



NUCLEAR ENERGY INSTITUTE

Adrian P. Heymer
DIRECTOR, NEW PLANT DEPLOYMENT
NUCLEAR GENERATION DIVISION

July 18, 2005

Stuart A. Richards
Chief, Inspection Programs Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Mr. Richards:

The industry compliments the NRC staff on taking the initiative in conducting an excellent workshop on the Construction Inspection Program (CIP) for new plants on May 4, 2005. The workshop gave the public a valuable opportunity to provide input into the development of NRC inspection guidance related to Part 52 ITAAC verification. The small, break-out group format was particularly valuable because it allowed all participants to be more actively involved in the discussions.

The workshop generated several follow-up questions related to NRC ITAAC verification for consideration by the Office of General Council and others. The enclosure provides the industry input to the NRC on these questions. The answers to these questions are of great importance to the eventual successful implementation of ITAAC verification. We believe there would be benefit in discussing these important questions with OGC, Inspection Branch and New Reactors staff in the near future so that we can attain a common understanding on these matters. This will aid the industry and NRC staff understanding of the COL and ITAAC implementation process and will be useful input into the development of the industry's COL implementation guideline, which will be drafted in 2006.

The workshop discussions on categorizing inspection findings related to ITAAC yielded important conclusions that provide a foundation for the further development of CIP guidance. These include:

- 1. Focus of licensee and NRC ITAAC determinations**

Determinations by the licensee and the NRC that an ITAAC has been

successfully completed should be based solely on satisfaction of the acceptance criteria specified in the Tier 1 ITAAC, and not on conformance with Tier 2 and underlying QA requirements. As discussed in the workshop, this does not mean that QA/QC problems cannot affect an ITAAC conclusion. For example, while proper test equipment calibration is not specified as part of any ITAAC, the industry and NRC staff agree that miscalibrated test equipment could affect an ITAAC determination if the miscalibration exceeds the margin by which an acceptance criterion was met.

There was general recognition by the industry and NRC staff that conformance with Tier 2 and underlying QA requirements would be assured by normal NRC inspections, including the sign-as-you-go inspections envisioned in NUREG 1789.

2. Objective of NRC ITAAC verification –

There should be no “shades of gray” regarding the completion status of a particular ITAAC. Nevertheless, some workshop examples could not be “binned” definitively as “ITAAC not met” or “ITAAC met.” We consider that such results were an indication that, in these instances, additional information was needed to determine whether the ITAAC was met or not. We expect that NRC inspectors will obtain the additional information necessary to reach a conclusion on whether or not ITAAC have been successfully completed.

3. Post-ITAAC maintenance of SSCs

After a licensee sends an ITAAC completion letter to the NRC, the condition of SSCs associated with that ITAAC will be maintained by the licensee’s QA, maintenance, and configuration control processes. Routine maintenance, corrective actions, and plant modifications are part of the normal life-cycle of plant activities and operations after ITAAC are met, and do not alter the completed status of ITAAC. Maintenance, corrective action, and plant modification processes will be the subject of other NRC inspections.

4. Role of the licensee’s Corrective Actions Program (CAP)

There was agreement that construction and QA deficiencies would be effectively addressed by the licensee’s CAP, with no impact on ITAAC. For example, loose or missing bolts or similar QA/QC deficiencies identified as part of NRC ITAAC verification would not affect NRC ITAAC determinations because such deficiencies are typically not material to the determination that ITAAC acceptance criteria are met. It is expected that NRC inspectors would confirm that such deficiencies are being addressed in the CAP.

Similarly, there was substantial agreement that situations involving post-

Stuart A. Richards

July 13, 2005

Page 3 of 3

ITAAC damage to SSCs would not affect a prior ITAAC determination by the NRC because these situations would be resolved through the CAP, assuming the equipment is returned to its original condition.

There was substantial agreement that ITAAC determinations might be adversely affected – invalidated – only when it is determined that an ITAAC conclusion was based on incorrect information.

