



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001**

December 8, 2011

The Honorable Gregory B. Jaczko
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: PROPOSED REQUIREMENTS FOR ITAAC MAINTENANCE AND DRAFT FINAL REGULATORY GUIDE 1.215, "GUIDANCE FOR ITAAC CLOSURE UNDER 10 CFR PART 52"

Dear Chairman Jaczko:

During the 589th meeting of the Advisory Committee on Reactor Safeguards, December 1-3, 2011, we reviewed the proposed requirements for maintenance of inspections, tests, analyses, and acceptance criteria (ITAAC) and draft final Revision 1 of Regulatory Guide (RG) 1.215, "Guidance for ITAAC Closure Under 10 CFR Part 52." During this meeting we had the benefit of discussions with representatives of the NRC staff. We also had the benefit of the documents referenced.

CONCLUSION AND RECOMMENDATIONS

1. The proposed ITAAC rule, "Requirements for Maintenance of Inspections, Tests, Analyses, and Acceptance Criteria," meets the goal of ensuring maintenance of ITAAC validity and should be approved.
2. The approach in RG 1.215, Revision 1, for closing and maintaining ITAAC should be revised to include an assessment that ensures a change does not introduce unintended consequences. The assessment should also include an evaluation that confirms the original inspections, tests, and analyses and their acceptance criteria are still valid and assures the functionality originally intended.
3. After revision, RG 1.215, Revision 1, should be issued.

BACKGROUND

ITAAC are the proposed inspections, tests, analyses, and acceptance criteria that are necessary and sufficient to provide reasonable assurance that, if the inspections, tests, and analyses are performed and the acceptance criteria are met, a facility is in conformance with the design certification. ITAAC are discussed in 10 CFR 52.47(b)(1), with the closure requirements specified in 10 CFR 52.99, "Inspection During Construction."

In 2007, 10 CFR 52.99 was amended to require that licensees notify the NRC that the prescribed inspections, tests, and analyses in the ITAAC have been completed and that the acceptance criteria have been met. After completing the 2007 rulemaking, the staff began developing guidance on the ITAAC closure process. RG 1.215 was originally issued in 2009 and endorsed the guidance developed by the Nuclear Energy Institute (NEI) in NEI 08-01.

The staff soon determined that additional requirements were needed to ensure that the validity of ITAAC are maintained during the potentially long interval between ITAAC closure and fuel load. In SECY-09-0119, the staff informed the Commission of its progress in resolving issues concerning ITAAC maintenance and reporting, including development of criteria for the threshold for notification of events that may result in the acceptance criteria of successfully completed ITAAC no longer being satisfied. That paper described new types of notifications that licensees should make to the NRC to address instances when licensee activities affect previously completed ITAAC. The staff proposed that the Commission supplement 10 CFR Part 52 to include additional notification requirements to address ITAAC maintenance. The staff reiterated its plans to propose rulemaking on ITAAC maintenance in a Commission meeting on September 22, 2009.

In parallel with the discussions on the draft proposed rule, NEI revised its ITAAC closure guidance to address the topic of ITAAC maintenance. The staff issued a proposed revision to RG 1.215 (DG-1250) for public comment (76 FR 27924) on May 13, 2011.

DISCUSSION

The proposed rule includes new provisions that apply after a licensee has completed an ITAAC closure notification. These provisions require that licensees (1) report new information that materially alters the basis under which ITAACs were performed and acceptance criteria were met and (2) notify NRC of completion of all ITAAC activities, before NRC issues its finding on ITAAC before fuel load. This rule refers to the time after notification of ITAAC completion until the date the Commission makes its finding under 10 CFR 52.103(g) as the 'ITAAC maintenance period.'

The criteria for determining if changes materially alter the basis under which ITAACs were performed and acceptance criteria were met are provided in RG 1.215, Revision 1. This approach allows flexibility to adjust the guidance based on lessons learned during early implementation of the ITAAC process under the first combined licenses. The maintenance of completed ITAAC include the use of licensee programs such as the Quality Assurance (QA) Program, Problem Identification and Resolution Program, Maintenance/Construction Program, and Design and Configuration Control Program. Guidance has been developed for the attributes that must be included in these programs in order to use them for ITAAC maintenance. Programs relied on for maintaining the validity of the ITAAC must be fully implemented and effective before taking credit for them.

If the NRC finds that any acceptance criteria in the ITAAC are not met, licensees may either (1) take corrective actions to successfully complete the ITAAC or (2) request an exemption from the standard design certification ITAAC, which requires an application for a license amendment under 10 CFR 52.98(f).

Appendix B to RG 1.215 provides the ITAAC maintenance thresholds that require submission of an ITAAC post-closure notification that new information materially alters the basis under which ITAACs were performed and acceptance criteria were met. RG 1.215, Revision 1, endorses NEI 08-01, Revision 4, which provides more detailed guidance and examples of applications of the threshold criteria.

There may be a gap in the process for the assessment of the impact of changes that may affect the ITAAC. Therefore, the approach in RG 1.215, Revision 1, for closing and maintaining ITTAC should be revised. Licensee's Design and Configuration Control Programs should include a 50.59-like assessment to ensure that a change does not introduce unintended consequences. The assessment should also include an evaluation that confirms the original inspections, tests, and analyses and their acceptance criteria are still valid and assures the functionality originally intended. If not, then a license amendment would be necessary, as currently stated in the guidance.

The proposed rule and revised guidance are consistent with the stated goals and address our previous recommendations.

Sincerely,

/RA/

Said Abdel-Khalik
Chairman

REFERENCES

1. FRN: Final Rule: Rulemaking to Amend 10 CFR Part 52: Requirements for Maintenance of Inspections, Tests, Analysis and Acceptance Criteria (RIN 3150-A177) (ML113390318)
2. Regulatory Guide 1.215, "Guidance for Closure Under 10 CFR Part 52," October 2009 (ML091480076).
3. Draft Final Regulatory Guide 1.215 Rev. 1, "Guidance for Closure Under 10 CFR Part 52," November 2011(ML112580018).
4. SECY-09-0119, "Staff Progress in Resolving Issues Associated with Inspections, Tests, Analyses, and Acceptance Criteria," August 26, 2009.
5. NEI written comments on the staff's plans to amend 10 CFR 52.99, letter dated April 29, 2010 (ML101300103).
6. NEI 08-01,"Industry Guideline for the ITTAC Closure Process Under 10 CFR Part 52," Rev. 2, July 16, 2010 (submittal with attachments) (ML102010076).
7. ACRS Report, "Draft Final Regulatory Guide 1.215, 'Guidance for ITTAC Closure Under 10 CFR Part 52'," July 24, 2009 (ML091960129).
8. Atomic Energy Act (AEA) of 1954 Section 189.a(1)(B) "Hearings and Judicial Row"

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