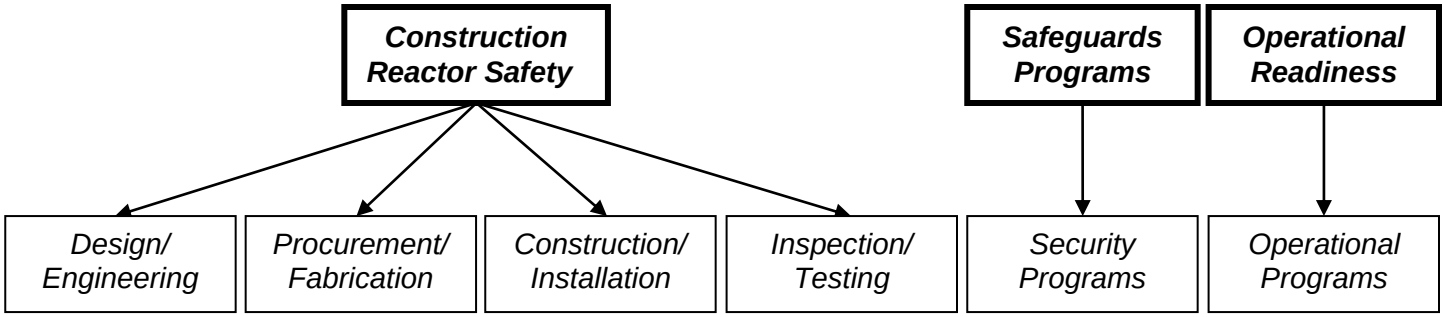
Summer Unit 2
3Q/2015 Performance Summary

Construction Action Matrix Column:

Licensee Response



Most Significant Inspection Findings

3Q/2015	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
2Q/2015	G	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter
1Q/2015	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
4Q/2014	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter

Additional Inspection and Assessment Information

- **List of Construction Inspection Reports**
- **List of Construction Assessment Reports/Inspection Plans**

Design Engineering

Identified By: NRC
Identification Date: 06/10/2015
Significance: Green
Item Type: Construction Finding

Failure to verify a design change did not adversely impact the containment vessel

Green: The NRC identified a construction finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion III, “Design Control” for inadvertently damaging the Unit 2 containment vessel bottom head (CVBH) as a result of the failure by SCE&G, through their contractors CB&I Power and Westinghouse Electric Company (WEC), to adequately verify a design change that was implemented for post-installing safety-related rebar and coring into concrete. No immediate corrective actions were necessary to alleviate immediate safety or security concerns. Subsequent corrective actions to repair the CVBH have been completed. The licensee entered this issue into their corrective action program as CR-NND-15-00539.

The finding was associated with the Design/Engineering cornerstone. The inspectors determined the performance deficiency was more than minor because it represented an adverse condition that rendered the quality of an SSC unacceptable or indeterminate, and required substantive corrective action. The inspectors evaluated the finding using the construction SDP in accordance with IMC 2519, "Construction Significance Determination Process," Appendix A, "AP 1000 Construction Significance Determination Process" and determined that the finding was of very low safety significance (Green) because it was associated with a portion of a structure assigned to the intermediate risk importance column and Row 1 of the construction significance determination matrix. The inspectors screened the finding for a possible construction cross-cutting aspect in accordance with Appendix F, “Construction Cross-Cutting Areas and Aspects” of IMC 0613. This finding has a cross-cutting aspect in the area of Human Performance, Work Management aspect, because the licensee failed to adequately identify and manage risk commensurate to the work and did not adequately coordinate different groups or job activities. [H.5].

Identified By: NRC
Identification Date: 03/31/2015
Significance: Green
Item Type: ITAAC Finding

Failure to include a design input into a design analysis document for the Unit 2 Auxiliary Building Internal Structures

The inspectors identified an ITAAC finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion III, “Design Control” for South Carolina Electric and Gas’ (SCE&G) failure, through their contractor Westinghouse, to include a design input into a design analysis document. The licensee entered this issue into their corrective action program as CR-NND-15-00496.

