NRC INSPECTION MANUAL

INSPECTION PROCEDURE 71013

SITE INSPECTION FOR PLANTS WITH A TIMELY RENEWAL APPLICATION

Effective Date: 06/26/2023

PROGRAM APPLICABILITY: IMCs 2515C, 2516

71013-01 INSPECTION OBJECTIVES

- 01.01 To determine whether commitments made by the licensee to implement actions, such as license conditions, other regulatory commitments proposed during the license renewal review, selected aging management programs (AMPs), and time-limited aging analyses (TLAAs), are implemented, scheduled, and completed.
- 01.02 To verify the license renewal application is updated annually in accordance with the requirement to submit changes to the current licensing basis (CLB) during the U.S. Nuclear Regulatory Commission (NRC) review of the license renewal application as required by 10 CFR 54.21(b).
- 01.03 To verify the "newly identified" systems, structures, and components (SSCs) are or will be included in the annual update of the final safety analysis report (UFSAR), as required by 10 CFR 54.37(b).
- 01.04 To verify the description of the AMPs and related activities covered in §01.01 that are contained in the UFSAR supplement are consistent with the programs the licensee proposed to implement.
- 01.05 To verify changes to the regulatory commitments the licensee agreed to implement or complete for license renewal are evaluated in accordance with NEI 99-04, "Guidelines for Managing NRC Commitment Changes," as endorsed by regulatory issue summary (RIS) 2000-017, and changes to the license renewal activities incorporated as part of the UFSAR are evaluated in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.59.

71013-02 INSPECTION REQUIREMENTS

02.01 General Inspection Requirements

- a. Verify that the licensee adequately completed the commitments to implement actions, such as license conditions, other regulatory commitments proposed during the license renewal review, AMPs, and TLAAs.
- b. Verify the license renewal application is updated annually in accordance with the requirement to submit changes to the CLB during NRC review of the license renewal application, according to 10 CFR 54.21(b).

- c. Verify that "newly identified" SSCs are or will be included in the annual UFSAR updates as required by 10 CFR 54.37(b) and the guidance provided in RIS 2007-016.
- d. Verify the description of the AMPs and TLAAs in the UFSAR supplement, as revised, matches the AMP or TLAA being implemented and that changes, caused by the inclusion of "newly identified" SSCs, were included in the UFSAR supplement.
- e. Verify the licensee properly evaluated, and reported, when necessary, changes to regulatory commitments in accordance with NEI 99-04, as endorsed by RIS 2000-017. Review changes to license renewal activities incorporated as part of the UFSAR in accordance with 10 CFR 50.59. Review planned changes to AMPs, TLAAs, and other license renewal actions.

71013-03 INSPECTION GUIDANCE

03.01 General Guidance.

In accordance with 10 CFR 2.109(b), if the licensee of a nuclear power plant files a sufficient application for renewal of an operating license at least 5 years before the expiration of the existing license, the existing license will not be deemed to have expired until the application has been finally determined. The NRC decision on a renewed operating license might not be completed before the licensee enters the period of extended operation. In this case, Inspection Procedure (IP) 71003, "Post-Approval Site Inspection for License Renewal," would not be applicable. As such, the licensee will continue to conduct activities in accordance with the facility's current licensing basis.

IP 71013 was developed to allow NRC inspections of license renewal programs for applicants that will likely be in timely renewal (e.g., reaching the end of their existing license without approval of their renewed license). The NRC inspectors will review AMPs, TLAAs, regulatory commitments, and license conditions proposed while the application is under review and after issuance of the renewed license. Depending on the progress of the application review, the inspection may rely on the information documented in the application, other communication with the applicant that details the intended implementation of proposed aging management activities, and, finally, the issued NRC safety evaluation (SE) and renewed license.

In some cases, timing constraints may warrant the performance of portions of IP 71013 prior to the submittal of the renewal application (e.g., when refueling outage schedules may not provide an opportunity to adequately complete portions of the inspection prior to the period of extended operation). The Regions have the flexibility to pursue such early inspections, provided that the licensee has adequately communicated essential elements of the forthcoming application, such as the intended implementation of proposed conditions, regulatory commitments, AMPs, TLAAs, and UFSAR. It is against this implementation communication that the NRC inspectors will perform the inspections described in IP 71013.

