



ITAAC Maintenance

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Agenda

- ITAAC team update
- ITAAC maintenance examples discussion
- Next steps

ITAAC Team Update

- RG 1.215 published final Oct. 20, 2009
- Commission meeting SRM-M090922
- SECY-09-0119
- NEI 08-01 and RG 1.215 revision schedule
- Propose a Category 2 meeting focused on ITAAC maintenance and examples

Draft Threshold 1

- Post work verification (PWV)
 - An engineering justification is needed to demonstrate that the PWV is appropriate

Threshold 1 Examples

Post Work Verification

- 1) ABWR ITAAC 2.2.4 3c - replace SLC pump piston (PDP): Same as replacing the SLC pump, and a test loop is used instead of the original test lineup.

No Supplemental Closure Letter is required.

- 2) ABWR ITAAC 2.2.4 3h - replace a SLC pump: Addition analysis is required to validate NPSH thru test loop, as the SLC tank is not in the test loop.

Supplemental Closure Letter is required.

- 3) Physical Security ITAAC #5 [10 CFR 73.55(i)(6)(ii)] - Licensee screening of activities for impact on ITAAC: General replacement of individual Light Unit and Light Bulbs due to fair wear and tear.

No Supplemental Closure Letter is required.

Draft Threshold 2

- Engineering changes
 - An engineering change has been implemented to correct a design flaw that causes the acceptance criteria not to be met

Threshold 2 Examples Engineering changes

- 1) AP1000 ITAAC 2.1.2.2b - replacement of snubbers/spring cans:
Thermal expansion during Hot Functional Testing identified need for different supports, and identified a potential design flaw.
Supplemental Closure Letter is required.

- 2) AP1000 ITAAC 2.3.6.9bii - replace pump impeller in the normal residual heat removal system (RNS) due to high vibration, and the new impeller is a different material: Pump can be tested for performance, and replacement not due to a design flaw.
No Supplemental Closure Letter is required.

Draft Threshold 3

- Population of SSCs and subcomponents
 - The number of SSCs or subcomponents related to a closed ITAAC has changed

Threshold 3 Examples Population of SSCs

- 1) AP1000 ITAAC 2.1.2.7aii - repair Environmental-Qualified cable by splicing: Added cable splice is new SSC requiring qualification [EQ]
Supplemental Closure Letter is required.

- replace EQ cable with new one: New cable is already qualified as replacement for damaged one
No Supplemental Closure Letter is required.

- 2) AP1000 ITAAC 2.1.2.3b - damage to pipe requires new pipe & pipe welds: Repair welds are new welds requiring new NDE; Some welds have been deleted, but some welds have also been added to the pressure boundary weld population.
Supplemental Closure Letter is required.

Threshold 3 Examples Population of SSCs

- 3) ESBWR ITAAC 2.3-1 Item 5.1 - due to restructuring, the TSC and OSC have been consolidated. The 2 phone lines that were originally documented in the closure letter have been replaced by a single line.
Supplemental Closure Letter is required.

- 4) ABWR ITAAC 2.3.3 Item 3 - during a raceway reroute, a configuration change forces what was an electrical separation to become an electrical isolation; If an isolation device is installed such as a relay, breaker, or optical isolator, there's an associated component change to the ITAAC.
Supplemental Closure Letter is required.

Draft Threshold 4

- Complete and valid representation of the ITAAC
 - The ITAAC determination basis needs to be updated to be complete and accurate

Threshold 4 Examples

ITAAC Complete Representation

- 1) Plant X, Part 10 COLA ITAAC, Emergency Planning ITAAC, Table 3.8-1, Item 8.1 – failure to perform maintenance on alert and notification system (ANS). The original FEMA design report had incorporated the licensee’s requirement to perform this maintenance. However siren system maintenance can be resumed; system can be verified by licensee.

No Supplemental Closure Letter is required

- 2) Plant Y, Part 10 COLA ITAAC, Emergency Planning ITAAC, Table 3.8-1, Item 5.1 – licensee changed source for back-up power to TSC. Source of power is not a regulatory issue, only that a back-up source of power for the TSC is available.

No Supplemental Closure Letter is required

Threshold 4 Examples

Complete ITAAC Representation

- 3) AP1000 ITAAC 2.5.2.8 Item10 - a change in the methodology chosen by the licensee for determining setpoints has occurred, but both are acceptable approaches by the NRC: ITA calls for description of the methodology.

Supplemental Closure Letter is required.

- 4) AP1000 ITAAC 3.3.6.7d - certain raceways and conduit needed to be rerouted, challenging the physical separation requirements for Class 1E wiring: If the rerouting causes different Non-Class 1E wiring that is not separated from Class 1E by the minimum separation distance (or by a barrier or analyzed as Class 1E requirements from the original closure letter)

Supplemental Closure Letter is required.

Threshold 4 Examples

Complete ITAAC Representation

- 5) PS-ITAAC #5 - Scope of additional licensee activities warrant augmentation of the statements made in the ITAAC determination basis: Repositions of established Light Poles and Lighting Units due to the installation of a new access road require re-analyzing lighting coverage.

Supplemental Closure Letter is required.

Next Steps

- Industry examples on ITAAC maintenance to confirm thresholds
- Update to NEI 08-01 and RG 1.215 to reflect ITAAC maintenance
- Category 2 meeting to focus on ITAAC maintenance examples