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GUIDANCE FOR ITAAC CLOSURE UNDER 10 CFR PART 52

A. INTRODUCTION

This guide describes a method that the staff of the U.S. Nuclear Regulatory Commission (NRC) considers acceptable for use in satisfying the requirements for documenting the completion of inspections, tests, analyses, and acceptance criteria (ITAAC). In particular, this guide endorses the methodologies described in the industry guidance document Nuclear Energy Institute (NEI) 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," Revision 4, issued July 2010 (Ref. 1), for the implementation of Title 10, Section 52.99, "Inspection during Construction," of the Code of Federal Regulations (10 CFR 52.99) (Ref. 2).

The NRC issues regulatory guides to describe to the public methods that the staff considers acceptable for use in implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific problems or postulated accidents, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations and compliance with them is not required.

This regulatory guide contains information collection requirements covered by 10 CFR Part 52 that the Office of Management and Budget (OMB) approved under OMB control number 3150-0151. The NRC may neither conduct nor sponsor, and a person is not required to respond to, an information collection request or requirement unless the requesting document displays a currently valid OMB control number. This Regulatory Guide is a rule as designated in the Congressional Review Act (5 U.S.C. 801–808). However, the NRC has determined this Regulatory Guide is not a major rule as designated by the Congressional Review Act and has verified this determination with the OMB.

This regulatory guide is being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. It has not received final staff review or approval and does not represent an official NRC final staff position. Public comments are being solicited on this draft guide (including any implementation schedule) and its associated regulatory analysis or value/impact statement. Comments should be accompanied by appropriate supporting data. Written comments may be submitted to the Rules, Announcements, and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; submitted through the NRC's interactive rulemaking Web page at http://www.nrc.gov; or faxed to (301) 492-3446. Copies of comments received may be examined at the NRC's Public Document Room, 11555 Rockville Pike, Rockville, MD. Comments will be most helpful if received by July 25, 2011.

Electronic copies of this draft regulatory guide are available through the NRC's interactive rulemaking Web page (see above); the NRC's public Web site under Draft Regulatory Guides in the Regulatory Guides document collection of the NRC's Electronic Reading Room at http://www.nrc.gov/reading-rm/doc-collections/; and the NRC's Agencywide Documents Access and Management System (ADAMS) at http://www.nrc.gov/reading-rm/adams.html, under Accession No. ML102530401. The regulatory analysis may be found in ADAMS under Accession No. ML102530440

B. DISCUSSION

Background

The regulation at 10 CFR 52.99 includes requirements for documenting and reporting the satisfaction of the acceptance criteria for each ITAAC contained in the combined license (COL).

This guide provides guidance on licensee notifications to the NRC for completed and uncompleted ITAAC, post-closure notifications on ITAAC maintenance activities, and notifications declaring that the licensee has completed all ITAAC contained in the COL. The NRC uses these notifications to determine whether the licensee has successfully completed ITAAC, to verify that acceptance criteria are met, to facilitate public participation in the ITAAC hearing process, and to plan inspections. This regulatory guide describes methods that the NRC staff considers acceptable for licensees to use for documenting, reporting, and maintaining the satisfactory completion of the acceptance criteria for each ITAAC contained in the COL. This regulatory guide, through its endorsement of an industry guidance document for licensees, provides guidance on complying with the requirements in 10 CFR 52.99.

Development of Industry Guideline Document NEI 08-01

In accordance with 10 CFR 52.97(b), COLs must contain ITAAC that are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in accordance with the license; the Atomic Energy Act of 1954, as amended; and NRC regulations. After issuance of a COL, a licensee completes all the ITAAC contained in the COL during construction and submits notifications to the NRC under 10 CFR 52.99.

The regulation at proposed 10 CFR 52.99 requires the licensee to submit several types of ITAAC notifications to the NRC. The licensee must submit the first type of ITAAC notification (ITAAC closure notification) in accordance with 10 CFR 52.99(c)(1). The ITAAC closure notification, which is referred to either as an ITAAC closure letter or ITAAC completion notification in NEI 08-01, must inform the NRC of the basis for the licensee's determination that it has successfully completed an ITAAC. ITAAC closure notifications must be submitted for all ITAAC, with the exception of those ITAAC resolved at COL issuance under 10 CFR 52.97(a)(2). The second type of ITAAC notification, an ITAAC post-closure notification (also referred to as a supplemental ITAAC closure notification) is governed by proposed 10 CFR 52.99(c)(2) and would apply to ITAAC for which an ITAAC closure notification has previously been submitted. This notification would result from the occurrence and resolution of an event that materially alters the basis for determining that a prescribed inspection, test, or analysis was performed as required, or finding that a prescribed acceptance criterion is met. This supplemental ITAAC closure notification would describe the resolution of the circumstances surrounding the identification of new material information, and would need to contain sufficient information to demonstrate that the prescribed inspections, tests, or analyses have been performed as required and the prescribed acceptance criteria are met. The licensee must submit the third type of ITAAC notification (uncomplete ITAAC notification) in accordance with the regulation at proposed 10 CFR 52.99(c)(3) at least 225 days before the scheduled initial loading of fuel. An uncomplete ITAAC notification must describe how the licensee will successfully complete all uncompleted ITAAC before fuel is loaded. The final type of notification under proposed 10 CFR 52.99(c)(4) informs the NRC that the licensee has successfully completed all ITAAC in the COL.

Operation (which includes loading fuel) cannot commence until the Commission finds under 10 CFR 52.103(g) that all acceptance criteria in the ITAAC are met. To provide a basis for the

Commission's finding that all acceptance criteria are met, and to ensure that ITAAC closure notifications contain sufficient information to satisfy 10 CFR 52.99, the licensee can follow the industry guidelines in NEI 08-01, with the exceptions and additional guidance discussed below.

The following sections of NEI 08-01 provide guidance for licensees on major aspects of the ITAAC closure process:

- Introduction
- Definitions
- General Description of 10 CFR Part 52 and ITAAC Processes
    - Role of ITAAC in 10 CFR Part 52 Process
    - ITAAC Closure Process
    - General Description of Public Hearing Opportunity
    - Summary Description of 10 CFR 52.103 Process and Fuel Load Authorization Process
- Schedule Considerations for ITAAC-Related Activities and Coordination To Support NRC Inspection Planning
    - Proprietary Construction Schedule Information
    - Licensee Schedule Coordination
- Licensee Process for Review and Preparation of ITAAC Closure Letters
    - Guidance for Oversight of ITAAC Closure Activities and Maintenance of Records
    - Standard Format for ITAAC Closure Packages
    - Licensee Corrective Action Process
- Guidance on Sufficient Information for ITAAC Closure Letters
- Guidance on Sufficient Information for 225-Day Notification of Uncompleted ITAAC
- Special Topics
    - Maintaining the Validity of ITAAC Conclusions Post-ITAAC Completion
    - Design Acceptance Criteria
    - Subsequent COL ITAAC Closure
    - Non-ITAAC Systems
    - Guidance for Inspections, Tests, or Analyses Performed at Other Than Final Installed Location
- Acronyms
- Appendix A—Excerpts from 10 CFR Part 52
- Appendix B—Reserved
- Appendix C—General Description of Common ITAAC Acceptance Criteria Categories
- Appendix D—ITAAC Closure Letter Template and Examples
- Appendix E—225-Day Notification Template and Examples
- Appendix F—All ITAAC Complete Letter Template
- Appendix G—ITAAC Maintenance Prompt Notification Template
- Appendix H—ITAAC Maintenance Examples
- Appendix I—Sample Supplemental ITAAC Closure Letters

