**Appendix D**

**GUIDANCE FOR DOCUMENTING INSPECTION PROCEDURE 71152**

**PROBLEM IDENTIFICATION AND RESOLUTION**

One of the objectives of Inspection Procedure 71152 is to provide an assessment of the effectiveness of the licensees problem identification and resolution (PI&R) programs. Consequently, the type of documentation for this inspection should be different than for other baseline inspections and may include more qualitative observations. Listed below are some general principles that apply to documenting the results of IP 71152. These principles supplement the guidance contained elsewhere in Inspection Manual Chapter (IMC) 0612.

1. The summary of issues for this report should contain the teams overall assessment of the licensees PI&R program, on the basis of both the biennial in- depth samples and routine baseline inspections. This overall assessment should also be placed in the PIM in accordance with the guidance in IMC 0306.
2. The inspection report should contain an assessment for each of the inspection requirements as follows. Some examples are provided in the attached example report and outline.

Assessment of the Corrective Action Program Effectiveness

Inspection Scope - Identify the documents that were reviewed and, if applicable, the other activities that were competed to verify that:

* the licensee is identifying problems at the proper threshold and entering them into the corrective action system;
* the licensee is adequately prioritizing and evaluating issues, include pertinent reference numbers (for example, NCR #s, violations #s, etc.); and
* corrective actions are effective at preventing recurrence and timely.

Include samples taken from the previous 12 months of routine baseline inspection reports. Also include assessments and audits of the corrective action program that were completed within the previous 12 months.

Assessment - Effectiveness of Problem Identification Document a general conclusion regarding the licensees effectiveness in problem identification. Include the bases for the general conclusion. Discuss issues and relevant observations regarding problem identification, and properly disposition any related findings.

Assessment - Effectiveness of Prioritization and Evaluation of Issues Document a general conclusion regarding the licensees effectiveness in problem evaluation, and include the bases for that conclusion. Discuss issues relative to:

* the effectiveness of the licensees process for prioritizing issues
* technical adequacy and depth of evaluations (including root cause analysis where appropriate).
* adequate consideration of operability and reportability requirements, and
* appropriate consideration of risk in prioritizing or evaluating issues.

Assessment - Effectiveness of Corrective Actions Document a general conclusion regarding the licensees ability to develop and implement effective corrective actions. Include the bases for the general conclusion and an assessment of the licensees consideration of risk insights in prioritizing corrective actions. Discuss issues and relevant observations regarding corrective actions, including, for significant conditions adverse to quality, issues associated with the effectiveness of corrective actions to prevent recurrence.

b. Assessment of the Use of Operating Experience

Inspection Scope - Identify the documents that were reviewed and, if applicable, the other activities that were completed to verify that the licensee appropriately used operating experience information.

Assessment - Document a general conclusion regarding the licensees use of operating experience information. Include the bases for the general conclusion.

c. Assessment of the Self-Assessments and Audits

Inspection Scope - Identify the documents that were reviewed and, if applicable, the other activities that were completed to verify that the licensee conducted self- and independent assessments of their activities and practices, as appropriate to assess performance and identify areas for improvement.

Assessment - Document a general conclusion regarding the licensees self-assessments and audits. Include in the conclusion if issues identified by those self-assessments were addressed. Incorporate into the discussion the bases for the general conclusion

d. Assessment of Safety Conscious Work Environment

Inspection Scope - *Identify the documents that were reviewed and, if applicable, the other activities that were completed to assess whether issues exist that may represent challenges to the free flow of information, and to determine whether underlying factors exist that would produce a reluctance to raise nuclear safety concerns.* [C1]

Assessment - *Document a general conclusion regarding the existence of issues that may represent challenges to the free flow of information, and of underlying factors that could produce a reluctance to raise nuclear safety concerns. Include the bases for the general conclusion.* [C1]

4. Negative conclusions regarding aspects of the PI&R program should be supported by examples of performance deficiencies. Other conclusions should be supported by a brief statement of the basis for the conclusion, including the scope of material that was reviewed.

Example Inspection Report Excerpts and Outline

Refer to [IMC 0612 Exhibit 4](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/manual-chapter/index.html), “Cover Letter Templates” for a report cover letter template that can be modified to create a problem identification and resolution biennial baseline inspection report cover letter.

**SUMMARY OF ISSUES**

ADAMS Template

IR (Docket and Report Number); (Utility Name); on (Date); (Plant Name); annual baseline inspection of the identification and resolution of problems. A violation was were identified in the area of root cause evaluations.

The inspection was conducted by a regional projects inspector, resident inspectors, and a regional radiation specialist. One green finding of very low safety significance was identified during this inspection and was classified as a noncited violation. The finding was evaluated using the significance determination process (SDP).

