is needed and whether conducting a conference call is appropriate at that particular time. NRC management may want to discuss with senior licensee management the possibility of conducting a conference call. The stability of the plant is the primary factor in deciding on a conference call. Other factors to be considered include the current level of NRC staff understanding and information available for the event, the safety significance of the event, the complexity of the event, and the current level of licensee activity in mitigating the event.
- b. When requesting the conference call, inform the licensee that it is the NRC's policy to not have the conference call interfere with the licensee's event response and that the call can be delayed. In keeping with the policy, coordinate with the licensee to establish an appropriate time for the call and allow the licensee to decide which individuals from their staff will participate. Generally, the SRI or resident inspector, when available, will coordinate the conference call.
- c. NRC technical staff and management with the right background should participate in the conference call to ensure proper questioning about and understanding of the event and associated issues. The senior NRC manager on the call should identify himself or herself and ensure that conference call discussions remain focused on relevant and important issues.
- d. The licensee should be informed of the proposed discussion topics and planned NRC participants to allow the licensee to prepare for the call.
- e. At the end of the call, an NRC manager should summarize followup actions, if any, to ensure that both the licensee and the NRC have a common understanding.

END

Attachment 3  
Plant Response and Event Followup

Each section of the checklist specifies the basis for actions.

a. Immediate Actions

- are intended to provide U.S. Nuclear Regulatory Commission (NRC) management with sufficient information to assess plant stability and make decisions about initial agency response without overwhelming the onsite inspector with information requests
- are based on conditions monitored by operators when implementing emergency operating procedures
- in most cases, can be easily collected over the telephone by an offsite inspector or collected and independently verified by an onsite inspector in less than 15 minutes

b. Short-Term Considerations

- are intended to provide NRC management with sufficient information to identify potential challenges to plant stability and verify the integrity of the safety barriers and assess radiological impacts
- prompt management and inspector decisions related to communication and coordination

c. Event Followup

- provides a list of post trip review activities that inspectors are expected to complete when implementing Inspection Procedure (IP) 71153, "Followup of Events and Notices of Enforcement Discretion"

## Pressurized-Water Reactor Plant Transient Response

For each item, gather information from the licensee or through direct observation on plant conditions (e.g., reactor power—“shutdown,”), control method (e.g., “all but three rods inserted”), and assessment (e.g., abnormal), and, if the assessment is abnormal, the actions being taken and the procedure being used.

<u>Immediate Actions</u>	<u>Event Time:</u>	<u>Event Date:</u>
<u>Cause/Description of Transient:</u>		
<input type="checkbox"/> Reactor power		
<input type="checkbox"/> Turbine status		
<input type="checkbox"/> Reactor coolant system pressure		
<input type="checkbox"/> Electrical power		
<input type="checkbox"/> Emergency core cooling system actuation		
<input type="checkbox"/> Decay heat removal path		
<input type="checkbox"/> Steam generator pressure and level		
<input type="checkbox"/> Emergency operating procedures (entered or imminent)		
<input type="checkbox"/> Emergency action levels (declared or imminent, time entered/exited)		
<input type="checkbox"/> Radioactive release (none, occurred and terminated, ongoing or imminent?)		
<input type="checkbox"/> Effect on other unit(s)		
<input type="checkbox"/> Security event (threat, damage)		
<u>Short-Term Considerations</u>		
<input type="checkbox"/> Fuel clad, reactor coolant system, and containment barriers		
<input type="checkbox"/> Technical specification safety limits		
<input type="checkbox"/> Emergency action level progression path		
<input type="checkbox"/> Safety-related equipment out of service or failed to actuate		
<input type="checkbox"/> Support systems for safety-related equipment functioning		
<input type="checkbox"/> What are the licensee’s priorities?		
<input type="checkbox"/> Abnormal reactor coolant system or secondary temperatures or pressures		
<input type="checkbox"/> Steam generator and pressurizer power-operated relief valves and safeties (actuated during event?)		
<input type="checkbox"/> Operator response in accordance with procedures		
<input type="checkbox"/> Licensee notifications to the state, locals, and the NRC		
<input type="checkbox"/> Communicate safety concerns to the NRC and licensee management		
<input type="checkbox"/> Personnel injuries, contaminations, or overexposures		
<input type="checkbox"/> Additional support or relief needed to continue to monitor the event		

## Boiling-Water Reactor Plant Transient Response

For each item, gather information from the licensee or through direct observation on plant conditions (e.g., reactor power—“shutdown,”), control method (e.g., “all but three rods inserted”), assessment (e.g., abnormal), and, if the assessment is abnormal, the actions being taken and the procedure being used?