Guidelines on ITAAC Closure Development and Documentation in NEI 08-01

The staff endorses NEI 08-01, Revision 4, as an acceptable method of complying with the requirements in 10 CFR 52.99, subject to the comments below. NEI 08-01 provides guidance for licensees on major aspects of the ITAAC closure process in the following sections:

Section 1 of NEI 08-01 provides an introduction to the document, a description and purpose of ITAAC, and the scope of topics that it covers.

Section 2 of NEI 08-01 provides a list of definitions for terminology used in the guide. Some of these definitions will reappear in other documents such as COL applications, design certification applications, and other supporting documents. Currently, certified designs have the following definition for "as-built":

As-built means the physical properties of the structure, system, or component following the completion of its installation or construction activities at its final location at the plant site.

NEI 08-01 defines "as-built" as follows:

As-built means the physical properties of a structure, system, or component following the completion of its installation or construction activities at its final location at the plant site. In cases where it is technically justifiable, determination of physical properties of the as-built structure, system, or component may be based on measurements, inspections, or tests that occur prior to installation, provided that subsequent fabrication, handling, installation, and testing do not alter the properties.

COL licensees referencing already certified designs are, of course, bound by the definitions in the design certification rather than by the definitions in NEI 08-01, unless they seek an exemption from the Tier 1 definition. The NRC staff believes that the NEI 08-01 definition of "as-built" could form the basis for a Tier 1 definition of "as-built" in future design certifications, design certification amendments, and plant-specific exemptions to already certified designs.

The licensee should ordinarily perform as-built inspections, tests, and analyses of ITAAC structures, systems, and components (SSCs) after installation and construction activities at the final location at the plant site. Section 3.1.4 of NEI 08-01 acknowledges that it may be appropriate to perform inspections or tests before final installation (e.g., measuring an interior dimension before the final assembly of a valve). Section 8.5 of NEI 08-01 provides detailed information on the successful application of the NEI 08-01 definition of "as-built" to inspections, tests, and analyses performed at locations other than the final location at the plant site.

Section 3 of NEI 08-01 generally describes the role of the ITAAC process in Subpart A, "Early Site Permits," Subpart B, "Standard Design Certifications," and Subpart C, "Combined Licenses," of 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." The ITAAC closure process described in NEI 08-01 is consistent with 10 CFR 52.99 requirements for verifying that the construction of a new nuclear plant matches the certified design and the acceptance criteria listed in the COL. The discussion on "sufficient information" further describes the notifications as required by proposed 10 CFR 52.99(c)(1), (c)(2), and (c)(3). Section 3 also discusses public hearing opportunities during construction and provides a summary description of the process under 10 CFR 52.103, "Operation under a Combined License," and its associated fuel load authorization process. Section 8.1 of NEI 08-01discusses in detail the additional notifications introduced in Section 3 after the licensee submits the ITAAC closure notification. Appendix A to this regulatory guide contains the proposed text for 10 CFR 52.99.

Section 4 of NEI 08-01 provides information on schedule considerations for ITAAC-related activities and on the coordination necessary to support NRC inspection planning. In accordance with 10 CFR 52.99, the licensee is required to submit an ITAAC closure schedule at 6-month intervals during plant construction. Within 1 year of the loading of fuel, that interval will decrease to 30 days. The information provided by the licensee, including the ITAAC closure schedule, will be used by the NRC in developing the NRC's inspection activities and activities necessary to support the Commission's finding whether all of the ITAAC acceptance criteria are met prior to the licensee's scheduled date for fuel load. The NRC will consider any licensee claims that the submitted schedule is proprietary and should be withheld from public release under the Freedom of Information Act and 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding" (Ref. 3).

In addition to the required schedule submittals, licensees should provide a Level 3 schedule of ITAAC-related activities on site and off site (in vendor shops). These detailed schedules will allow the staff to plan its oversight activities.

Applicants should submit and maintain a complete, consolidated listing of the ITAAC in their COL applications. Providing a complete table that lists all ITAAC will ensure that the ITAAC issued with the COL are accurate and will standardize a reference that the staff and licensees can then use. The submission of a complete ITAAC list prior to COL issuance will reduce errors when referencing or identifying ITAAC and will provide the basis for the ITAAC list included as an appendix to the COL.

Section 5 of NEI 08-01 provides guidance on the licensee process for the preparation and review of the notifications required by 10 CFR 52.99. This section also provides guidance for the licensee oversight of ITAAC closure activities and the maintenance of records referenced by the ITAAC closure packages. In addition, Section 5 of NEI 08-01 provides an outline of completion packages. In addition, Section 5 discusses a licensee's corrective action processes that address the identification and correction of deficiencies and the prevention of their recurrence as they relate to ITAAC completion.

Section 6 of NEI 08-01 provides guidance on the amount of information that ITAAC closure notifications must contain. ITAAC closure notifications must contain sufficient information to allow the NRC to determine whether the ITAAC have been successfully completed. According to the Statements of Consideration for the 2007 10 CFR Part 52 rule, the closure notifications mandated by 10 CFR 52.99(c)(1) must also include sufficient information so that interested persons will have access to information on completed ITAAC at a level of detail sufficient to address the Atomic Energy Act's Section 189.a(1)(B) threshold for requesting a hearing on whether the acceptance criteria have been, or will be, met (Ref. 4).

The NRC expects the notification of ITAAC completion to contain more information than just a simple statement that the licensee has completed the ITAAC and has met the acceptance criteria. The NRC expects the notification to be sufficiently complete and detailed for a reasonable person to understand the bases for the licensee's representation that it has successfully completed the inspections, tests, and analyses and has met the acceptance criteria. The term "sufficient information" requires, at a minimum, a summary description of the bases for the licensee's conclusion that it has performed the inspections, tests, or analyses and that it has met the prescribed acceptance criteria (Ref. 4).