The finding was associated with the Design/Engineering cornerstone. The inspectors determined the performance deficiency was more than minor because it represented a non-conservative error in a calculation that defines the technical requirements for the Unit 2 wall on column line 2 located in the radiologically controlled area of the Auxiliary Building. The inspectors evaluated the finding using the construction significance determination process and determined the finding was of very low safety significance (Green) because the licensee demonstrated, with reasonable assurance by design analysis, that the wall would have been able to meet its design function. The finding was determined to be an ITAAC finding because it was material to the acceptance criteria of Unit 2 ITAAC 763 (3.3.00.02a.i.d). The acceptance criteria of this ITAAC requires that a reconciliation report, concluding the “as-built” construction conforms to the approved design, is completed for the areas associated with the ITAAC. This

finding is associated with deviations from design requirements that would not have been reconciled by the licensee as required by the ITAAC. This finding has a cross-cutting aspect in the area of Human Performance, Procedure Adherence, because the licensee failed to follow procedures associated with the control of design inputs for design analysis documents [H.8].

Identified By: NRC
Identification Date: 12/31/2014
Significance: Green
Item Type: ITAAC Finding

Failure to Correctly Translate CA20 Module to Basemat Connection Requirements into Design Documents

The inspectors identified an ITAAC finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion III, "Design Control" for South Carolina Electric and Gas' (SCE&G) failure, through their contractor Westinghouse, to correctly translate design basis into specifications, drawings, procedures, and instructions. Specifically, the inspectors observed that the design did not conform to the requirements of ANSI/AISC N690-94, "American National Standard Specification for the Design, Fabrication, and Erection of Steel Safety-Related Structures for Nuclear Facilities," a Tier 2* licensing commitment for Seismic Category I structures, in that loose "shim" or "filler" plates greater than ¼ inch thickness were installed between the connection brackets and embed plates in the NI basemat. For bolted construction, ANSI/AISC N690-94 Section Q1.15.6, "Fillers" requires that when fillers thicker than ¼ inch are used in bearing connections, the filler be rigidly attached to one of the connecting elements to preclude inducing bending in the bolts due to the eccentricity between connecting elements. The licensee entered this issue into their corrective action program as CR-NND-14-01411.

The finding was associated with the Design/Engineering cornerstone. The inspectors determined the performance deficiency was more than minor because it represented a substantive non-conservative error in a design document that defines the technical requirements for the structural modules in the auxiliary building. The inspectors evaluated the finding using the construction significance determination process and determined the finding was of very low safety significance (Green) because the licensee was able to demonstrate with reasonable assurance that the design function of the applicable structure would not be impaired by the deficiency. The finding was determined to be an ITAAC finding because it was material to the acceptance criteria of Unit 2 ITAAC 763 (3.3.00.02a.i.d). The acceptance criteria of this ITAAC requires that a reconciliation report, concluding the "as-built" construction conforms to the approved design, is completed for the areas associated with the ITAAC. This finding is associated with deviations from design requirements that would not have been reconciled by the licensee as required by the ITAAC. The inspectors screened the finding for a possible construction cross-cutting aspect (CCA) and determined that it was not related to any of the CCA discussed in IMC 0613.

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Construction/Installation

Identified By: NRC
Identification Date: 06/30/2015
Significance: Green
Item Type: ITAAC Finding

Failure to Incorporate Grout Strength Acceptance Limits from Engineering Documents

Green. The inspectors identified an ITAAC finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XI, “Test Control” for a potential unanalyzed structural defect as a result of a failure by South Carolina Electric and Gas’ (SCE&G) through their contractor Chicago Bridge and Iron (CB&I) Power, to incorporate the appropriate grout compressive strength acceptance limits into the testing of grout used for post-installed anchors. No immediate corrective actions were necessary to address safety or security concerns. The licensee entered this issue into their corrective action program as CR-NND-15-00763.

The inspectors determined the performance deficiency was more than minor following the guidance in IMC 0613, “Power Rector Construction Inspection Reports,” Appendix E, Example 11. The inspectors evaluated the finding using the construction significance determination process and determined the finding was of very low safety significance (Green) because it was associated with a portion of a structure assigned to the intermediate risk importance and Row 2 of the construction significance determination matrix. The finding was determined to be an ITAAC finding because it was material to the acceptance criteria of Unit 2 ITAACs 760 (3.3.00.02a.i.a) and 763 (3.3.00.02a.i.d). The acceptance criteria of these ITAACs requires that a reconciliation report is completed that concludes the “as-built” construction conforms to the approved design. This finding is associated with deviations from design requirements that would not have been reconciled by the licensee as required by the ITAACs. The inspectors screened the finding for a possible construction safety focus component aspect in accordance with Appendix F, “Cross-cutting Areas and Aspects,” of IMC 0613, “Power Reactor Construction Inspection Reports.” This finding has a cross-cutting aspect in the area of Human Performance, Procedure Adherence Aspect, because the licensee failed to follow the processes, procedures, and work instructions contained in the applicable engineering documents. [H.8].