03.02 Inspection Schedule.

A majority of this inspection should be performed, where possible, following the issuance of an SE for a renewed operating license, but prior to the expiration date of the original operating license. If the SE is not issued prior to the period of extended operation (PEO), the regional office should describe the way the phases of this inspection will be conducted to the NRR division with responsibility for license renewal, as described in inspection manual chapter (IMC) 2516, and complete Phase(s) I and II below with the best-available information. Since certain programs and activities may or may not be implemented or completed at the time portions of the inspection occur, the inspection may be performed in three phases to accommodate the site's implementation schedule, with the potential issuance of three separate inspection reports. Performing this inspection using a three-phase approach is a recommendation and not a requirement.

a. Timely Renewal (TR) Phase I: This portion of the inspection is likely to occur during the second to last and/or last refueling outage prior to the expiration date of the original operating license.

This Phase of the inspection observes the implementation of select AMPs and activities described in proposed license conditions, the UFSAR supplement, AMPs, TLAAs, and other regulatory commitments proposed during the license renewal review, as well as any testing, or visual inspections of SSCs which are only accessible at reduced power levels. Those SSCs may be located inside the containment and other high radiation areas. This inspection may occur at each unit of a multi-unit site.

b. TR Phase II: This portion of the inspection is likely to occur 3 months to a year prior to the expiration date of the original operating license, depending on the site's implementation schedule of outages and license renewal activities. In some circumstances this inspection may be performed after the unit's entry into the period of extended operation.

This Phase of the inspection is a one-time major team inspection per site. However, for multi-unit sites, subsequent Phase II inspections may be conducted, as deemed necessary by regional management. Subsequent Phase II inspections at multi-unit sites may not require the same level of effort as the Phase II inspection for the first unit. The inspectors will assess the adequacy and effectiveness of the implementation and/or completion of the programs and activities described in the regulatory commitments proposed during license renewal, UFSAR supplement program descriptions, TLAAs, and proposed license conditions as agreed to by the licensee while the application for renewal is being determined, as well as evaluate the need for any additional follow-up inspections under this inspection procedure or as part of the reactor oversight program (ROP).

c. TR Phase III: This portion of the inspection occurs after issuance of the renewed license and after the licensee enters the PEO, in accordance with the implementation schedule of the license conditions, AMPs, TLAAs and commitments for license renewal.

This Phase of the inspection reviews the implementation of approved license conditions, regulatory commitments, TLAAs, and AMPs as documented in the SE with implementation schedules that extend into the PEO. Additionally, this phase may be implemented to review corrective actions for issues of concern identified during TR Phase I and II inspections.

If, during the planning, execution, or documentation of this procedure, the NRC determines the operating license will not be renewed, inspection efforts should cease.

Upon issuance of the renewed license and completion of TR Phase III, subsequent inspection efforts should shift to the corresponding portion of IP 71003, "Post-Approval Site Inspection for License Renewal."

03.03 Document Review.

Inspectors should familiarize themselves with the requirements and guidance related to license renewal. The inspectors should also familiarize themselves with the specific license renewal application and associated SE for the plant being inspected when available. License renewal requirements and guidance documents that should be reviewed prior to this inspection include:

- 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants"
- The statement of consideration published with the revision to 10 CFR Part 54 in the *Federal Register*, Vol. 60, No. 88, Monday, May 8, 1995, pages 22461 to 22495
- The SE and applicable supplements for the plant(s) to be inspected, if available, or alternatively, the license renewal application. In the case where the license renewal application has not been submitted, the inspectors should review docketed correspondence from the licensee that outlines the additional aging management actions that will be implemented during the period of extended operation.
- Appendix A of the SE, if applicable
- The UFSAR supplement as revised during the license renewal application review, if available

03.04 Inspection Sample Attributes.

In selecting samples, consideration should be given to attributes such as:

- The risk significance of SSCs associated with the regulatory commitments, license conditions, AMPs, and TLAAs, using insights gained from sources such as the NRC's "Significance Determination Process (SDP) Risk Informed Inspection Notebooks," Revision 2, Standardized Plant Analysis Risk (SPAR) models, and results from the NRC staff "Risk Informed Materials Assessment (RIMA)" system tier lists.
- The extent of previous license renewal audits and inspections of AMPs
- The extent that baseline inspection programs will inspect an SSC or commodity group
- The type and maturity of the AMP, for example, programs such as the selective leaching, one-time inspection program, or infrequent inspection activities may take priority over long-standing programs such as the Steam Generator Tube Integrity Program, which are routinely inspected
- Issues that were addressed in an Atomic Safety Licensing Board (ASLB) hearing or Advisory Committee on Reactor Safeguards (ACRS) committee meeting

• Issues that were in the public domain at the time of the license renewal application review

