

## Appendix C

### GUIDANCE FOR SUPPLEMENTAL INSPECTIONS

The guidance contained in inspection Manual Chapter 0612 applies equally to the baseline and supplemental portions of the power reactor inspection program. However, given the nature of the supplemental inspections, the associated supplemental inspection reports will contain a more complete documentation of the NRC's independent assessment of each inspection requirement, including pertinent qualitative observations of the licensee's efforts to identify and address the root cause of the finding. A separate inspection report will usually be generated for each supplemental inspection. All violations and findings must conform to the format guidance provided in MC 0612. The independent review of extent of condition and extent of cause called for in Inspection Procedure 95002 and performed using one more procedure(s) chosen from Appendix B to IMC 2515 should be documented along with the other inspection requirements contained in Inspection Procedure 95002.

The following guidance applies specifically to the documentation of inspections using Supplemental Inspection Procedures 95001 and 95002.

The inspection report will contain the following sections:

1. A summary of findings which will provide an overall assessment of the licensee's evaluation of the performance issue. The summary will include any specific findings associated with the licensee's evaluation, any new findings that emerged during the inspection. The summary of findings is to be recorded in accordance with the guidance contained in IMC 0306.
2. A presentation of details containing the following:
  - a. A summary of the performance issue for which the inspection is being performed. This summary can be taken from a previous inspection report for a inspection issue or can be a summary of the PI and the particulars associated with its crossing a threshold.
  - b. An evaluation of the inspection requirement containing the following in order.
    - The headings within the section should restate each inspection requirement (or an abbreviated heading describing each requirement)
    - A synopsis of the licensee's assessment related to the inspection requirement.
    - The inspector's assessment of the licensee's evaluation, including a description of any additional actions taken by the inspector to assess the validity of the licensee's evaluation.
3. An exit meeting summary.

4. A list of persons contacted and all licensee documents reviewed during the inspection.
5. A list of acronyms used in the inspection report, as applicable.

Portions of a sample inspection report performed in accordance with Supplemental Inspection Procedure 95001 are provided on the following pages. Some sections of this sample report contain alternative writeups to illustrate how both positive and negative inspection results would be documented.

Specific documentation requirements and report format for Supplemental Inspection Procedure 95003 will be provided by the team leader.

U.S. NUCLEAR REGULATORY COMMISSION

REGION X

Docket Nos: 50-ddd, 50-ddd

License Nos: xxx-79, xxx-80

Report No: 05000ddd/YYYY###, 05000ddd/YYYY###

Licensee: (Utility Name)

Facility: (Plant Name(s))

Location: (Full Mailing Address)

Dates: (Dates of inspection)

Inspectors: (First initial and last name of inspector and title)

Approved by: (First initial, last name and title of approver  
(Organization))

## **SUMMARY OF FINDINGS**

### **(EXAMPLE)**

ADAMS TEMPLATE: (TO BE INSERTED HERE, see IMC 0612, Exhibit 2)

#### Cornerstone: Mitigating Systems

The U.S. Nuclear Regulatory Commission (NRC) performed this supplemental inspection to assess the licensee's evaluation associated with the inoperability of the Unit 1 diesel generator A. This performance issue was previously characterized as having low to moderate risk significance ("white") in NRC Inspection Report (number). During this supplemental inspection, performed in accordance with Inspection Procedure 95001, the inspectors determined that the licensee performed a comprehensive evaluation of the inoperable diesel that the licensee-identified during a surveillance test. The licensee's evaluation identified the primary root cause of the performance issue to be poor control of vendor manuals, which resulted in the maintenance workers miscalibrating the governor speed control unit. The vendor manual control issue was not limited to the diesel generator, and the licensee has taken corrective actions to ensure vendor manuals are current for all risk-significant equipment. In addition, the licensee intends to review the scope of quality assurance audits to determine whether additional resources need to be provided to the quality assurance department to identify similar programmatic deficiencies.

Given the licensee's acceptable performance in addressing the inoperable Unit 1 diesel generator, the white finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in IMC 0305, "Operating Reactor Assessment Program." Implementation of the licensee's corrective actions will be reviewed during a future inspection.

**or**

The U.S. Nuclear Regulatory Commission (NRC) performed this supplemental inspection to assess the licensee's evaluation associated with the in operability of diesel generator A. This performance issue was previously characterized as having low to moderate risk significance ("white") in NRC Inspection Report (number). During this supplemental inspection, performed in accordance with Inspection Procedure 95001, several significant deficiencies were identified with regard to the licensee's evaluation of the inoperable diesel.

While the licensee's evaluation attributed the root cause of this issue to improper training of maintenance workers, the NRC inspectors identified that the improper maintenance was actually the result of vendor manuals that were not up to date and contained inaccurate guidance concerning the calibration of the diesel generator governor speed control unit. In addition, the inspectors determined that the vendor manual control issue does not appear to be limited to the diesel generators, as similar concerns regarding the control of vendor manuals have been documented in other NRC inspection reports. Also, the inspectors determined that the licensee's corrective actions were inadequate in that they

only involved retraining the maintenance workers and failed to address the issue of vendor manual control.

As a result of these concerns, the white performance issue associated with the inoperable diesel generator will not be closed at this time. In addition, the deficiencies identified in the NRC's review of the licensee's corrective actions are being considered for additional enforcement action.

