

EVALUATIONS OF CHANGES, TESTS, AND EXPERIMENTS

Effective Date: 01/01/2017

INSPECTABLE AREA: Evaluations of Changes, Tests, and Experiments

CORNERSTONES: Initiating Events
Mitigating Systems
Barrier Integrity

INSPECTION BASES: The inspection monitors the effectiveness of the licensee's implementation of changes to facility structures, systems, and components (SSCs), risk significant normal and emergency operating procedures, test programs, and the updated final safety analysis report (UFSAR) in accordance with the requirements of 10 Code of Federal Regulations (CFR) 50.59. The inspection provides assurance that required license amendments have been obtained.

This inspection procedure verifies aspects of the Initiating Events, Mitigating Systems, and Barrier Integrity cornerstones for which there are no performance indicators to measure licensee performance. Potential issues regarding the impact that changes have on **Emergency Preparedness and Security** should be raised and addressed under **their respective** Inspection Programs.

LEVEL OF EFFORT Triennially review **18 to 37** evaluations, screenings, and/or applicability determinations for 10 CFR 50.59.

71111.17-01 INSPECTION OBJECTIVES

01.01 Verify that evaluations were performed in accordance with 10 CFR 50.59.

71111.17-02 INSPECTION REQUIREMENTS

02.01 Sample Selection

Review evaluations performed in accordance with 10 CFR 50.59, and changes, tests, or experiments performed since the last triennial modification inspection that the licensee determined did not require 10 CFR 50.59 evaluations based upon the following:

- a. Safety Significance;
- b. Risk Significance;
- c. Complexity.

02.02 Inspection

NOTE: NEI 96-07, Revision 1, Appendix E shall not be used by NRC staff in evaluating compliance with the provisions of 10 CFR 50.59.

Inspection of evaluations performed in accordance with 10 CFR 50.59, and changes, tests, experiments, or methodology changes that the licensee determined did not require 10 CFR 50.59 evaluations.

- a. Verify that when changes, tests, or experiments were made, evaluations were performed in accordance with 10 CFR 50.59. Verify that the licensee has appropriately concluded that the change, test or experiment can be accomplished without obtaining a license amendment.
- b. Verify that safety issues related to the changes, tests, or experiments have been resolved.
- c. For the changes, tests, or experiments that the licensee determined that evaluations were not required, verify that the licensee's conclusions were correct and consistent with 10 CFR 50.59.

02.03 Problem Identification and Resolution

Verify that the licensee is identifying problems related to 10 CFR 50.59 applicability determinations, screenings and evaluations, and entering them in the corrective action program. For a selected sample, evaluate appropriateness of corrective actions.

71111.17-03 INSPECTION GUIDANCE

03.01 Sample Selection

The resident inspector staff and the Nuclear Reactor Regulation project manager should be consulted for recommendations on sample selection. Substantial changes performed since the last triennial inspection should be reviewed as samples. Samples should be of such complexity that the change affects either the license basis or the 10 CFR 50.2 Design Basis. Consideration should also be given to degraded and non-conforming conditions by selecting evaluations or screenings associated with operability evaluations and temporary modifications. If available as a potential sample selection, additional consideration should also be given to reviewing 6 to 12 evaluations and 12 to 25 screenings and/or applicability determinations for 10 CFR 50.59.

Since lists of changes provided by the licensee will not necessarily indicate the complexity and scope of a change, a number of changes should be reviewed prior to the inspection to meet the "complexity" criteria contained in section 02.01. This is best accomplished by first choosing documents from the list provided by the licensee and then requesting the actual documentation for the changes. An initial review of these changes for complexity prior to the inspection should result in a smaller final list of samples.

03.02 Inspection

Regulatory Guide (RG) 1.187 "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," states that Revision 1 of NEI 96-07, "Guidelines for 10 CFR 50.59 Evaluations" provides methods that are acceptable to the NRC staff for complying with the provisions of 10 CFR 50.59. NEI has also published a NEI 96-07, Revision 1, Appendix E, "User's Guide for NEI 96-7, Revision 1, Guidelines for 10 CFR 50.59 Implementation." However, NEI 96-07, Revision 1, Appendix E has not been reviewed or endorsed by the NRC. If needed, questions regarding potential 10 CFR 50.59 issues as a result of a licensee's use of Appendix E can be raised with the DORL PM.