Each 10 CFR 52.99(c)(1) submittal should include sufficient information on the attributes that validate that the licensee has satisfied the acceptance criteria. The licensee should copy the ITAAC directly from the certified design and COL to the ITAAC statement. The ITAAC determination basis (IDB) should include a clearly written, detailed process on how the licensee completed the inspections, tests, or analyses and should explain how it met the acceptance criteria. The licensee should provide enough detail on each inspection, test, or analysis to clearly indicate how it was completed and should

state its results. The licensee should then compare the results to the acceptance criteria and should include the bases for its conclusion that the acceptance criteria have been met. The submittal should also include ITAAC-related construction findings related to the ITAAC and their closure status, confirmation from the licensee's official representative that the licensee has met the acceptance criteria, and a list of references applicable to the ITAAC and available for NRC review. Appendix D to NEI 08-01 presents examples of ITAAC closure notifications.

The proposed regulation in 10 CFR 52.99(e)(2) (Appendix A to this regulatory guide) requires that the NRC make publicly available the licensee notifications under proposed paragraph 10 CFR 52.99(c). Licensees should, to the extent possible, exclude sensitive or proprietary information that would otherwise be withheld under 10 CFR 2.390 in these notifications. If it is necessary to include such information, both public and non-public versions of the notification should be submitted.

In an effort to reduce a large surge in ITAAC closure notification submittals late in the construction period, licensees should submit closure notifications as soon as possible. Because of the nature of how ITAAC are normally developed, many complex ITAAC cannot be closed until larger systems have been fully completed. In cases in which these complex ITAAC have distinct, individual acceptance criteria for which licensees can demonstrate satisfaction earlier rather than waiting for closure of the entire ITAAC, they may submit those completed portions early. These partial submittals would follow the same format as the 10 CFR 52.99(c)(1) notifications and will identify what has been completed and what has not been completed. The partial submittals will not close the entire ITAAC but instead will lessen the burden of verifying ITAAC that have been completed over a long period of time. Each partial submittal of a complex ITAAC should describe all work performed to date and reference any previous submittals on the licensee's progress of completing the ITAAC. The final closure notification will be a stand-alone 10 CFR 52.99(c)(1) notification that comprises the information previously submitted in the partial closure notifications, and will need to include all the information that correctly shows the progression of closure of the ITAAC.

Section 7 of NEI 08-01 provides guidance on sufficient information for the 225-day notification of uncompleted ITAAC. The 225-day notification mandated by proposed 10 CFR 52.99(c)(3), must include sufficient information so that interested persons will have access to information on uncompleted ITAAC at a level of detail sufficient to address the Atomic Energy Act's Section 189.a(1)(B) threshold for requesting a hearing on whether the acceptance criteria have been, or will be, met (Ref. 4). The uncomplete notification will be a predictive summary for how the licensee plans to complete the ITAAC if that ITAAC is not completed by 225 days before the scheduled loading of fuel.

The licensee must demonstrate that it will comply with the ITAAC, and it must provide sufficient information to demonstrate that it will perform the prescribed inspections, tests, or analyses and will meet the prescribed acceptance criteria for the uncompleted ITAAC. The term "sufficient information" requires, at a minimum, a summary description of the bases for the licensee's conclusion that it will perform the inspections, tests, or analyses and that it will meet the prescribed acceptance criteria (Ref. 4). In addition, "sufficient information" includes, but is not limited to, a description of the specific procedures and analytical methods that the licensee will use to perform the inspections, tests, and analyses and to determine that it has met the acceptance criteria (Ref. 2).

Each proposed 10 CFR 52.99(c)(3) notification should include sufficient information for both the completed and uncompleted elements of the ITAAC. The licensee should copy the ITAAC directly from the certified design and COL to the ITAAC statement. Items that the licensee has completed toward ITAAC closure should be accompanied by a clearly written, detailed process that describes how it completed those portions of the inspections, tests, or analyses. Items that remain uncomplete for ITAAC closure should be accompanied by a clearly written, detailed process that describes how the licensee

expects to complete those portions of the inspections, tests, or analyses and that subsequently concludes that the acceptance criteria will be met. The licensee should include enough detail on each inspection, test, or analysis for both completed and uncompleted portions to clearly indicate how it completed, or will complete, those portions. The submittal should also include a schedule for completing the ITAAC and a list of references applicable to the ITAAC and available for NRC review. Appendix E to NEI 08-01 presents examples of uncomplete notifications.

Section 8 of NEI 08-01 discusses special topics, including ITAAC maintenance, design acceptance criteria (DAC); subsequent COL ITAAC closure; non-ITAAC systems; and guidance for inspections, tests, or analyses performed at locations other than the final installed location.

The regulation at 10 CFR 52.103(g) states, "The licensee shall not operate the facility until the Commission makes a finding that the acceptance criteria in the combined license are met." Following the completion of any ITAAC, the licensee must maintain the validity of the acceptance criteria of the closed ITAAC to support the Commission's finding that the acceptance criteria are met. ITAAC maintenance is the period between the submission of an ITAAC closure notification in accordance with 10 CFR 52.99(c)(1) and an affirmative 10 CFR 52.103(g) finding. An acceptable licensee approach to maintaining ITAAC provides the NRC with confidence that the acceptance criteria continue to be met at the conclusion of construction when the Commission makes a determination under 10 CFR 52.103(g). One proposed method that the licensee can use to meet this requirement is to include provisions in programs such as the quality assurance (QA) program, the maintenance program, the corrective action program, and the design and configuration control program. These provisions should include licensee plans and programs to ensure that activities affecting successfully completed ITAAC do not invalidate the conclusion that the acceptance criteria are met. Section 8.1.1 of NEI 08-01 addresses the attributes that licensees should include in their programs for maintaining the validity of successfully completed ITAAC. Specifically, Section 8.1.1 lists the QA program, construction corrective action processes, the design and configuration control program, and the construction and maintenance program as available programs to which attributes can be added to facilitate successful ITAAC maintenance. Although the section focuses mainly on the construction of components, systems, and buildings, this section also applies to the maintenance of emergency preparedness and security ITAAC. Licensees are responsible for ensuring that these programs maintain the validity of prior ITAAC conclusions on security and emergency preparedness to support an affirmative 10 CFR 52.103(g) finding and provide continuity after those programs and systems are turned over to the operations staff. While NEI 08-01 includes discussions on the need for license amendments and exemptions in the ITAAC context in Sections 3.2, 8.1, and 8.2, Appendix B to this regulatory guide contains Enclosure 1 to SECY 10-0100 (Ref. 7), which is a more detailed discussion specifically focused on issues associated with ITAAC maintenance.

Section 8.1.2 of NEI 08-01 includes thresholds for determining when a licensee should notify the NRC of new information that it has discovered after the submission of an ITAAC closure notification or the "All ITAAC Complete" notification. During the development of the proposed changes to 10 CFR 52.99, the staff revised its characterization of the reporting thresholds. This characterization differs slightly from that used in NEI 08-01, as follows:

- Material Error or Omission – Is there a material error or omission in the original ITAAC closure notification?