## Report Details

### 01 INSPECTION SCOPE

EXAMPLE: The U.S. Nuclear Regulatory Commission (NRC) performed this supplemental inspection to assess the licensee's evaluation associated with the inoperability of diesel generator A. This performance issue was previously characterized as "white" in NRC Inspection Report (number) and is related to the mitigating systems cornerstone in the reactor safety strategic performance area.

### 02 EVALUATION OF INSPECTION REQUIREMENTS

#### 02.01 Problem Identification

- a. Determination of who (i.e., licensee, self-revealing, or NRC) identified the issue and under what conditions

EXAMPLE: The inoperability of the diesel generator was identified during a routine surveillance test performed by the licensee. During testing of diesel generator A, the diesel failed to reach the required speed, at which time the test was stopped and the diesel was declared inoperable.

- b. Determination of how long the issue existed, and prior opportunities for identification

EXAMPLE: The licensee determined that the diesel was likely inoperable since maintenance was last performed on September 5, 1999. The inspectors agreed with the licensee's evaluation.

- c. Determination of the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue

EXAMPLE: The licensee's evaluation assigned a change in core damage frequency of  $5 \times 10^{-6}$  to this condition. The inspectors reviewed the licensee's evaluation and assumptions and confirmed their validity.

#### 02.02 Root Cause and Extent of Condition Evaluation

- a. Evaluation of method(s) used to identify root cause(s) and contributing cause(s).

EXAMPLE: To evaluate this issue, the licensee used a combination of structured root cause analysis techniques including barrier, change, and events and causal factor analysis. The inspectors determined that the licensee followed its procedural guidance for performing level 1 root cause analysis. The procedure required conducting interviews with key personnel and preserving evidence associated with the

issue. The licensee successfully accomplished this by quarantining the diesel until formal troubleshooting controls could be established.

b. Level of detail of the root cause evaluation

EXAMPLE: The licensee's root cause evaluation was thorough and identified the primary root cause of the performance issue to be poor control of vendor manuals, which resulted in the maintenance workers miscalibrating the governor speed control unit. Furthermore, the licensee-identified that the vendor manual control issue was not limited to the diesel generator, but also applied to several pieces of risk-significant equipment.

**Or**

The inspectors determined that the root cause evaluation was not conducted to a sufficient level of detail. Although the licensee correctly diagnosed the apparent cause of the diesel failure as being a miscalibrated governor speed control unit, the licensee's evaluation incorrectly identified the root cause as being maintenance worker error. The inspectors determined that the worker errors were actually caused by out-of-date vendor manuals for the governor speed control units. The calibration procedure in the vendor manual was for an old speed control unit that had been replaced 2 years ago. In addition, the inspectors noted that problems with control of vendor manuals for other equipment had previously been documented during NRC inspections (see NRC Inspection Reports (list numbers)); however, the licensee had failed to enter the concerns into its corrective action program.

c. Consideration of prior occurrences of the problem and knowledge of prior operating experience

EXAMPLE: The licensee's evaluation included a review to see if similar problems had previously been reported with the diesel governor unit. This was the first known instance of a failure of this type. The inspectors did not possess any information to the contrary.

d. Consideration of potential common cause(s) and extent of condition of the problem

EXAMPLE: The licensee's evaluation considered the potential for common cause and extent of condition associated with the lack of vendor manual control. The licensee determined that the issue of vendor manual control was not limited to the diesel generators and potentially affected other safety equipment. The inspectors agreed that this problem was not limited to the diesels, as they had previously identified problems with vendor manual control when reviewing maintenance on the auxiliary feedwater pumps. These concerns were previously documented in NRC Inspection Report (number).

## 02.03 Corrective Actions

### a. Appropriateness of corrective action(s)

EXAMPLE: The licensee took immediate corrective actions to make the diesel generator operable. The governor control unit was recalibrated and the diesel generator vendor was contacted to ensure that the latest technical information was available and being used. The licensee has also specified corrective actions to address the root cause of poor vendor manual control. The licensee has begun a program to reverify that all safety- significant vendor information is current, and is planning to contact each of the associated vendors. The inspectors determined that the proposed corrective actions are appropriate.

### b. Prioritization of corrective actions

EXAMPLE: The licensee's immediate corrective actions restored the diesel generators to operability within the allowed by the outage time, technical specification (TS). After restoring the affected diesel, the other diesel was tested to ensure that it would perform its intended functions if called upon. The inspectors witnessed this testing and observed that the diesel successfully passed the surveillance test.

### c. Establishment of schedule for implementing and completing the corrective actions

EXAMPLE: The licensee's plans to re-verify vendor information are being implemented according to the risk-significance of the equipment. The inspectors reviewed the licensee's plans for accomplishing this activity and noted that the risk significance of the equipment was being appropriately considered.

### d. Establishment of quantitative or qualitative measures of success for determining the effectiveness of the corrective actions to prevent recurrence

EXAMPLE: The licensee has enhanced its monitoring of the diesel generators to ensure that any additional failures are given appropriate management attention. The licensee has also scheduled a quality assurance audit to assess the adequacy of the corrective actions associated with the vendor manual control issue.



### 03. **MANAGEMENT MEETINGS**

Exit Meeting Summary

#### ATTACHMENTS

Persons Contacted

Documents Reviewed (optional if list is publically available some other way)

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Acronyms (optional)