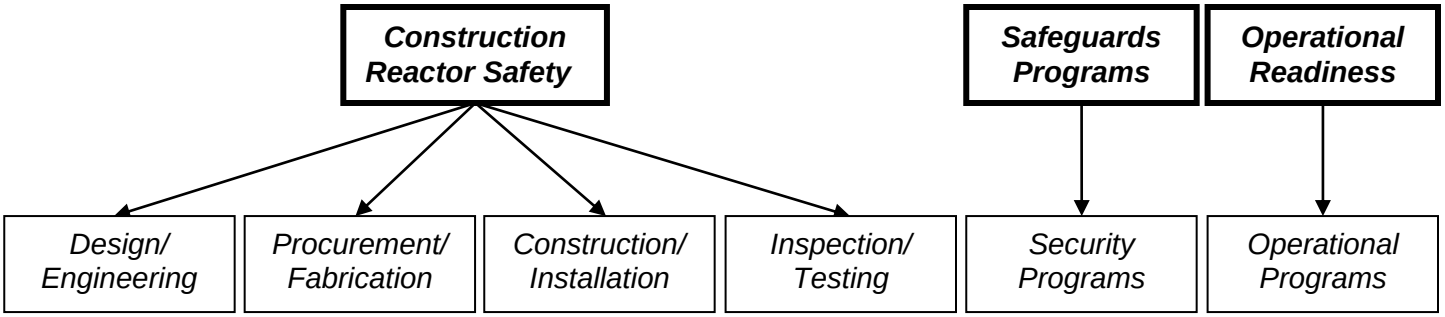
Vogtle Unit 4
3Q/2017 Performance Summary

Construction Action Matrix Column:

Licensee Response



Most Significant Inspection Findings

	Design/ Engineering	Procurement/ Fabrication	Construction/ Installation	Inspection/ Testing	Security Programs	Operational Programs
3Q/2017	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/2017	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarte
1Q/2017	No findings this quarter	No findings this quarter	No findings this quarter	G	No findings this quarter	No findings this quarter
4Q/2016	No findings this quarter	No findings this quarter	No findings this quarter	G	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
- Vogtle Unit 4 Findings Archive

Design Engineering

Identified By: NRC
Identification Date: 06/30/2017
Significance: Green
Item Type: ITAAC Finding

The NRC identified an ITAAC finding of very low safety significance (Green) and associated NCV of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, “Design Control” for the licensee’s failure through their contractor Westinghouse Electric Company (WEC) to perform thermal stress analysis in the ASME design report for the shear cap and valve body of the 14-inch fourth-stage automatic depressurization system (ADS) squib valves, RCS-PL-V004A/B/C/D. The licensee entered this finding into their corrective action program as Condition Reports (CR) 10379762 and 10389193 and WEC Corrective Action, Prevention and Learning (CAPAL) 100478099 and 100481984. The licensee performed immediate corrective actions to demonstrate with reasonable assurance through design analysis that the component would have been able to meet its design function. Additional long-term corrective actions include performance of additional analysis and revisions to the ASME design report and supporting documentation.

The inspectors determined this finding was associated with the Design/Engineering Cornerstone. The finding was determined to be more than minor because the performance deficiency represented an adverse condition that rendered the quality of component indeterminate, and required substantive corrective action. The inspectors also determined that the finding was more than minor because it represented an ITAAC finding that was material to the acceptance criteria of VEGP Unit 3 and 4 ITAAC 13 (2.1.02.02a), and if left uncorrected, the licensee may not have been able to demonstrate that the acceptance criteria of this ITAAC was met. The inspectors evaluated the finding in accordance with IMC 2519, Appendix A, “AP1000 Construction Significance Determination Process,” and determined the finding was of very low safety significance (Green) because it was associated with the RCS system which is assigned to the high risk importance column of the AP1000 Construction Significance Determination Matrix, and the licensee was able to demonstrate with reasonable assurance that the design function of the applicable structure or system would not be impaired by the deficiency. The inspectors determined the finding was indicative of present licensee performance and was associated with the cross-cutting aspect of Documentation, in the area of Human Performance, in accordance with IMC 0613, Appendix F, “Construction Cross-Cutting Areas and Aspects.” Specifically, the licensee failed to maintain complete, accurate, and up-to-date design documentation for the 14-inch ADS squib valves [H.7]. (Section 1A01)

