



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

ITAAC Maintenance

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Purpose

- To clarify the NRC's position on and discuss issues concerning ITAAC Maintenance:
 - Notification Letters
 - §52.103(g) Finding



Expected Outcomes

- Common understanding of
 - Threshold for Notification Letters
 - § 52.103(g) finding and the definition of 'are met'



Agenda

- Review results of May 7th meeting
- Threshold of Confidence
- Supplemental ITAAC Closure Letter Threshold
- Threshold Concepts 1-4 (Draft)
- ITAAC 'are met' (Draft)
- Continued Confidence in ITAAC (Draft)
- ITAAC Maintenance Timeline (Draft)
- ITAAC Maintenance Reporting
- Notification to Resident Inspectors of ITAAC Work



Results from the May 7th Meeting

- ITAAC closure activities governed by 10 CFR Appendix B
- Adverse conditions affecting ITAAC will be entered into PI&R
- NEI agreed to develop attributes to be included in programs credited with maintaining ITAAC (including implementation timing)



Results from the May 7th Meeting Cont.

- Post-work ITA should reflect the original ITA as closely as possible
- NRC to review ASME Code Section III vs. XI applicability and report results in a future meeting



“Threshold of Confidence”

- Provides consistency when determining if a Supplemental ITAAC Closure Letter is required
 - Augmented determination bases
 - New engineering analysis
 - Ensures completeness and accuracy of the public record
- Provides objective criteria consistent with most of the NEI examples



Supplemental ITAAC Closure Letter Threshold

- Changes to Section 3b of NEI 08-01 Section 8
 - If licensee activities **either** alter statements **or warrants the augmentation of statements** made in the ITAAC Determination Basis **summarized** in the original ITAAC Closure Letter, licensees should submit a Supplemental ITAAC Closure Letter.
 - **Consequently, supporting engineering analyses (e.g., engineering equivalency evaluations) are needed to justify the following situations:**



Draft Threshold Concept 1

“Post-work ITA different from the ITA that is specified in the ITAAC has been performed and analyzed to demonstrate that the AC remains met.”

- NEI Example 5: “SLC Pump Maintenance” (Supplemental Not Required)
- Ex. 5 Modified: “Replace Injection MOV” (Supplemental Required)



Draft Threshold Concept 2

“A design change is implemented to address a condition that invalidates the acceptability of the affected SSC which is related to a previously closed ITAAC.”

- NRC Pipe Support Ex. (Scenario 2)
(Supplemental Not Required)
- Example modified to consider ASME support damage by water hammer (Supplemental Required)



Draft Threshold Concept 3

“A need for increasing the ITAAC component population (e.g., an added pipe weld) is identified, subsequent to closure notification, which results in more SSC than was applicable to the original ITAAC Closure Letter.”

- NEI ASME Piping ITAAC Maintenance Example (Supplemental Not Required)
- Example modified to Section III controls - base metal repair requiring NDE and other follow-up (Supplemental Required)



Draft Threshold Concept 4

“The scope of additional licensee activities warrants augmentation of the statements made in the ITAAC Determination Basis. Such augmentation is considered necessary to establish an accurate and complete record in the ITAAC Closure Letter.”

- NRC MOV Example (Scenario 3.a)
(Supplemental Not Required)
- NRC MOV Example (Scenario 3.b)
(Supplemental Required)



“ITAAC Are Met”

- In accordance with 10 CFR §52.103(g), the licensee shall not operate the facility until the Commission makes a finding that acceptance criteria in the combined license are met
- Following successful licensee completion of ITAAC and notification of same per 10 CFR 52.99(c)(1) by the licensee, the NRC shall ensure that the prescribed inspections, tests, and analyses in the ITAAC are performed per 10 CFR 52.99(e)
- Per 10 CFR § 52.99(e)(1), the NRC shall publish notices in the *Federal Register* of the NRC staff's determination of the successful completion of inspections, tests, and analyses



“ITAAC Are Met” (DRAFT)

- From the time the licensee successfully completes ITAAC and notifies the NRC staff, until the Commission makes its § 52.103(g) finding, the staff must have continued confidence that the ITAAC that were met, continue to be met, and that no activity has invalidated the basis for determining that ITAAC are met
- We have identified a “threshold of confidence,” beyond which, the staff does not have sufficient confidence that the ITAAC are met
 - The threshold for determining that a Supplemental ITAAC Closure Letter is necessary is the same as the “threshold of confidence”
 - For post-ITAAC closure issues that do not rise to this threshold, the staff has continued confidence that the ITAAC are met as the licensee is addressing these issues in accordance with their established programs