Identified By: NRC
Identification Date: 06/30/2015
Significance: Green
Item Type: Construction Finding

Failure to Perform Required QC Visual Examinations of In-Process Welding

Green. The inspectors identified a construction finding of very low safety significance (Green) and associated non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," for SCE&G's failure through their contractor CB&I Power, to accomplish safety-related, required quality control inspections. The inspections were required by CB&I QC inspection plans F-S561-007, "AWS D1.1 – Visual Weld Inspection - Carbon Steel" and F-S561-008, "AWS D1.6 - Visual Weld Inspection - Stainless Steel." The licensee entered this issue into their corrective action program as CRNND-15-00927.
The finding was associated with the Construction/Installation cornerstone. The inspectors determined the performance deficiency was more than minor following the guidance in IMC 0613, “Power Rector Construction Inspection Reports,” Appendix E, because the issue represented a substantive failure to implement an adequate quality oversight function. Specifically, routine welding inspections were not performed by the licensee's contactor for a seven month period. The inspectors utilized Appendix A of IMC 2519, “Construction Significance Determination Process,” to evaluate the finding. The inspectors determined that the finding was of very low safety significance (Green) because other pre-weld inspections including material identification, fit up, cleanliness, welder qualification, filler material, and proper post-weld non-destructive examinations including visual, magnetic particle and ultrasonic testing were completed that gave reasonable assurance the structure will meet its design function and a use-as-is determination can be made without a detailed analysis.

The inspectors screened the finding for a possible construction cross-cutting aspect in accordance with Appendix F, “Cross-Cutting Areas and Aspects” of IMC 0613. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, because the licensee failed to ensure that effective

corrective action was taken on CAR 2014-0025 "Documentation of Fit-Up and In-Process Weld Inspections". [P.3]

Identified By: NRC
Identification Date: 06/10/2015
Significance: Green
Item Type: ITAAC Finding

Failure to implement procedures for coring concrete and post installing anchors

Green: The NRC identified an Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings” for damage to safety related structural rebar as a result of failure by South Carolina Electric and Gas (SCE&G), through their contractor Chicago Bridge & Iron (CB&I) Power, to implement appropriate procedures for coring into concrete. No immediate corrective actions were necessary to alleviate immediate safety or security concerns. Subsequent corrective actions to evaluate damaged safety-related rebar have been completed. The licensee entered this issue into their corrective action program as CR-NND-15-00539.

The finding was associated with the Construction/Installation cornerstone. The inspectors determined the performance deficiency was more than minor following the guidance in IMC 0613, “Power Reactor Construction Inspection Reports,” Appendix E, Example 16. The inspectors evaluated the finding in accordance with IMC 2519, "Construction Significance Determination Process," Appendix A, "AP 1000 Construction Significance Determination Process," and determined the finding was of very low safety significance (Green) because it was associated with a portion of a structure assigned to the intermediate risk importance column, and Row 2, of the construction significance determination matrix. The finding was determined to be an ITAAC finding because it was material to the acceptance criteria of Unit 2 ITAAC 760 (3.3.00.02a.i.a). The acceptance criteria of this ITAAC requires that a reconciliation report is completed that concludes the “as-built” construction conforms to the approved design. At the time of the inspection, this finding was associated with deviations from design requirements that would not have been reconciled by the licensee as required by the ITAAC; however, as of the writing of this report, the associated deviations have been adequately reconciled. The inspectors screened the finding for a possible construction cross-cutting aspect in accordance with Appendix F, “Cross-cutting Areas and Aspects,” of IMC 0613. This finding has a cross-cutting aspect in the area of Human Performance, Avoid Complacency aspect because the licensee failed to adequately develop a process which would recognize and plan for the possibility of mistakes. [H.12].

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