- Post Work Verification (PWV) - Will the PWV performed following work undertaken to resolve an issue reportable under 10 CFR 52.99(c)(2) use a significantly different approach than the original performance of the inspection, test, or analysis as described in the original ITAAC notification?

- Engineering Changes - Will an engineering change be made that materially alters the determination that the acceptance criteria are met?

- Additional Items To Be Verified - Will there be additional items that need to be verified through the ITAAC?

- Complete and Valid ITAAC Representation - Will any other licensee activities materially alter the ITAAC determination basis?

Each threshold listed in Section 8.1.2 of NEI 08-01 provides a supporting example explaining whether an ITAAC post-closure notification would be necessary. The example accompanying Threshold 1 in Section 8.1.2 of NEI 08-01 should add the following language in italics to clarify this additional reporting requirement:

Example: The AC states that 300 gpm flow passes through an MOV. The MOV is replaced and water cannot be flowed through the valve as part of the PWV to verify the AC continues to be met. Instead, the valve is stroked and an engineering analysis *that verifies 300-gpm flow under all applicable conditions* is performed to validate the AC. This would be an acceptable means to meet the AC….

To ensure that the ITAAC continue to be met, the analysis in the PWV must specifically focus on the same acceptance criteria parameters that were measured in the original ITAAC performance.

Section 8.1.2 of NEI 08-01 also discusses the timing of notifications to the NRC, regarding the determination of the need to submit an ITAAC post-closure notification. Licensees should notify the NRC within seven days upon determining the need to submit a proposed 10 CFR 52.99(c)(2) notification. Appendix G of NEI 08-01 contains a template to use for making such early notifications.

Section 8.1.3 of NEI 08-01 includes guidance on developing the all ITAAC complete notification that would be required by proposed 10 CFR 52.99(c)(4). If, after filing the all ITAAC complete notification, the licensee identifies new information material to the basis for determining that a prescribed inspection, test, or analysis was performed as required or for finding that a prescribed acceptance criterion is met, it should determine whether that information materially alters the basis for the ITAAC determination such that notification would be required by 10 CFR 52.99(c)(2). If that is the case, the licensee should make an ITAAC maintenance prompt notification within 24 hours of the determination of the new information, and should follow the format presented in Appendix G of NEI 08-01. Section 8.1.3 of NEI 08-01 recommends that the licensee "should evaluate new information or conditions expeditiously to determine if a notification threshold is exceeded" during this period before the 10 CFR 52.103(g) finding.

Section 8.2 of NEI 08-01 addresses DAC, which are a subset and special type of ITAAC. The staff defined DAC in SECY-92-053, "Use of Design Acceptance Criteria during 10 CFR Part 52 Design Certification Reviews," dated February 19, 1992 (Ref. 5), to address design areas that rapidly change or for which sufficient as-built (or as-procured) information is unavailable to support design analysis. For example, digital instrumentation and control is a rapidly changing design area, and freezing its associated design details early in a design certification stage could make implementation of the certified design impractical for COL holders because the final instrumentation and control design and installation would be completed years after the design certification was completed.

DAC set forth the processes and acceptance criteria for completing design detail. DAC can be resolved through three different options: (1) an amendment to the design certification (generic), (2) a submittal as part of the COL application (plant specific), and (3) closure of the DAC during construction

(plant specific). The NRC staff prefers to resolve DAC through the amendment of the design certification rule or resolve DAC through the COL application review process because these two scenarios would be completed before construction begins.

As-built ITAAC will be used to demonstrate that the as-built facility conforms to the completed DAC. As-built ITAAC will be resolved as part of the ITAAC closure process. The successful completion of the as-built ITAAC will be documented through the ITAAC closure documentation process described in NEI 08-01.

The DAC review and inspection process is currently being developed. Detailed guidance on NRC review and inspection of DAC will be documented as appropriate when complete. Types of documents being considered include an inspection manual chapter, NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," or other suitable guidance.

ITAAC closure might involve closure notifications that are common to each licensee of a particular design. After the licensee submits the initial closure notification on a common issue to the NRC, subsequent licensees could submit notifications referencing identical information; however, this process would not apply to acceptance criteria that require field activities.

Section 8.3 of NEI 08-01 includes information on subsequent COL ITAAC closure.

Section 8.4 of NEI 08-01 describes non-ITAAC systems. Non-ITAAC systems might not have design commitments specifically listed under its system title; however, in some cases, it may have design commitments listed under another system title.

Section 8.5 of NEI 08-01 includes guidance for inspections, tests, or analyses performed at locations other than final installed locations for licensees using the definition of "as-built" provided in NEI 08-01. For ITAAC that specify that the inspection, test, or analysis is to be performed as-built, licensees may take credit for inspections, tests, or analyses performed at locations other than the final installed location provided that it is technically justifiable to do so. In certain cases, and consistent with Section 8.5 of NEI 08-01, use of other than final in-place, as-built inspections, tests, or analyses to satisfy as-built ITAAC may be exercised when performing them earlier is consistent with standard industry practice. NEI 08-01 provides guidance on when it is technically justifiable for the licensee to take credit for inspections, tests, and analyses performed at locations other than the final installed location for as-built ITAAC.

For the as-built inspections and tests detailed in Section 8.5 of NEI 08-01, if a question exists about whether an item falls in the category of "standard industry practice" for the performance of inspections or tests, at locations other than the final installed location, the licensee is responsible for demonstrating that the actions taken were "standard industry practice." The licensee should include this information in the 10 CFR 52.99(c)(1) notification. Inspections and tests performed at other than final installed locations, and designated as "standard industry practice", must still be technically justifiable. For example, Section 8.5 of NEI 08-01 recognizes that for an inspection or test at other than the final installed location to be technically justifiable it must be both in accordance with standard industry practice and also specified in procurement specifications. This section of NEI 08-01specifies that inspections of structures or components performed at other than the final installed location may be used as part of the IDB, provided that it is standard industry practice and specified in procurement specifications, or in accordance with NRC regulatory guidance.

Section 9 of NEI 08-01 provides a list of acronyms used in the guide.

Appendix A to NEI 08-01 provides excerpts from 10 CFR Part 52, reflecting amendments through August 2007, that are applicable to the areas of discussion in the guidance. The proposed 10 CFR 52.99 is not reflected in this appendix to NEI 08-01.

Appendix B to NEI 08-01 is reserved for future use.

Appendix C to NEI 08-01 generally describes common ITAAC categories and discusses categories such as calculations and analyses, test procedures, special processes, inspection programs, code design reports from the American Society of Mechanical Engineers, existing reports that conclude that acceptance criteria are met, procurement, material control, and training and qualification. These discussions are intended to assist the licensee in preparing closure notifications or uncomplete notifications for each type of ITAAC category.