Inspectors may review programmatic procedures to verify that licensee processes and standards are met.

03.03 Problem Identification and Resolution

See Inspection Procedure (IP) 71152, "Problem Identification and Resolution," for additional guidance.

71111.17-04 RESOURCE ESTIMATE

This inspection procedure is estimated to take **86 to 106** hours and should be performed by engineering specialists knowledgeable in the affected subject areas.

71111.17-05 COMPLETION STATUS

Inspection of the minimum sample size will constitute completion of this procedure in the Reactor Programs Systems. That minimum sample size will consist of the review of at least **18** evaluations, screenings, and/or applicability determinations. Refer to Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase," for further guidance on procedure completion.

71111.17-06 REFERENCES

IP 71111.18, "Plant Modifications"

IP 71152, "Problem Identification and Resolution"

IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase"

NRC Inspection Manual Part 9900 10 CFR Guidance, "10 CFR 50.59 Changes, Tests, and Experiments"

10 CFR 50.59, "Changes, tests, and experiments."

NRC Regulatory Guide 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Test, and Experiments," Nov 2000. (ML003759710)

NEI 96-07, Revision 1, "Guidelines for 10 CFR 50.59 Evaluations," (Nov 2000). (ML003771157)

RIS 2016-03, "10 CFR 50.59 Issues Identified in NRC's San Onofre Steam Generator Tube Degradation Lessons Learned Report," April 2016. (ML15196A575)

<http://nrr10.nrc.gov/rop/ip71111-17.html>

END

Attachment 1
Revision History for IP 71111.17T

| Commitment Tracking Number | Accession Number Issue Date Change Notice | Description of Change | Description of Training Required and Completion Date | Comment and Feedback Resolution Accession Number (Pre-Decisional, Non-Public) |
|----------------------------|--|--|--|---|
| NA | ML082670321 01/31/08 CN 08-005 | New inspection procedure (IP) which combines the previous IP 71111.02, "Evaluations of Changes, Tests, or Experiments," and the biennial portion of IP 71111.17, "Permanent Plant Modifications" as a triennial inspection. | No | ML080250279 |
| NA | ML073180042 10/31/08 CN 08-031 | Revise to include consideration of GSI-191 issue related to potential sump blockage. | No | N/A |
| NA | ML101340791 03/05/13 CN 13-007 | Revised procedure to incorporate recommendations from the modification working group conference. | No | |
| N/A | ML15208A030 11/13/15 CN 15-024 | Revisions are made in order to: (1) ensure that security related issues identified as a result of changes are raised so that they may be considered under the Security Inspection Program; (2) ensure that there is awareness that changes to aging management programs associated with 10 CFR 54.21(d) are within scope of this IP; and (3) ensure that there is awareness that NEI 96-07, Revision 1, Appendix E has not been reviewed or endorsed by the NRC. Feedback forms incorporated into this revision: 2145. Feedback forms reviewed but not incorporated: 2062, 2088, and 2109. | No | ML15187A245 71111.17T-2062 ML15306A007 71111.17T-2088 ML15306A008 71111.17T-2109 ML15306A009 71111.17T-2145 ML15306A011 |

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|----------------------------|---|--|--|---|
| N/A | ML16147A416 DRAFT CN 16-____ | <p>Revisions are made to: 1) address use of mandatory and discretionary language concerns and recommendations found in OIG-16-A-12 (ML16097A515), and 2) relocate inspection of permanent plant modifications to IP 71111.21M, "Component Design Bases Inspection (Teams)."</p> <p>Made draft version public prior to final version being issued to allow viewing of potential inspections starting CY 2017.</p> | None | ML16158A103 71111.17T-2211 ML16147A281 |