If you have any questions regarding the conclusions drawn from the CIP workshop identified above, or the views presented in the enclosure, please contact Russ Bell (202-739-8087 or rjb@nei.org) or me.

Sincerely,



Adrian P. Heymer

Enclosure

c: Dr. William D. Beckner, NRC
Mary Ann Ashley, NRC
NRC Document Control Desk

Enclosure
Industry Input on Follow-up Questions from May 4, 2005 CIP Workshop

1. Section 52.103(g) states that prior to operation that “the Commission shall find that the acceptance criteria in the COL are met.” Recognizing that ITAAC are completed over a long period of time, and that SSCs may be maintained, repaired or modified after ITAAC are completed, does the plant need to be in conformance with all ITAAC at the time of the Commission's § 52.103(g) finding? For example, if a pump that had previously met its ITAAC is out of service when the time comes for the § 52.103(g) finding, are the acceptance criteria for ITAAC involving this pump still considered met for purposes of § 52.103(g), or not?

Response: There are numerous post-ITAAC completion situations, such as:

- a. Normal maintenance – Licensee maintenance and QA processes assure that SSCs are restored to pre-service condition; no change in design, operation or function
- b. Repair/replace – Licensee corrective action and QA processes assure that SSCs are restored to pre-service condition; no change in design, operation or function
- c. Minor change – Licensee design control, configuration and QA processes assure that SSCs continue to satisfy Tier 1 and ITAAC
- d. Major change – A change in design or operation such that SSCs no longer satisfy one or more ITAAC

After an ITAAC is completed, SSCs may be taken out of service for normal or corrective maintenance, or to implement design changes in accordance with established licensee procedures and processes. These procedures and processes will assure the existing ITAAC continue to be valid, or may require new or modified ITAAC to be established, as necessary, in connection with a major change to the Tier 1 design.

If an ITAAC-covered SSC is undergoing a major change such that upon return to service, one or more ITAAC would no longer be applicable (e.g., a Tier 1 design requirement was modified). In such cases, the licensee would have submitted the Tier 1 change and any necessary ITAAC for NRC review and approval prior to implementing the change. The Commission would make the required § 52.103(g) finding after these new ITAAC and all other ITAAC have been verified to be successfully completed.

As discussed in NUREG-1789, before a facility may operate, the Commission is required by § 52.103(g) to find that the acceptance criteria in the COL were met.

Once the licensee has informed the staff that all the ITAAC have been completed, the staff will perform a review to ensure that an ITAAC determination letter has been received for each ITAAC, a notice of NRC acceptance has been published in the *Federal Register* for each ITAAC, and the staff has agreed that all the ITAAC have been met. The NRC Regional Administrator will rely on the inspection and ITAAC determination results when informing the Director of Nuclear Reactor Regulation (NRR) that all the ITAAC have been met. The Director of NRR will make a recommendation to the Commission that all acceptance criteria in the COL have been met.

Out-of-service conditions may occur at any time before, during, and after fuel load.¹ Due to the fluid nature of activities to prepare the plant for operation, it is very likely that one or more SSCs covered by ITAAC will be out-of-service in the week, day, and hour that the Commission makes its required finding that all ITAAC have been met. ITAAC are completed at a point in time; licensee QA, configuration, corrective action and maintenance processes are relied upon to maintain SSCs after that point. The state of being out-of-service does not cause SSCs to be in non-conformance with ITAAC. Therefore, provided that the maintenance or modification work package calls for out-of-service SSCs to be restored to their pre-service, ITAAC compliant condition, it is expected that the Commission would make the required § 52.103(g) finding. The licensee would then be authorized to load fuel and operate the plant in accordance with the technical specifications and other conditions of the license.

2. If the ITAAC does not accurately confirm the design commitment, i.e., if there is a mismatch between the ITAAC and the design commitment, what actions should be taken to establish and satisfy an alternative ITAAC that is appropriate to the design commitment? For example, what if the capacity of a fuel storage tank meets the 55,000 gallon acceptance criterion specified in the ITAAC, but the actual measured capacity is not sufficient to satisfy the design commitment to provide seven days of fuel?