In addition to the topics discussed above, the staff recommends that licensees reference NUREG-0800, Chapter 17, "Quality Assurance," Section 17.5(V), "Nonsafety-Related SSC Quality Controls (Not Applicable to ESP Applicants)," for expectations on QA use during the construction and installation of SSCs. In particular, the licensee should adapt a graded QA approach for the ITAAC completion of nonsafety-related ITAAC and ITAAC associated with the regulatory treatment of nonsafety-related systems.

Appendix D to NEI 08-01 provides the set of ITAAC closure notifications that were prepared during the workshops and public meetings in 2007 and 2008. The template presented in Appendix D-1 to NEI 08-01 for these notifications required by 10 CFR 52.99(c)(1) discusses the level of detail recommended for the IDB. The NRC encourages the licensee to provide a level of detail that is commensurate with the complexity of ITAAC completion activities. This also applies to the technical justification for completing inspections, tests, or analyses if they are performed at locations other than the final installed location. In cases in where it is acceptable for the licensee to perform these inspections, tests, or analyses at locations other than the final installed location, the licensee must summarize the associated technical justification in the IDB of the closure notification to establish that it has successfully completed the ITAAC in conformance with the definition of "as-built." This can include appropriately specific references to the generic technical justifications in Section 8.5 of NEI 08-01.

Appendix E to NEI 08-01 provides the set of 225-day notifications that were also prepared during the workshops and public meetings in 2007 and 2008. Licensees can use these templates to submit notifications required by proposed 10 CFR 52.99(c)(3). Each template contains a statement of the full ITAAC as it is included in the COL or certified reactor design, a section describing the bases for considering the ITAAC complete, a section for an ITAAC-related construction finding review, and a closure statement followed by a licensee representative signature for each submittal. Licensees must submit a proposed 10 CFR 52.99(c)(3) notification for each uncompleted ITAAC by the 225-day milestone before the scheduled loading of fuel. The 225-day notification requires additional detail on items that the licensee completed toward ITAAC closure and on items that it must complete in the time before the 10 CFR 52.103(g) finding. The staff considers these notifications and those in Appendix D to NEI 08-01 as examples and anticipates that differing or additional information, consistent with Section 6, "Guidance on Sufficient Information for ITAAC Closure Letters," and Section 7, "Guidance on Sufficient Information for 225-Day Notification of Uncompleted ITAAC," of NEI 08-01, may be necessary for individual ITAAC notifications. Licensees should review the criteria of Sections 6 and 7 of NEI 08-01 to determine the appropriate content.

Appendix F to NEI 08-01 provides a template for the "All ITAAC Complete" notification that would be required by proposed 10 CFR 52.99(c)(4)). This notification is made concurrent with or after the last 10 CFR 52.99(c)(1) notification is submitted. The All ITAAC Complete notification serves to

notify the NRC that all of the inspections, tests, and analyses have been performed; all acceptance criteria have been met; and all ITAAC conclusions are being maintained. The notification provides the staff with confidence that it can recommend an affirmative 10 CFR 52.103(g) finding by the Commission.

Appendix G to NEI 08-01 provides a template for ITAAC maintenance prompt notification to inform the NRC of conditions or events that exceed the ITAAC maintenance reporting thresholds presented in the discussion on NEI 08-01, Section 8.1.2. This prompt notification is to be used for events or conditions that materially alter the bases of the notifications under proposed 10 CFR 52.99(c)(1).

Appendix H to NEI 08-01 provides examples of ITAAC maintenance. The examples are various scenarios and events that show whether an ITAAC post-closure notification would likely be required.

Appendix I to NEI 08-01 provides the template and examples of the ITAAC post-closure ITAAC notification that proposed 10 CFR 52.99(c)(2) would require.

Appendices to This Regulatory Guide

Appendix A to this regulatory guide contains the proposed text for 10 CFR 52.99.

Appendix B to this regulatory guide contains Enclosure 1 to SECY 10-0100 (Ref. 7), ITAAC Maintenance Thresholds and Associated License Amendments.

Appendix C to this regulatory guide contains the flowchart and description for the implementation of 10 CFR 52.99 and 10 CFR 52.103(g) that the staff developed for use in public workshops, as described in Enclosure 3 of SECY-08-0117, "Staff Approach To Verify Closure of Inspections, Tests, Analyses, and Acceptance Criteria and To Implement Title 10 CFR 52.99, 'Inspection during Construction,' and Related Portion of 10 CFR 52.103(g) on the Commission Finding," dated August 7, 2008 (Ref. 6). The process flowchart blocks include numbered descriptions to further delineate each major milestone in the regulatory process for ITAAC closure and verification, up to and including the 10 CFR 52.103(g) finding.

C. REGULATORY POSITION

1. NEI 08-01

   The NRC staff considers the methods discussed in NEI 08-01, Revision 4, to be acceptable for complying with the provisions of 10 CFR 52.99, subject to the comments above.

2. Other Documents Referenced in NEI 08-01

   NEI 08-01 references other documents, but this regulatory guide does not endorse any of the referenced documents.

3. Use of Examples in NEI 08-01

   NEI 08-01 includes examples for notifications required by 10 CFR 52.99. Although these examples are appropriate as general templates for illustrating and reinforcing the guidance in NEI 08-01, the licensee should not consider the NRC's endorsement of this industry guideline document a determination that each example applies to all licensees as it is presented and written in the guide. A licensee should ensure that an example applies to its particular circumstances before implementing the guidance or template, as described.

4. Guidance for Site-Specific ITAAC

   For licensees that have site-specific ITAAC in their COLs, the guidance in NEI 08-01 applies to both design certification and site-specific ITAAC closure notification development.

5. Use of Other Methods

   Licensees may use methods other than those provided in NEI 08-01 to meet the requirements of proposed 10 CFR 52.99. The staff will review such methods and determine the acceptability of other methods on a case-by-case basis.

D. IMPLEMENTATION

The purpose of this section is to provide information on how design certification applicants, license applicants, and licensees may use this guide and information regarding the NRC's plans for using this Regulatory Guide. In addition, it describes how the NRC staff has complied with the Backfit Rule, 10 CFR 50.109 and any applicable finality provisions in 10 CFR Part 52.

Applicant and Licensees' Use

Applicants and licensees may (i.e., voluntarily) use the information in this regulatory guide to develop applications for initial licenses, amendments to licenses, design certifications, or other requests for NRC regulatory approval (e.g., exemptions). Licensees may use the information in this regulatory guide for actions which do not require prior NRC review and approval (e.g., changes to a facility design under 10 CFR 50.59 which do not require prior NRC review and approval). Licensees may use the information in this Regulatory Guide or applicable parts to resolve regulatory or inspection issues (e.g., by committing to comply with provisions in the regulatory guide).

Current licensees may continue to use the guidance that was found acceptable for complying with specific portions of the regulations as part of their license approval process, which may be a previous version of this Regulatory Guide.