03.05 Level of Effort.

To the extent practical, this inspection is performed before the expiration date of the original operating license (with the exception of TR Phase III which occurs after the expiration of the original operating license). It may be necessary to perform some phases of the inspection before the PEO, with the best information available, and then re-perform a phase of the inspection with the latest information when it becomes available. Additionally, the number of AMPs, regulatory commitments, TLAAs, and proposed license conditions may vary broadly from plant to plant. Therefore, this procedure does not contain a predetermined sample size for each component of the inspection that would uniformly represent each plant. As such, the lead inspector will determine the sample size and extent of review of the license conditions, AMPs, TLAAs, and regulatory commitments prior to performing these inspections. The lead inspector should ensure that the team comprehensively inspects a majority (recommended greater than 70 percent) of each of the number of: (1) AMPs, (2) regulatory commitments, (3) TLAAs, and (4) license conditions to assess the adequacy and effectiveness of the license renewal program. Some sites may not require the same level of inspection effort as others and may be inspected using a smaller sample size. Also, some multi-unit sites contain units with similar designs, and may not require the same level of inspection at the additional units as was received for the first unit. The lead inspector should use discretion in determining the inspection sample size at multi-unit sites with similar designs between the units.

03.06 Inspection Sample Selection.

Although the renewed operating license may not have been issued for TR Phases I and II, the licensee may have agreed to complete certain license renewal activities to support entering the period of extended operation. The sample selection for TR Phases I and II should be based upon the AMPs, TLAAs, regulatory commitments, and proposed license conditions the licensee has agreed to implement while the license renewal application is being reviewed.

For TR Phase III, which occurs after issuance of the SE and the renewed license, the sample would bridge differences between the scope of the TR Phase I and II inspections and the renewed license, as described in the SE, to achieve an overall verification level similar to that of IP 71003 for non-timely-renewal plants.

- a. Selection of License Conditions: A sample of license conditions will be inspected to the extent necessary to determine that the license conditions were implemented consistent with the licensee's commitments. Inspection of the license conditions should include a review of supporting documentation to determine if the licensee has taken the appropriate actions, including corrective action, to satisfy a particular license condition. Appropriate technical expertise should be requested from the license renewal program office if needed.
- b. Selection of Regulatory Commitments: The sample should include regulatory commitments that were proposed or accepted by the staff during the license renewal application review and that describe a modification or enhancement to a program, or future actions necessary for compliance with 10 CFR Part 50 or 10 CFR Part 54. The

selected regulatory commitments will be inspected to the extent necessary to determine that the commitments were implemented, and any modifications were completed in accordance with NEI 99-04, as endorsed by Regulatory Issue Summary 2000-17. The inspection team should determine whether there is reasonable assurance that the commitment tracking program is effective. The inspection of regulatory commitments should include a review of supporting documentation, to determine if the licensee has taken the appropriate actions, including corrective action, to satisfy a particular commitment. Appropriate technical expertise should be requested from the license renewal program office if needed.

- c. Selection of AMPs: The sample should include selected AMPs that are new, modified, or enhanced. The selected AMPs will be inspected to the extent necessary to determine that updates, modifications, and implementation occurred consistent with the licensee's commitments. AMP activities, bases, and acceptance criteria should be appropriately proceduralized. The license renewal program office recommends that the inspector include the Buried and Underground Piping and Tanks Program, the One-Time Inspection Program, and the Selective Leaching Program as part of the sample, because these programs may involve new or unique inspection and/or testing activities that are being performed by the licensee for the first time, or may identify inspection or test results that the licensee may not have experienced in the past. Appropriate technical expertise should be requested from the license renewal program office if needed.
- d. Selection of TLAAs: The sample should include selected TLAAs that have an associated AMP in accordance with 10 CFR 54.21(c)(1)(iii). The inspector should verify that the AMP describes how the licensee will manage, update, or refine the TLAA during the PEO. The inspector should verify that the AMP demonstrates how the licensee meets the acceptance criteria for the CLB. The AMP should contain the licensee's actions when the CLB acceptance criteria are exceeded. The licensee's actions may include taking the appropriate corrective actions to repair and/or replace impacted SSCs, recalculating the TLAA, or initiating additional inspection activities. AMP activities, bases, and acceptance criteria that relate to TLAA acceptance under 10 CFR 54.21(c)(1)(iii) should be appropriately proceduralized. There are currently three programs that the inspector may want to include as part of his or her sample selection: the Fatique Monitoring Program, the Concrete Containment Tendon Prestress Program, and the Environmental Qualification of Electric Components Program. However, the inspector may want to contact the license renewal program office to identify which TLAAs were of significant interest during the license renewal application review for a particular plant, to determine which TLAAs will be reviewed for this portion of the inspection. Also, for questions or concerns by the inspector during the review of highly specialized TLAAs, or for errors identified by the inspector to have significant impact on 10 CFR 54.21(c)(1)(i) or 10 CFR 54.21(c)(1)(ii), assistance should be requested from the license renewal program office.
- e. Inspection of Newly Identified Systems: Licensees may identify new SSCs that should be within the scope of its license renewal program at any time. Any "newly identified" SSCs may be inspected to the extent necessary to ensure that the licensee adequately evaluated and included applicable SSCs into its AMPs or TLAAs. Inspectors should contact the Division of New and Renewed Licenses (DNRL) staff for: (1) information on generic communications that were issued naming newly identified SSCs, or (2) technical assistance regarding the review of new AMPs that have been developed by the licensee.