Identification and Resolution of Problems

The team identified that the licensee was effective at identifying problems and putting them into the corrective action program. The licensees effectiveness at problem identification was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. The licensee effectively used risk in prioritizing the extent to which individual problems would be evaluated and in establishing schedules for implementing corrective actions. However, of the 10 root cause evaluations reviewed, 1 was found to be deficient in that it was not performed to a sufficient depth to determine the primary root causes of the finding. Corrective actions, when specified, were generally implemented in a timely manner. Licensee audits and assessments were found to be effective and highlighted a similar concern in the root cause area.

Operating experience usage was also found to be effective. Self assessment results adequately identified problems. On the basis of interviews conducted during this inspection, workers at the site felt free to input safety findings into the corrective action program.

Cornerstone: Mitigating Systems

Green: A violation of 10 CFR Part 50, Appendix B, Criterion XVI dispositioned as a noncited violation was identified for the licensee's failure to take corrective actions. Specifically, on {date} the licensee reset the turbine-driven auxiliary feedwater pump overspeed trip mechanism with an incorrect setpoint from an outdated technical manual rendering the pump inoperable until its discovery on {date}. The licensee had a prior opportunity to identify this condition when a root cause analysis was preformed for a previous failure and incorrectly attributed a premature pump trip to poor training that resulted in an error setting the trip mechanism.

The risk associated with the failure of the auxiliary feedwater pump had previously been determined to be of very low safety significance because of the redundancy in the auxiliary feedwater system.

**REPORT DETAILS**

OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Assessment of the Corrective Action Program

(1) Inspection Scope

EXAMPLE: The inspectors reviewed items selected across the seven cornerstones of safety to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. Specifically, the inspectors selected and reviewed 50 deviation and event reports (DERs) from approximately 2000 that had been issued between January 1999 to January 2000. The inspectors reviewed the two audits of the corrective action program that were completed during the review period. The results of audits were evaluated by comparing them to the self-revealing and NRC-identified findings.

The inspectors evaluated the DERs to determine the licensees threshold for identifying problems and entering them into the corrective action program. Also, the licensees efforts in establishing the scope of problems were evaluated by reviewing selected control room logs, work requests, engineering modification packages, self-assessments results, audits, system health reports, action plans, and results from surveillance tests and preventive maintenance tasks. The inspectors reviewed work requests and attended the licensees daily work control meeting to understand the interface between the corrective action program and the work control process. The DERs and other documents listed in Attachment 2 were used to facilitate the review.

The inspectors also conducted walkdowns and interviewed plant personnel to identify other processes that may exist where problems and findings could be identified. The inspectors reviewed work requests and attended the licensees daily work control meeting to understand the interface between the corrective action program and the work control process.

(2) Assessment

Identification of Issues

EXAMPLE: The team determined that the licensee was effective at identifying problems and entering them into the corrective action system. This was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee during the review period. Licensee audits and assessments were of good depth and identified issues similar to those that were self-revealing or raised during previous NRC inspections. Also, during this inspection, there were no instances identified where conditions adverse to quality were being handled outside the corrective action program.

Prioritization and Evaluation of Issues

EXAMPLE: The team determined that the licensee was effective at problem evaluation. This was demonstrated by examples of the licensee personnel appropriately prioritizing issues, including one in which design work was rescheduled to enable engineering personnel to address a risk-significant issue. Evaluations were technically adequate and of appropriate depth. There were no instances in which the licensee did not adequately consider operability and reportability requirements. The licensee appropriately considered risk in prioritizing or evaluating issues, including one instance in which the unit was shutdown to make repairs on an un-isolable component.

Effectiveness of Corrective Action

b. Assessment of the Use of Operating Experience

(1) Inspection Scope

(2) Assessment

c. Assessment of Self-Assessments and Audits

(1) Inspection Scope

(2) Assessment

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

(2) Assessment

Attachments:

LIST OF PERSONS CONTACTED

LIST OF DOCUMENTS REVIEWED (optional if documents are identified in the body of the report)

Attachment 1 – Revision History for IMC 0612 Appendix D

| Commitment Tracking Number | Issue Date & Accession Number | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| --- | --- | --- | --- | --- | --- |
|  | 06/24/03  [CN 03-021](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2003/03-021.html)  [ML031610702](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML031610702) |  |  |  |  |
| C1 | 06/22/06  [CN 06-015](http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML061560454)  [ML061560471](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML061560471) | PI&R Team Inspection Report format revised to accommodate the safety culture initiative described in Staff Requirements – SECY-04-0111 – “Recommended Staff Actions Regarding Agency Guidance in the Areas of Safety Conscious Work Environment and Safety Culture,” dated August 30, 2004 | Yes | 07/01/2006 | [ML061570081](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML061570081) |
|  | 10/28/11  CN 11-024 ML111881201 | Relocated example cover letter guidance to IMC 0612 Exhibit 4. | No | N/A |  |