A licensee who believes that the NRC staff is inappropriately imposing this Regulatory Guide as part of a request for a license amendment or request for a change to a previously issued NRC regulatory approval may file a backfitting appeal with the NRC in accordance with applicable procedures.

NRC Staff Use

The NRC staff does not intend or approve any imposition or backfitting of the guidance in this Regulatory Guide. The staff does not expect any existing licensee to use or commit to using the guidance in this Regulatory Guide in the absence of a licensee-initiated change to its licensing basis. The NRC staff does not expect or plan to request licensees to voluntarily adopt this Regulatory Guide to resolve a generic regulatory issue. The NRC staff does not expect or plan to initiate NRC regulatory action which would require the use of this regulatory guide (e.g. issuance of an order requiring the use of the Regulatory Guide, requests for information under 10 CFR 50.4(f) as to whether a licensee intends to commit to use of this regulatory guide, generic communication, or promulgation of a rule requiring the use of this Regulatory Guide) without further back-fit consideration.

During inspections of specific facilities, the staff may suggest or recommend that licensees consider various actions consistent with staff positions in this regulatory guide. Such suggestions and recommendations would not ordinarily be considered backfitting even if prior versions of this Regulatory Guide are part of the licensing basis of the facility with respect to the subject matter of the inspection. However, the staff may not represent to the licensee that: (i) the licensee's failure to comply with the positions in this Regulatory Guide constitutes a violation; (ii) the licensee may avoid the violation by agreeing to comply with this Regulatory Guide; or (iii) the only acceptable way for the licensee to address the NRC-identified non-compliance or violation is to commit to this Regulatory Guide (i.e., including this Regulatory Guide in the facility's licensing basis).

If an existing licensee seeks a license amendment or change to an existing regulatory approval, and the staff's consideration of the request involves a regulatory issue which is directly relevant to this Regulatory Guide and the specific subject matter of the new or revised guidance is an essential consideration in the NRC staff's determination of the acceptability of the licensee's request, the staff may require the licensee to use this Regulatory Guide as a prerequisite for NRC approval. This is not considered backfitting as defined in 10 CFR 50.109(a)(1) or a violation of any of the issue finality provisions in 10 CFR Part 52.

Conclusion

This regulatory guide is not being imposed upon current licensees and may be voluntarily used by existing licensees. In addition, this Regulatory Guide is issued in conformance with all applicable internal NRC policies and procedures governing backfitting. Accordingly, the NRC's staff issuance of this regulatory guide is not considered backfitting, as defined in 10 CFR 50.109(a)(1), nor is it deemed to be in conflict with any of the issue finality provisions in 10 CFR Part 52.

REFERENCES[1]

1. NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," Revision 4, Nuclear Energy Institute, Washington, DC, July 2010. (ADAMS Accession No. ML102010051).

2. 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," U.S. Nuclear Regulatory Commission, Washington, DC.

3. 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," U.S. Nuclear Regulatory Commission, Washington, DC.

4. 72 FR 49352, "Licensees, Certifications, and Approvals for Nuclear Power Plants," Federal Register, Volume 45, Number 166, p. 49352, Washington, DC, August 28, 2007.

5. SECY-92-053, "Use of Design Acceptance Criteria during 10 CFR Part 52 Design Certification Reviews," U.S. Nuclear Regulatory Commission, Washington, DC, February 19, 1992.

6. SECY-08-0117, "Staff Approach To Verify Closure of Inspections, Tests, Analyses, and Acceptance Criteria and To Implement Title 10 CFR 52.99, 'Inspection during Construction,' and Related Portion of 10 CFR 52.103(g) on the Commission Finding," U.S. Nuclear Regulatory Commission, Washington, DC, August 7, 2008.

7. SECY-10-0100, "Staff Progress In Resolving Issues Associated With Inspections, Tests, Analyses, And Acceptance Criteria," U.S. Nuclear Regulatory Commission, Washington, DC, August 5, 2010.

[1] Publicly available NRC published documents are available electronically through the Electronic Reading Room on the NRC's public Web site at: http://www.nrc.gov/reading-rm/doc-collections/. The documents can also be viewed on-line or printed for a fee in the NRC's Public Document Room (PDR) at 11555 Rockville Pike, Rockville, MD; the mailing address is USNRC PDR, Washington, DC 20555; telephone 301-415-4737 or (800) 397-4209; fax (301) 415-3548; and e-mail pdr.resource@nrc.gov.

APPENDIX A

TEXT FOR 10 CFR 52.99, AS PROPOSED 10 CFR 52.99, "INSPECTION DURING CONSTRUCTION; ITAAC SCHEDULES AND NOTIFICATIONS; NRC NOTICES"

(a) Licensee schedule for completing inspections, tests or analyses. The licensee shall submit to the NRC, no later than 1 year after issuance of the combined license or at the start of construction as defined at 10 CFR 50.10(a), whichever is later, its schedule for completing the inspections, tests, or analyses in the ITAAC. The licensee shall submit updates to the ITAAC schedules every 6 months thereafter and, within 1 year of its scheduled date for initial loading of fuel, the licensee shall submit updates to the ITAAC schedule every 30 days until the final notification is provided to the NRC under paragraph (c)(1) of this section.

(b) Licensee and applicant conduct of activities subject to ITAAC. With respect to activities subject to an ITAAC, an applicant for a combined license may proceed at its own risk with design and procurement activities, and a licensee may proceed at its own risk with design, procurement, construction, and preoperational activities, even though the NRC may not have found that any one of the prescribed acceptance criteria are met.

(c) Licensee notifications and documentation.

(1) ITAAC closure notification. The licensee shall notify the NRC that prescribed inspections, tests, and analyses have been performed and that the prescribed acceptance criteria are met. The notification must contain sufficient information to demonstrate that the prescribed inspections, tests, and analyses have been performed and that the prescribed acceptance criteria are met.

(2) ITAAC post-closure notifications. Following the licensee's ITAAC closure notifications under paragraph (c)(1) of this section until the Commission makes the finding under 10 CFR 52.103(g), the licensee shall notify the NRC, in a timely manner, of new information that materially alters the bases for determining that either inspections, tests, or analyses were performed as required, or that acceptance criteria are met. The notification must contain sufficient information to demonstrate that, notwithstanding the new information, the prescribed inspections, test, or analyses have been performed as required, and the prescribed acceptance criteria are met.

(3) Uncompleted ITAAC notification. If the licensee has not provided, by the date 225 days before the scheduled date for initial loading of fuel, the notification required by paragraph (c)(1) of this section for all ITAAC, then the licensee shall notify the NRC that the prescribed inspections, tests, or analyses for all uncompleted ITAAC will be performed and that the prescribed acceptance criteria will be met prior to operation. The notification must be provided no later than the date 225 days before the scheduled date for initial loading of fuel, and must provide sufficient information to demonstrate that the prescribed inspections, tests, or analyses will be performed and the prescribed acceptance criteria for the uncompleted ITAAC will be met, including, but not limited to, a description of the specific procedures and analytical methods to be used for performing the prescribed inspections, tests, and analyses and determining that the prescribed acceptance criteria are met.
(4) The licensee shall notify the NRC that all ITAAC are complete.

