

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

## NRC INSPECTION MANUAL

**PECB** 

#### INSPECTION PROCEDURE 92700

# ONSITE FOLLOW-UP OF WRITTEN REPORTS OF NONROUTINE EVENTS AT POWER REACTOR FACILITIES

PROGRAM APPLICABILITY: 2515

FUNCTIONAL AREA: ENGINEERING (ENG)

92700-01 INSPECTION OBJECTIVE

To determine through onsite follow-up of selected event reports, whether NRC licensees have taken corrective action(s) as stated in written reports of the events and if responses to the events were adequate and met regulatory requirements, license conditions, and commitments.

#### 92700-02 INSPECTION REQUIREMENTS

02.01 <u>Nonroutine Event Review</u>. Verify the nature, impact, and cause of the nonroutine event; actions taken or planned by the licensee; and other information of significance.

02.02 <u>Safety of Operation</u>. Based upon the review conducted in Inspection Requirement 02.01, determine

- a. If the event involved activities or facility operation in violation of the technical specifications, license conditions, or other regulatory requirements.
- b. If, for facilities licensed under 10 CFR Part 50, the event involved operation of the facility in a manner that constituted an unreviewed safety question, as defined in 10 CFR 50.59(a)(2).
- c. If the event may have generic implication(s).

## 02.03 Reactor Trips. Verify that:

- a. The licensee followed its program to ensure that unscheduled reactor shutdowns are analyzed and that the licensee determined that the reactor could be restarted safely.
- b. The licensee's system for recording, recalling, and displaying data and information operated properly to permit diagnosing the causes of unscheduled reactor shutdowns before restart.

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### 02.04 Corrective Action. Determine if:

- a. Corrective actions stated in the report are appropriate to correct the cause of the event, defect, or failure to comply, and are prioritized and planned for completion.
- b. Corrective actions have been completed, are in progress, or are planned as stated in the report.
- c. The licensee has assigned the responsibility for ensuring the completion of actions not yet completed. Where possible, determine the estimated completion date.
- d. Corrective actions include consideration of generic implications to other systems, units, or facilities for which the licensee is responsible.

## 02.05 Reporting Requirements. Verify that:

- a. The report is timely, accurate, and adequately describes the event, defect, or failure to comply.
- b. The safety implications and significance stated in the report are consistent with details of the event, as determined in Inspection Requirement 02.01.
- c. The cause is accurately described.
- d. The licensee will submit a corrected report if information included in the report is found to be significantly in error.

## 02.06 <u>Licensee Review and Evaluation</u>. Verify that the licensee:

- a. Reviewed or evaluated the event as required by the condition of license, technical specifications, QA program, administrative controls, or other requirements.
- b. Accurately evaluated the event and implemented appropriate corrective action. Collect and review information on the following items to analyze the event:
  - 1. Details regarding the cause of the event, if known.
  - 2. Event chronology.
  - 3. The functioning of safety systems as required by plant conditions.
  - 4. Any radiological consequences (onsite or offsite) and personnel exposure, if any.
  - 5. Verification that plant and system performance were within the limits of analyses described in the final safety analysis report (FSAR).
  - 6. Consistency of the licensee's actions with license requirements, approved procedures, and the nature of the event.
  - 7. The licensee's proposed actions to correct the cause of the event.

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- 8. Corrective actions taken or planned to be taken before resuming facility operation.
- 9. Corrective actions were based on complete and factual information.
- 10. The event evaluation included assessment of similar previous events, generic implications, personnel error, and procedural adequacy.
- 11. The overall assessment resulted in logical conclusions with regard to cause, significance, and associated corrective actions.
- c. Notification of personnel in the licensee's organization regarding the event as required by the technical specifications, regulations, QA program, administrative controls, or other requirements.
- 02.07 <u>Operator Performance</u>. Verify that the operator's performance was adequate to ensure safety.

### 92700-03 INSPECTION GUIDANCE

### General Guidance

This procedure applies to those nonroutine events selected during in-office review according to IP 90712 for onsite follow-up. Either the resident or regional based inspector may have conducted the in-office review, and either may conduct the onsite follow-up.