<u>Immediate Actions</u>	<u>Event Time:</u>	<u>Event Date:</u>
<u>Cause/Description of Transient:</u>		
<input type="checkbox"/> Reactor power		
<input type="checkbox"/> Reactor pressure vessel pressure		
<input type="checkbox"/> Reactor pressure vessel level		
<input type="checkbox"/> Electrical power		
<input type="checkbox"/> Emergency core cooling system actuation		
<input type="checkbox"/> Decay heat removal path		
<input type="checkbox"/> Primary containment		
<input type="checkbox"/> Suppression pool		
<input type="checkbox"/> Safety relief valves (closed, cycling, or stuck open?)		
<input type="checkbox"/> Emergency operating procedures (entered or imminent)		
<input type="checkbox"/> Emergency action levels (declared or imminent, time entered/exited)		
<input type="checkbox"/> Radioactive release (none, occurred and terminated, ongoing or imminent?)		
<input type="checkbox"/> Effect on other unit(s)		
<input type="checkbox"/> Security event (threat, damage)		
<u>Short-Term Considerations</u>		
<input type="checkbox"/> Fuel clad, reactor coolant system, and primary and secondary containment		
<input type="checkbox"/> Technical specification safety limits		
<input type="checkbox"/> Electrical power		
<input type="checkbox"/> Emergency action level progression path		
<input type="checkbox"/> Safety-related equipment out of service or failed to actuate		
<input type="checkbox"/> Support systems for safety-related equipment functioning		
<input type="checkbox"/> What are the licensee’s priorities?		
<input type="checkbox"/> Operator response in accordance with procedures		
<input type="checkbox"/> Licensee notifications to the state, locals, and the NRC		
<input type="checkbox"/> Communicate safety concerns to the NRC and licensee management		
<input type="checkbox"/> Personnel injuries, contaminations, or overexposures		
<input type="checkbox"/> Additional support or relief needed to continue to monitor the event		

## Post Transient Response

<u>Event Followup</u>
Provide information to the Public Affairs and State liaison officers about the event.
Implement IP 71153, "Followup of Events and Notices of Enforcement Discretion."
Confirm the licensee properly classified the event and timely notified the State, local officials, and the NRC.
Review event notification.
Collect alarm data printouts.
Obtain and review sequence of event recorders.
Provide necessary information to the region in support of the determination under Management Directive 8.3, "NRC Incident Investigation Program."
Perform control room walkdown and review control board status and strip charts/digital recorders.
Review operator logs.
Walk down affected equipment.
Should plant equipment be quarantined?
Observe operator interviews or review operator statements.
Determine the event chronology.
Evaluate operator response to the transient.
Independently interview operators.
Evaluate the plant data of the event and compare it with the design data and final safety analysis report descriptions to evaluate whether the plant response was within the bounds of the final safety analysis report analysis.
Review all condition reports generated as a result of the transient.
Evaluate the licensee's post trip review for necessary corrective actions before startup.
Ensure the licensee has appropriately resolved any issues identified as a result of the event.
Transition to IP 71111.20, "Refueling and Other Outage Activities," as appropriate.
For security-related events, evaluate the communications and coordination between the security and operations organizations. Determine whether a security inspector is needed for further followup.

# Wallet Cards

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center; vertical-align: middle;">                     Pressurized-Water Reactor HOO RDO                 </td> <td style="padding: 5px;"> <b>Immediate Actions</b>                      Reactor power                      Turbine status                      Reactor coolant system pressure                      Electrical power                      Emergency core cooling system actuation                      Decay heat removal path                      Steam generator pressure and level                      Emergency operating procedures (entered or imminent)                      Emergency action levels (declared or imminent)                      Radioactive release                      Effect on other unit(s)                      Security event (threat, damage)                 </td> </tr> <tr> <td style="width: 20%; text-align: center; vertical-align: middle;">                     Pressurized-Water Reactor HOO RDO                 </td> <td style="padding: 5px;"> <b>Short-Term Considerations</b>                      Fuel clad, reactor coolant system, and containment barriers                      Technical specification safety limits                      Emergency action level progression path                      Safety-related equipment out of service                      Support systems functioning                      What are the licensee's priorities?                      Abnormal reactor coolant system or secondary temperatures or pressures                      Steam generator and pressurizer power-operating relief valves/safeties                      Operator response in accordance with procedures                      Licensee notifications to the State, local officials, and the NRC                      Communicate safety concerns to NRC and licensee management                      Personnel injuries, contaminations, or overexposures                      Additional support or relief needed to continue to monitor the event                 </td> </tr> </table>	Pressurized-Water Reactor HOO RDO	<b>Immediate Actions</b> Reactor power Turbine status Reactor coolant system pressure Electrical power Emergency core cooling system actuation Decay heat removal path Steam generator pressure and level Emergency operating procedures (entered or imminent) Emergency action levels (declared or imminent) Radioactive release Effect on other unit(s) Security event (threat, damage)	Pressurized-Water Reactor HOO RDO	<b>Short-Term Considerations</b> Fuel clad, reactor coolant system, and containment barriers Technical specification safety limits Emergency action level progression path Safety-related equipment out of service Support systems functioning What are the licensee's priorities? 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END