(d) Licensee determination of non-compliance with ITAAC.

(1) In the event that an activity is subject to an ITAAC derived from a referenced standard design certification and the licensee has not demonstrated that the prescribed acceptance criteria are met, the licensee may take corrective actions to successfully complete that ITAAC or request an exemption from the standard design certification ITAAC, as applicable. A request for an exemption must also be accompanied by a request for a license amendment under 10 CFR 52.98(f).

(2) In the event that an activity is subject to an ITAAC not derived from a referenced standard design certification and the licensee has not demonstrated that the prescribed acceptance criteria are met, the licensee may take corrective actions to successfully complete that ITAAC or request a license amendment under 10 CFR 52.98(f).

(e) NRC inspection, publication of notices, and availability of licensee notifications. The NRC shall ensure that the prescribed inspections, tests, and analyses in the ITAAC are performed.

(1) At appropriate intervals until the last date for submission of requests for hearing under 10 CFR 52.103(a), the NRC shall publish notices in the Federal Register of the NRC staff's determination of the successful completion of inspections, tests, and analyses.
(2) The NRC shall make publicly available the licensee notifications under paragraph (c) of this section. The NRC shall make publicly available the licensee notifications under paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this section no later than the date of publication of the notice of intended operation required by 10 CFR 52.103(a).

[57 FR 60978, December 23, 1992; 72 FR 49536, August 28, 2007; 72 FR 57447, October 9, 2007]

APPENDIX B

ENCLOSURE 1 TO SECY 10-0100, "INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA MAINTENANCE THRESHOLDS AND ASSOCIATED LICENSE AMENDMENTS"

Enclosure 1 to SECY 09-0119, "Staff Progress in Resolving Issues Associated with Inspections, Tests, Analyses, and Acceptance Criteria," dated August 26, 2009, presented four thresholds for identifying when activities would materially alter the determination bases for inspections, tests, analyses, and acceptance criteria (ITAAC). Throughout the past year, the U.S. Nuclear Regulatory Commission staff refined the ITAAC maintenance thresholds after interactions with interested stakeholders during the ITAAC public workshop series. These refinements are intended to optimize the effectiveness of the thresholds and to clearly articulate the criteria for reporting. Each item below is an updated version of the thresholds proposed in Enclosure 1 to SECY 09-119. Following each threshold is a discussion on license amendments that would be necessary beyond the envelope of the threshold. These discussions describe scenarios that pertain to the threshold and state when a license amendment would be necessary.

<u>Threshold 1: Postwork Verification</u>

Will the postwork verification (PWV) use a significantly different approach than the original performance of the inspection, test, or analysis (ITA) as described in the original ITAAC notification?

Threshold 1 involves situations in which the occurrence of an event could call into question whether a licensee continues to meet an acceptance criterion (AC). Such situations could involve many types of maintenance activities, including component replacement. After work is complete, a PWV will be used to confirm that the licensee still meets the AC. The PWV is not a performance of the ITA because the licensee has already satisfied the requirement to perform the ITA; instead, the PWV and its results supplement the performance of the ITA to provide confidence that the licensee continues to meet the AC. The nature and the scope of the PWV will depend upon the nature of the initiating event, the maintenance activities undertaken, and the specific ITAAC that is implicated by the event. If the PWV represents an alternate approach that is significantly different from the approach described in the original ITAAC notification, a supplemental notification is necessary to provide the agency and members of the public information that is material to the agency's determination on ITAAC.

Because the PWV is not a performance of the ITA but rather a supplement to the performance of the ITA, the PWV does not have to comport with the ITA set forth in the license. However, the licensee would need to seek an amendment to that ITA in the license if no reasonable "alternate" PWV approach is available to demonstrate that the AC continues to be met. Whether an alternative PWV is reasonable or not depends on several factors, including the engineering justification provided and the wording of both the ITA and the AC. A reasonable alternative to the original ITA represents a different, yet acceptable, engineering equivalent for performing the activity prescribed in the ITAAC. As an example, if a test was the original prescribed ITA, then the PWV should also be a test, or possibly a combination of a test and analysis or a test and an inspection. The PWV methodology should generally follow the methodology used in the original prescribed ITA.

A license amendment would also be necessary if the PWV reveals that the licensee never met the AC because the original ITA, as worded in the license, was flawed.

Threshold 2: Engineering Changes

Will an engineering change be made that materially alters the determination that the acceptance criteria are met?

License amendments would also be necessary if the engineering change results in the need to identify new AC or if the engineering change results in a design for which the AC as written cannot be demonstrated using the original ITAs.

Threshold 3: Population of Systems, Structures, and Components

Will there be additional items that need to be verified through the ITAAC?

