

ITAAC “Technical Bases”

Staff Feedback

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ITAAC 2.3.06.11a

Statement

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
11.a) Controls exist in the MCR to cause those remotely operated valves identified in Table 2.3.6-1 to perform active functions.	Stroke testing will be performed on the remotely operated valves identified in Table 2.3.6-1 using the controls in the MCR.	Controls in the MCR operate to cause those remotely operated valves identified in Table 2.3.6-1 to perform active functions.

ITAAC 2.3.06.11a

Industry Interpretation

Item for Interpretation	AP1000 Interpretation
There are multiple controls in the MCR capable of operating these valves: • Which control (or controls) are used to operate the valves?	The Plant Control System (PLS) is the system normally used for operating these valves remotely, and the test should be done from one PLS operator work station. The valves are also subject to Plant Safety and Monitoring System (PMS) control, and that logic is tested separately under ITAAC 11b.

ITAAC 2.3.06.11a

Staff Feedback

- The licensee is expected to test each control in the MCR for every remotely operated valve to demonstrate its capability to perform the applicable active functions through plant preoperational procedures.
- The interpretation to only test the valve controls from one PLS operator work station is not sufficient.

ITAAC 2.2.05.10

Statement

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
10. After loss of motive power, the remotely operated valves identified in Table 2.2.5-1 assume the indicated loss of motive power position.	Testing of the remotely operated valves will be performed under the conditions of loss of motive power.	After loss of motive power, each remotely operated valve identified in Table 2.2.5-1 assumes the indicated loss of motive power position.

ITAAC 2.2.05.10

Licensee Interpretation

Item for Interpretation	AP1000 Interpretation
'Motive power' for air operated valves is compressed air. A loss of compressed air by isolation from CAS does not immediately result in a valve change of state. However, loss of power to the associated 3-way solenoid valve results in isolation of CAS to the valve and venting of the valve actuator.	For air operated valves, testing will include both removing the air supply and venting the diaphragm (if necessary) to fully remove the motive power, and then observe the valve position.

ITAAC 2.2.05.10

Staff Feedback

- The licensee is expected to test each remotely operated valve to demonstrate its capability to assume the indicated loss of motive power position through plant preoperational procedures.
- Interpretation to remove air supply and to vent diaphragm is acceptable in testing the loss of motive power for air-operated valves.

ITAC 3.3.00.02a.ii.d

Statement

Design Commitment	Inspections, Tests, Analyses	Acceptance Criteria
2.a) The nuclear island structures, including the critical sections listed in Table 3.3-7, are seismic Category I and are designed and constructed to withstand design basis loads as specified in the Design Description, without loss of structural integrity and the safety-related functions.	ii) An inspection of the as-built concrete thickness will be performed.	ii.d) A report exists that concludes that the as-built concrete thicknesses of the radiologically controlled area of the auxiliary building sections conform to the building sections defined in Table 3.3-1.

ITAAC 3.3.00.02a.ii.d

Licensee Interpretation

Item for Interpretation	AP1000 Interpretation
No objective standard is provided for how frequently to measure each building section. One measurement per section may or may not be sufficient, and infinite measurement of the entire surface is not practical.	An AP1000 Engineering Guideline, (initially based on ACI 117-2010 and augmented for the specifics of AP1000 design) provides minimum measurement frequencies based on section construction type. These measurement points are sufficient to determine the overall thickness of each building section.

ITAAC 3.3.00.02a.ii.d

Staff Feedback

- Staff could not verify any guidance in ACI 117-90 or ACI 117-2010 related to measurement frequencies
- Staff is not aware of the AP1000 Engineering Guideline

ITAAC 3.3.00.02a.ii.d

Licensee Interpretation

Item for Interpretation	AP1000 Interpretation
Table 3.3-1 Note 2: “These wall (and floor) thicknesses have a construction tolerance of ± 1 inch, except for exterior walls below grade where the tolerance is +12 inches, - 1 inch.	The Nuclear Island Basemat is neither a wall nor a floor per ACI-349. Therefore the tolerance in Note 2 does not apply. Since no stated tolerance exists in the ITAAC statement, the Basemat ITAAC tolerance is as-stated on the detailed design drawings, consistent with other portions of the Licensing Basis (i.e. design of critical sections).

ITAAC 3.3.00.02a.ii.d

Staff Feedback

- The Nuclear Island Basemat is neither a wall nor a floor. Therefore, the tolerance in Table 3.3-1, Note 2 does not apply
- The Basemat ITAAC tolerance is as-stated in Tier 2* information, consistent with other portions of the Licensing Basis
- LAR-12-008 will clarify the interpretation and will allow the licensee to update the site specific DCD