f. Inspection of the UFSAR supplement: The UFSAR supplement, as revised, describes the AMPs and TLAAs in the SE for license renewal. This inspection verifies that the proposed UFSAR supplement description matches the AMP or TLAA being implemented and that changes, caused by the inclusion of "newly identified" SSCs, were included in the UFSAR supplement. If the licensee has not submitted an annual update to the UFSAR supplement since implementing the AMP or TLAA, review the planned UFSAR supplement changes and verify that they are included in an appropriate tracking system.

03.07 Dispositioning Issues of Concern.

The level of documentation for license renewal inspection activities differs from that used in other inspection activities by allowing the documentation of observations. Since the renewed operating license will not be issued at the time of some portions of this inspection, inspectors can document observations associated with the implementation and/or completion of proposed license conditions, regulatory commitments, TLAAs and AMPs. These and any other inspection results will be evaluated and dispositioned using the guidance in IMCs 0611, 0612, and 2516.

71013-04 RESOURCE ESTIMATES

The total resource expenditure of this inspection procedure is estimated to be approximately 1,120 hours for a one-unit site, 2,052 hours for a dual-unit site, and 2,850 hours for a three-unit site. This resource estimate includes the preparation and documentation weeks. This resource estimate does not include the time spent travelling to and from the site.

71013-05 REFERENCES

IP 71003, "Post-Approval Site Inspection for License Renewal"

- 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"
- 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants"
- Commitment Lists for Renewed Plants with No Commitment Appendix Attached to its Safety Evaluation Report for License Renewal, ADAMS Accession No. ML070640041
- IMC 0308, "Reactor Oversight Process Basis Document"
- IMC 0609, "Significance Determination Process"
- IMC 0612, "Power Reactor Inspection Reports"
- IMC 2515, "Light-Water Reactor Inspection Program Operations Phase"
- IMC 2516, "Policy and Guidance for the License Renewal Inspection Program"
- NRR Office Instruction LIC-105, "Managing Regulatory Commitments Made by the Licensee to the NRC"
- Nuclear Energy Institute (NEI) 99-04, "Guidelines for Managing NRC Commitment Changes" Revision 0, July 1999

- NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants," Revision 2, December 2010
- NUREG-1801, "Generic Aging Lessons Learned (GALL) Report," Revision 2, December 2010
- NUREG-2191, Volumes 1 and 2, "Generic Aging Lessons Learned for Subsequent License Renewal (GALL-SLR) Report," July 2017
- NUREG-2192, "Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants–Final Report," July 2017
- NRC approved interim staff guidance positions relating to LR (https://www.nrc.gov/readingrm/doc-collections/isg/license-renewal.html#current) and SLR (https://www.nrc.gov/reading-rm/doc-collections/isg/license-renewal.html#slr)
- RIS 2000-017, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff"
- RIS 2007-016, "Implementation of the Requirements of 10 CFR 54.37(b) for Holders of Renewed Licenses"

END

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	ML13032A102 09/25/13 CN 13-023	A four-year historical search for commitments was performed. Change Notice 11-004 for temporary instruction (TI) 2516/001 was found related to timely renewal inspection activities. TI 2516/001, Review of License Renewal Activities, expires on December 31, 2013, at which point timely renewal inspection activities will be conducted in accordance with IP 71013.	N/A	N/A
N/A	ML23080A001 06/26/23 CN 23-018	Reactivated and updated for use for the Diablo Canyon license renewal application review.	N/A	ML23081A512

Attachment 1: Revision History for IP 71013