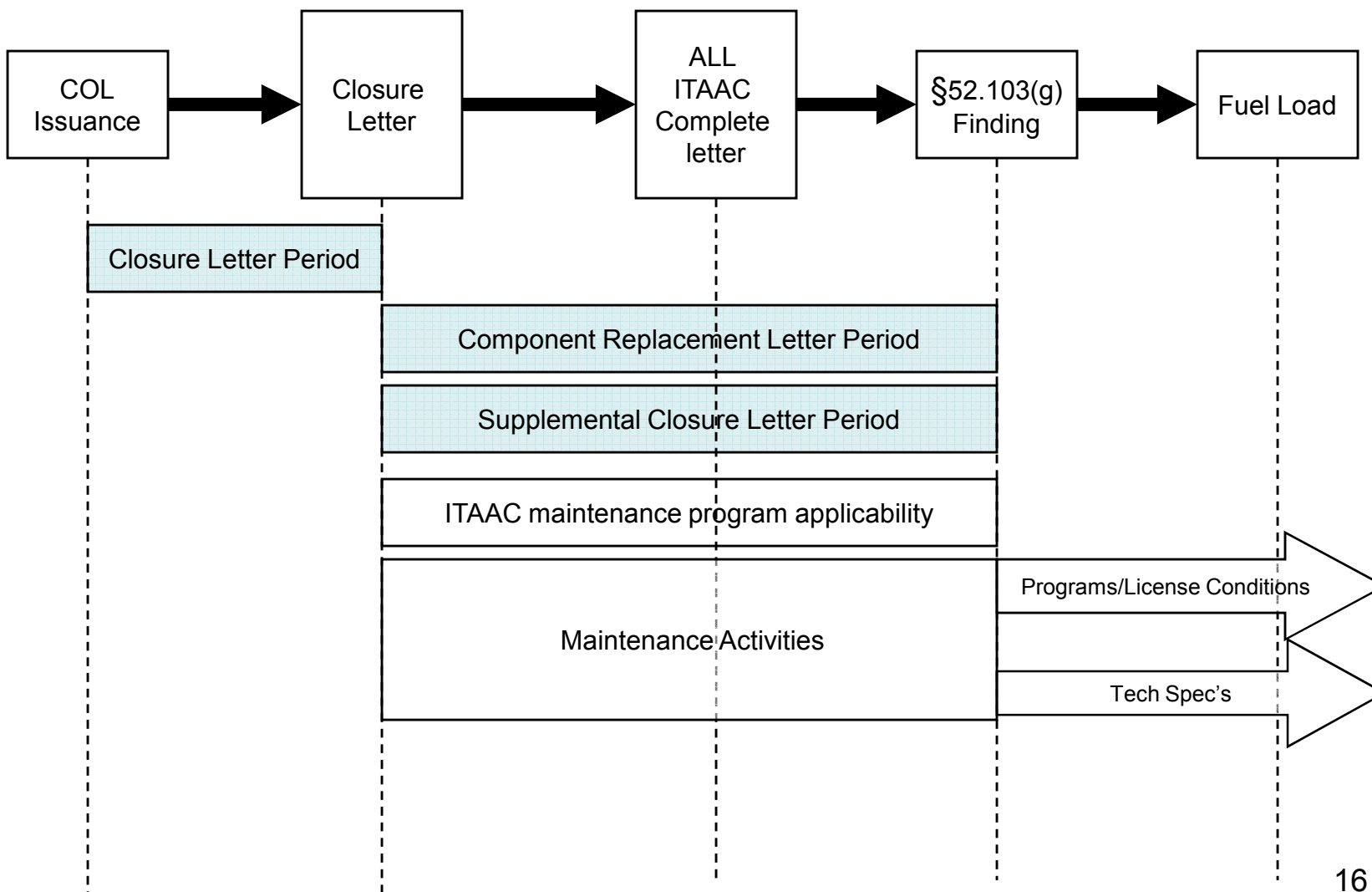


Continued Confidence in ITAAC (Draft)

- The §52.103(g) finding can be made, even if maintenance activities are not completed, if no Supplemental ITAAC Closure Letter is necessary
 - The established programs must be of sufficient quality to give the NRC confidence that the AC are met
- All conditions requiring a Supplemental ITAAC Closure Letter must be resolved prior to the §52.103(g) finding



Draft Timeline





ITAAC Maintenance Reporting

- Component Replacement Letter
 - Like-for-Like components
 - Req'd at 1 yr prior to fuel load, then 30-day intervals
- Supplemental ITAAC Closure Letter
 - Needs to identify and define what information is different from the original ITAAC closure letter
 - Explain the bases for how the acceptance criteria are restored, including engineering analysis results
 - Notification to Resident Inspector after discovery
 - Req'd as repairs and PWT is completed
 - Same level of detail as original ITAAC closure letter



Notification to Resident Inspectors of ITAAC Work

- Work planned on SSCs for which ITAAC have been closed
- Supplemental ITAAC Closure Letter being prepared
- Supplemental ITAAC Letter Issued
- ITAAC Component Replacement Summary Letters



Conclusion

- Proper notification and threshold consistency adds the confidence needed to make the §52.103(g) finding that ITAAC “are met”
- Questions or Comments?
- Next Steps



List of Acronyms

- AC Acceptance Criteria
- ASME American Society of Mechanical Engineers
- CFR Code of Federal Regulations
- COL Combined License
- CTSB Construction Technical Specifications Branch
- DCIP Division of Construction Inspection & Operational Programs



List of Acronyms Cont.

- ITA Inspection, Tests, Analysis
- ITAAC Inspection, Tests, Analysis, and
Acceptance Criteria
- MOV Motor Operated Valve
- NDE Non-Destructive Examination
- NEI Nuclear Energy Institute
- NRC Nuclear Regulatory Commission



List of Acronyms Cont.

- NRO Office of New Reactors
- PI&R Problem Identification and Resolution
- PWT Post-Work Testing
- SLC Standby Liquid Control
- SSC Structures, Systems, and Components