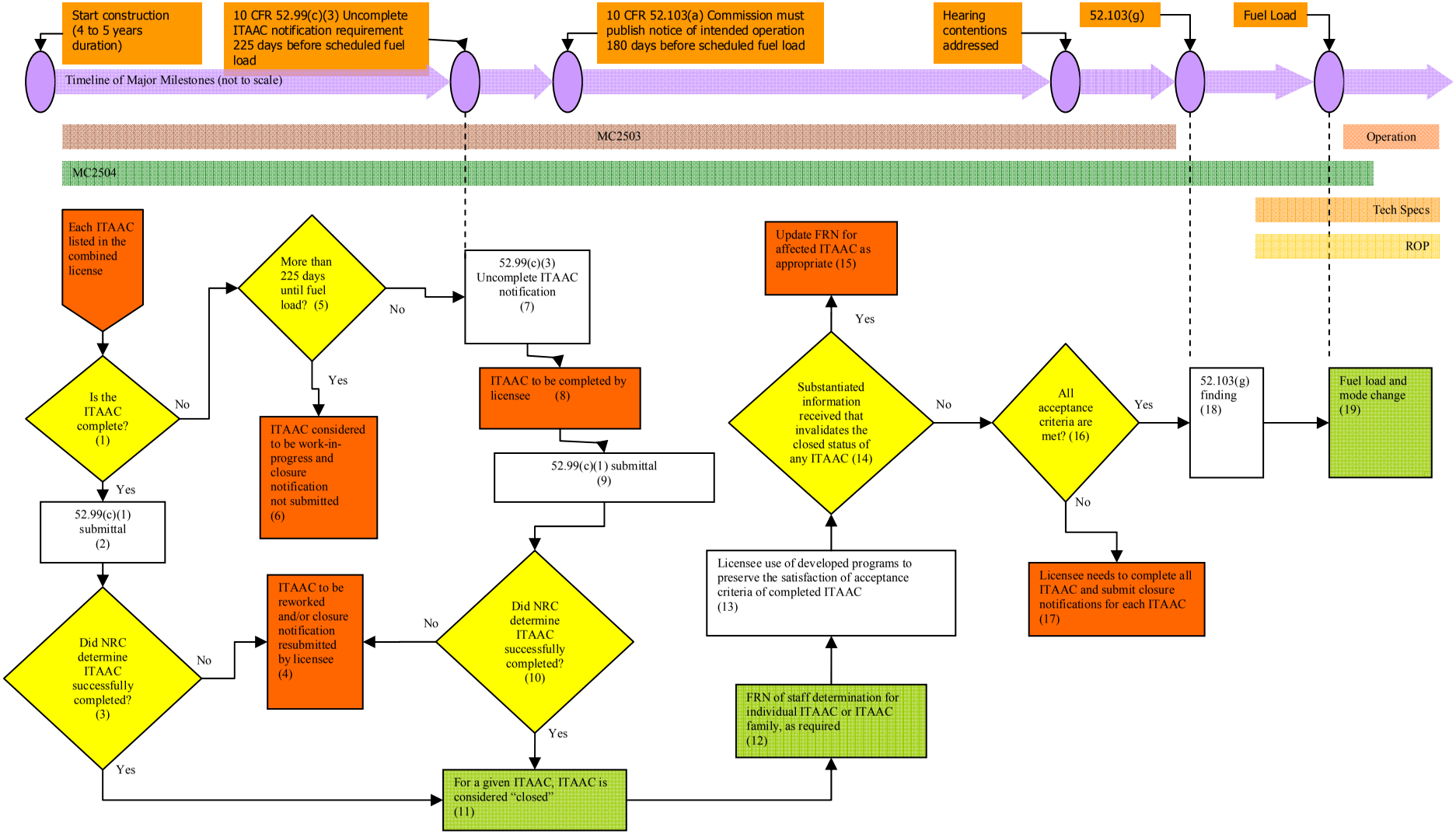
A license amendment would be needed if there are additional items subject to verification through the existing ITAAC, but the licensee proposes not to perform the ITAs specified in the ITAAC. An amendment would also be required if new or amended ITAAC are needed to cover new items (e.g., the new items are of a different type than those covered in the original ITAAC).

Threshold 4: Complete and Valid ITAAC Representation

Will any other licensee activities materially alter the ITAAC determination basis?

A license amendment would be needed if an update of the determination basis necessitates a change to any portion of ITAAC in the license for reasons not covered under thresholds 1, 2, and 3.

APPENDIX A
Flowchart and Description of Implementation Under 10 CFR 52.99 and 10 CFR 52.103(g)



Process block descriptions:

(1) This is the first decision block for any given inspection, test, analysis, and acceptance criterion (ITAAC), and the licensee needs to assess each ITAAC from the license. Each ITAAC can enter this block at any time during construction regardless of its completed or uncompleted status for processing through this flowchart.

(2) If (1) is "yes," then the licensee must submit a closure notification pursuant to 10 CFR 52.99(c)(1).

(3) The U.S. Nuclear Regulatory Commission (NRC) will perform ITAAC closure verification activities, including direct inspection, engineering reviews, and consideration of licensee performance within an ITAAC family. Licensee performance within an ITAAC family is taken into consideration for determination of subsequent licensee ITAAC submittals. "Yes" indicates that the staff has determined that the ITAAC was successfully completed and is "closed." "No" indicates that the ITAAC is not "closed" and remains uncomplete.

(4) If (3) is "no," the NRC has determined that either the 10 CFR 52.99(c)(1) closure notification information is insufficient or that the licensee has not met the acceptance criteria for the given ITAAC. The licensee will either need to resubmit a closure notification that contains sufficient information demonstrating that it has completed the ITAAC, or the licensee will need to rework the ITAAC and redo the inspections, tests, and analyses. In either case, the licensee will need to resubmit the 10 CFR 52.99(c)(1) closure notification.

(5) If (1) is "no," the licensee needs to identify if the time to scheduled fuel load is greater than 225 days. At the 225-day milestone, the licensee is required to submit 10 CFR 52.99(c)(3) uncomplete ITAAC notifications for those ITAAC not yet completed and the 10 CFR 52.99(c)(1) closure notification not yet submitted.

(6) If (5) is "yes," there is no 10 CFR 52.99(c)(3) uncomplete notification required for this ITAAC, and the ITAAC under consideration is in the "work-in-progress" population.

(7) If (5) is "no," the licensee needs to submit to the NRC a 10 CFR 52.99(c)(3) uncomplete ITAAC notification. This notification needs to contain sufficient information to demonstrate that the licensee will perform the ITAAC.

(8) Entry here indicates that an individual ITAAC remains in the uncomplete population. Once the licensee concludes that it has met the acceptance criteria, process block (9) is entered.

(9) Upon successfully meeting the acceptance criteria for a given ITAAC, the licensee can submit the 10 CFR 52.99(c)(1) closure notification to the NRC.

(10) The NRC will perform ITAAC closure verification activities. This decision block is identical to block (3).

(11) If (10) is "yes," the NRC staff has determined that the licensee has met the acceptance criteria.

(12) The NRC determination that the licensee has successfully completed an ITAAC is published in the Federal Register until the last date for submission of requests for hearings under 10 CFR 52.103(a). The NRC can publish a Federal Register notice (FRN) for individual ITAAC (if needed) or multiple ITAAC (such as an entire family). The NRC is not required to publish an FRN after the last date for submission of requests for hearings under 10 CFR 52.103(a).

(13) The licensee will apply developed programs such as quality assurance and maintenance to preserve the satisfaction of acceptance criteria for completed ITAAC, and ensure the validity of ITAAC conclusions.

(14) Any substantiated information received by the NRC, including allegations, can invalidate the closed status of any ITAAC.

(15) If (14) is "yes," then, depending on the severity of the substantiated allegation or information received, the FRN for each affected ITAAC could be updated accordingly. Also depending on the severity of the situation, the licensee may or may not have options available to act accordingly to preserve the FRN for the affected ITAAC.

(16) This process block collectively considers if the licensee has met all ITAAC acceptance criteria.

(17) If (16) is "no," then the licensee needs to complete all ITAAC and ensure that it meets, and continues to meet, all the acceptance criteria for the 10 CFR 52.103(g) finding.

(18) At the time of the 10 CFR 52.103(g) finding, all acceptance criteria must be met, such as when (16) is "yes." Also, this timeline and flowchart do not contemplate an interim operation scenario whereby the Commission could authorize a period of interim operation that would allow the licensee to load fuel before making the 10 CFR 52.103(g) finding, per 10 CFR 52.103(c).

(19) With an affirmative Commission 10 CFR 52.103(g) finding, the licensee will be authorized to load fuel and enter operational status.