The inspectors should document their review of the event in an inspection report to close out the particular event report in a traceable manner, and summarize the findings in accordance with Manual Chapter 0610. The factors contained in the inspection requirements paragraph 92700-02 should be addressed as applicable. If some of the inspection requirements were already performed under a separate inspection procedure (e.g., IP 71707, IP 93702), then a cross reference to the inspection report documenting the review is adequate. If more than one inspection is necessary to complete the event follow-up, the inspection report should provide a status regarding what portion(s) of the event was/were reviewed and the report for the last such inspection should reflect final close out. Some long term corrective actions may be treated as regulatory commitment and subject to programmatic verification of licensee's commitment management system. The inspector may use judgement to refer to the licensee's corrective action program for completion of corrective actions of minor to low safety and risk significance. However, for long-term corrective action items, such as certain design changes, that have substantial risk and safety significance, the regional management should decide if future inspection to ensure completion is necessary.

Reports to which this inspection procedure applies will normally be required because of conditions of the license or permit, the orders of the Commission or the NRC's rules and regulations such as  $10\ \text{CFR}\ 50.73$ ,  $10\ \text{CFR}\ 73.71$ ,  $10\ \text{CFR}\ 2201$  through 2205, and  $10\ \text{CFR}\ 71.95$ .

This inspection procedure does not apply to:

a. The licensee's 10 CFR Part 21 notifications. IP 36100 provides inspection guidance to review and assess licensees' 10 CFR Part 21 programs.

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- b. The licensee's prompt (telephone) notifications concerning events at operating power reactors. IP 93702 provides inspection guidance to respond to prompt notification.
- c. Periodic and special reports such as annual operating reports, or inservice inspection reports. IP 90713 provides guidance for reviewing these reports.

## Specific Guidance

- 03.01 <u>Nonroutine Event Review</u>. The inspector should consider the following factors to determine the extent of independent verification.
  - a. The complexity of the event;
  - b. The licensee's past record for reliability and completeness of event reports;
  - c. The nature of any questions identified during in-office review of the written report and;
  - d. The radiological or public health and safety concerns.
- 03.02 <u>Safety Operation</u>. This inspection requirement applies to reports including written event reports that affect operating facilities and written event reports of conditions or equipment defects at plants under construction that may affect the safety of operating plants.
  - a. No specific guidance.
  - b. No specific guidance.
  - C. The regional offices should use only limited resources to identify generic implication(s). Any matters that are perceived to have generic applicability should be promptly forwarded to the Events Assessment, Generic Communications and Special Inspection Branch (PECB), NRR. See Inspection Manual Chapter (IMC) 0970, "Potentially Generic Items Identified by Regional Offices," for further guidance in this area.

# 03.03 Reactor Trips

- Review the licensee's program for post-trip reviews, in accordance with Section 1.1 of Generic Letter 83-28, "Required Actions Based On Generic Implications of Salem ATWS Events." Interview licensee personnel and review documentation and records to ascertain that the program was followed.
- b. Review the licensee's program for diagnostic data on unscheduled reactor shutdowns in accordance with Section 1.2 of Generic Letter 83-28. Examine records and interview personnel to ascertain that the data were recorded and used.

## 03.04 Corrective Action

a. Corrective actions should generally include (1) action to eliminate the cause or to mitigate consequences, (2) action such as maintenance, repair, replacement, procedure change, or special administrative control to

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correct the specific fault or failure, and (3) action to reduce the probability or prevent recurrence such as design change, personnel training, maintenance practice, or work controls.

If the licensee's corrective action is significantly different from that stated in the report, request the licensee for an updated report to the NRC.

- b. Based on safety and risk significance of the corrective actions, regional management should decide if future inspection to ensure completion is necessary.
- c. If the licensee has an approved procedure for maintaining a tracking system that includes a field for noting "responsibility for completing the corrective action," then the inspector should determine by sampling whether such responsibility has been documented in this tracking system.
- d. No inspection guidance.