Response: The licensee may request a license amendment under 10 CFR 50.90 to make a plant-specific correction to the ITAAC. Alternatively, if the problem is generic, the design certification rule could be modified under 10 CFR 52.63(a)(1). Such changes would be applied to plants referencing the design certification in accordance with 10 CFR 52.63(a)(2).

3. If the licensee's ITAAC completion letter does not include the documentation on which the ITAAC conclusion was based, can a member of the public request the ITAAC determination bases under the Freedom of Information Act (FOIA)?

Response: No. FOIA can only be used to obtain copies of documents in the

¹ During and after fuel load, out-of-service conditions are limited by technical specifications.

actual possession of NRC. Therefore, unless a document is provided to the NRC or is otherwise in NRC's possession (e.g., on their computers), FOIA would not apply. Moreover, FOIA is only applicable to the Federal government, including the NRC. A member of the public cannot submit a FOIA request to an applicant or licensee.

4. Can the NRC base an ITAAC determination on all or part of a licensee document that is not on the docket, e.g., ASME Code reports?

Response: Yes. The NRC can base its ITAAC determination on any relevant information gathered during the course of its inspection, including its inspections and analyses and its review of licensee internal documentation.

5. Section 52.99 notices will reflect NRC staff concurrence that an ITAAC has been successfully completed. If subsequent information causes the staff to reconsider a previous ITAAC determination, does this invalidate the ITAAC, such that it must be repeated (including another licensee letter, NRC verification and § 52.99 notice)? Related question: Under what circumstances should the NRC be notified of subsequent information/events that affect a previously completed ITAAC?

Response: There was substantial agreement at the May 4 workshop, that the only subsequent information that could “invalidate the ITAAC” would be discovery that the information on which an ITAAC conclusion is based was in error. In this case, the flawed ITAAC determination bases mean that the plant was never in conformance with the ITAAC, and the licensee would need to properly execute and document that ITAAC.

The NRC should be notified if, after sending an ITAAC completion letter to the NRC, ITAAC determination bases are determined to be incorrect. This notification would identify the affected ITAAC and the steps being taken to satisfactorily complete it.

As discussed in response to Question 1, some situations would not lead to invalidation of a completed ITAAC. In particular, discovery that a pump covered by a completed ITAAC is out-of-service at the time of the 52.103(g) finding would not invalidate the ITAAC because the completed status of the ITAAC is not affected by an SSC being out-of-service for maintenance, corrective action, or modification. In these situations, the Commission would continue with the 52.103(g) finding proceeding. The licensee would then be authorized to load fuel and operate the plant subject to technical specification operability requirements and other conditions of the license.

Similarly, discovery that the pump was damaged, repaired, and returned to service following ITAAC completion (before or after the required *Federal Register* notice) does not mean that the ITAAC for the pump needs to be repeated. This is because after ITAAC completion, the licensee's normal QA, configuration, and maintenance processes will maintain the pump as appropriate, restoring it to its previous condition such that the previous ITAAC conclusion remains valid.

Special notification of NRC is not necessary when SSCs covered by completed ITAAC are removed from service in the course of plant maintenance, modification, or pre-operational activities.

6. Which Part 2 processes will be used for the ITAAC hearing opportunity, i.e., which subpart of Part 2?

Response: We expect that the process for a 52.103 hearing opportunity will most likely be a Subpart L hearing.

Note that the Administrative Procedures Act states that no hearing is required for issues that pertain to simple implementation of objective criteria. Therefore, for example, if the ITAAC states that the reactor vessel must be 24 feet long, and appropriate documentation exists that shows the as-fabricated vessel is, indeed, 24 feet long, there should be no opportunity for a hearing on this ITAAC since this ITAAC leaves no room for judgment.