Attachment 4  
Revision History for IP 71153

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 Number (Pre-Decisional, Non-Public Information)
N/A	04/04/00 CN 00-005	Revised to provide inspection requirements and guidance for review of event reports.	None	N/A
N/A	03/06/01 CN 01-006	Revised to better define the scope of the IP, to expand the definition of power reactor events to include degraded conditions, and to integrate the IP with the options for inspection activities related to the deterministic and risk criteria in MD 8.3.	None	N/A
N/A	01/17/02 CN 02-001	Revised to delete the previous Appendix A since that material was included in Management Directive 8.3. It also clarifies that written LERs are to be reviewed, but not telephone notifications to the NRC Operations Center for invalid actuations, as allowed in 10 CFR 50.73.	None	N/A
N/A	04/16/02 CN 02-017	Revised to provide guidance on assessing degraded condition exposure time if time of unavailability is unknown.	None	N/A
N/A	06/24/03 CN 03-020	Clarified that the risk metric for events is Conditional Core Damage Probability (CCDP) and the metric for degraded conditions is incremental CCDP. Also this revision lists examples of events addressed by this IP in cornerstones outside of reactor safety.	None	N/A
C1	<a href="#">ML061560504</a> 06/22/06 CN-06-015	Incorporate safety culture into inspection procedures. "Staff Requirements—SECY-04-0111—Recommended Staff Actions Regarding Agency Guidance in the Areas of Safety Conscious Work Environment and Safety Culture," August 30, 2004. Revision history reviewed for the last 4 years.	Inspector training on use of safety culture in the ROP. 07/01/06	<a href="#">ML061570089</a>

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 Number (Pre-Decisional, Non-Public Information)
N/A	<a href="#">ML061920454</a> 07/26/06 CN-06-018	Add inspections of (1) personnel performance during planned non-routine plant evolutions and/or contribution to unplanned non-routine evolutions, events and transient operations (previously in IP 71111.14); and (2) granted Notices of Enforcement Discretion.	None	<a href="#">ML061770161</a>
N/A	<a href="#">ML080280581</a> 02/12/08 CN 08-007	Clarified the process of using both MD 8.3 and IMC 0309 to determine appropriate responses to significant operational events.	None	N/A
N/A	<a href="#">ML093620322</a> 02/02/10 CN 10-004	Added requirement to review retractions of Event Notifications, and reduced resources based on actual reported hours.	None	N/A
N/A	<a href="#">ML102810102</a> 12/05/11 CN 11-039	Added guidance for inspecting personnel performance (ROPFF 71153-1554). Added Appendix C to enhance plant status data collection (ROPFF 71153-1661), updated references, adjusted resources to reflect the 2011 ROP Realignment ( <a href="#">ML11178A329</a> ).	None	N/A
N/A	<a href="#">ML15322A151</a> 12/17/15 CN15-030	Changed outdated references (ROPFF 71153-1901)	None	71153-1901 <a href="#">ML15349A022</a>
N/A	<a href="#">ML18122A142</a> 10/03/18 CN 18-034	Added SER reviews. Added guidance on LER/SER review timeliness. Added sample to verify that reports are correctly submitted. Reformatted. Eliminated redundancy and improved for plain writing. Relocated optional requirements to the guidance section to better align with IMC 2515, "Light-Water Reactor Inspection Program—Operations Phase," Section 8.04, sample completion requirements. Relabeled Appendices A, B, and C as Attachments 1, 2, and 3 to align better with IMC 0040, "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual."	None	<a href="#">ML18190A008</a>

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 Number (Pre-Decisional, Non-Public Information)
N/A	ML19197A110 11/13/19 CN 19-035	Revised to provide oversight guidance associated with licensee adoption of 10 CFR 50.69. Provided direction to assessing reasonable assurance of operability during LER reviews.	N/A	ML19108A030