03.05 Reporting Requirements. These inspection requirements need not be completed for every event selected for follow-up, but should be performed periodically to verify proper functioning of the licensee's administrative controls. See Regulatory Guide 10.1, "Compilation Of Reporting Requirements For Persons Subject To NRC Regulations." In addition, the following references provide required content and timing of certain types of written event reports related to this inspection procedure.

Operating reactors

Technical Specifications

- 10 CFR 73.71

- 10 CFR 50.73

- 10 CFR 50.46

Radiological incidents

10 CFR 20.2202

Overexposure, radiation/contamination levels

10 CFR 20.2203 thru 2205

Packaging

- 10 CFR 71.95

- a.-c. No inspection guidance.
- d. 10 CFR 50.73 and NUREG 1022, Rev 1, Event Reporting Guidelines 10 CFR 50.72 and 50.73, provide the requirements and the guideline for the content of the report. Also 10 CFR 50.9 delineates the requirements for completeness and accuracy of information provided to the Commission by a licensee. If the report is not complete, not understandable, or contains inaccurate information, contact the licensee. Obtain a commitment for a corrected report if the information reported to the NRC is found to be significantly in error or incomplete. Document the review in an inspection report with what was found and what was requested of the licensee. The inspector should determine the threshold of significance of errors, including omissions, for which a corrected report is required. For errors of lesser significance, it may be sufficient to discuss the error with the licensee to ensure that future reports are accurate. If

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a corrected report is submitted, the inspector should review it in accordance with this procedure.

## 03.06 Licensee Review and Evaluation

- a. IP 90714 requires the inspector to review the licensee's nonroutine event reporting program including the licensee's management and administrative controls system for investigating, reporting, reviewing, corrective action development and follow-up of events.
- b. The inspector should collect and review, as appropriate, available computer printouts, recorder traces, log book entries, or test equipment tapes. Unless determined otherwise by NRC management, copies instead of originals should be sufficient for these purposes.
  - b.1-b.3. No inspection guidance.
  - b.4. The inspector should obtain the following information regarding an onsite or offsite release of radioactivity:
    - (a) Type, quantity, and form of radioactive material released (MPC factor, duration, total activity),
    - (b) Direct radiation levels in plant, onsite, or offsite, and
    - (c) Monitoring or sampling results of environs.

The inspector should obtain the following information regarding those events that result in radioactive exposure or contamination of individuals:

- (a) Names of individual(s) involved (Note: Names should not be released until approved by regional management),
- (b) Amounts of whole body, local, or other radiation received and methods of measuring or estimating,
- (c) Activities in which the individual(s) was involved at the time, and the cause of exposure or contamination, and
- (d) Results of in vivo assessment or other bioassays.
- b.5-b.11. No inspection guidance.
- c. No inspection guidance.
- 03.07 Operator Performance. Significant information concerning the performance of an individual licensed operator may have a decisive role in licensing actions of the regional operator licensing branch or the Operator Licensing Branch (HOLB), NRR. Therefore, each inspector should ensure that the appropriate group is aware of those events in which the performance of an operator, especially a licensed operator, may affect the safety of the facility.

The following are general indications of poor performance by an operator especially a licensed individual:

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- a. The individual's action clearly demonstrates inattention to duty or disregard for requirements, including technical specifications and operating procedures;
- b. The individual takes (or fails to take) a required action that results in significant actual or potential safety consequences;
- c. There is repetitive noncompliance with regulatory requirements; or
- d. The facility licensee determines to remove the individual from licensed duties.

These situations parallel those in which enforcement action against the individual may be invoked. Document information about poor performance by a licensed operator and send a separate memorandum identifying the operator(s) to the regional operator licensing branch or to HOLB, NRR. A copy of the inspection report should also be sent to HOLB.

Also, the following information should be determined and documented:

- a. Was training deficient.
- b. The time and the shift when the event occurred (e.g., day of rotation, 11th hour of a 12 hour shift).
- c. Was the operator on overtime when the operator error occurred.

#### 92700-04 RESOURCE ESTIMATE

The direct inspection resources to complete this inspection procedure are estimated to be 8 hours for each report.

**END** 

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