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Procurement/Fabrication

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Construction/Installation

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Inspection/Testing

Identified By: NRC
Identification Date: 03/31/2017
Significance: Green
Item Type: ITAAC Finding

Failure to Identify Nonconforming Welds.

Green: The inspectors identified an ITAAC finding of very low safety significance (Green) and associated NCV of 10 CFR Part 50, Appendix B, Criterion XVI, “Corrective Action,” for the licensee's failure to identify nonconforming welds between seismic category I structural modules associated with the Unit 4 In-Containment Refueling Water Storage Tank steel wall (IRWST) – module CA03. Specifically, the license failed to identify that welds 880718-A12 and 880717- A09 were nonconforming to section 5.11.5 of American Welding Society (AWS) Code D1.6:1999, in that these welds contained multiple locations of weld reinforcement that exceeded 1/8 inch and did not have a gradual transition to the plane of the base metal surface. The licensee entered this finding in their corrective action program as Corrective Action, Prevention and Learning (CAPAL) 100451345, Nonconformance and Disposition Report (N&D) SV4-CA03- GNR-000049, and SV4-CA03-GNR-000050. The licensee reworked the welds and restored compliance with the approved design.

The inspectors determined the performance deficiency was more than minor because Question 3 provided in IMC 0613, Appendix E was answered “Yes.” Specifically, the inspectors considered the rework required to restore welds 880718-A12 and 880717-A09 to design requirements, to be substantive, based on the linear feet of nonconforming weld and because the rework invalidated the surface examinations that had already been performed... Using Appendix A, “AP1000 Construction Significance Determination Process,” of IMC 2519, “Construction Significance Determination Process,” the inspectors concluded this finding was of very low safety significance (Green) because the licensee demonstrated with reasonable assurance that the design function of the IRWST steel wall would not be impaired by the deficiency (Step 9 of Appendix A). This finding was cross-cutting in the area of Problem Identification and Resolution, Identification, because individuals did not identify issues completely, accurately, and in a timely manner in accordance with the corrective action program. [P.1] (Section 1A34)

Identified By: NRC
Identification Date: 12/31/2016
Significance: Green
Item Type: ITAAC Finding

The inspectors identified an ITAAC finding of very low safety significance (Green) and associated NCV of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to identify nonconforming welds between seismic category I embed plates and structural modules inside the Vogtle Unit 3 and Unit 4 containment building. The licensee entered this finding into their corrective action program as Condition Reports (CRs) 10308295, 10308213, Corrective Action, Prevention, and Learning (CAPAL) 100436977, SV3-CA01-GNR-000958, SV3-CA02-GNR-000069, and SV4-CA05-GNR-000028.

The inspectors concluded this finding was associated with the Construction Reactor Safety - Inspection/Testing Cornerstone. The finding was considered more-than-minor because the issue was not isolated, similar to example 11 from Appendix E, "Examples of Minor Construction Issues," of IMC 0613, and represented a substantive failure to implement a quality oversight function. Specifically, the inspectors identified at least 33 nonconforming welds that were accepted by at least eight different quality control (QC) inspectors. The inspectors determined the finding was of very low safety significance (Green) because the finding was associated with Row 1 of the AP1000 Construction Significance Determination Matrix and the containment internal structures basemat was associated with the Intermediate Risk of the Systems/Structures Risk Importance Table for AP1000 Construction Significance Determination Process (SDP) Matrix X-Axis. Furthermore, the licensee was able to provide reasonable assurance that the structure would have been able to meet its design function. The inspectors determined the finding represented an ITAAC finding because it was material to the acceptance criteria of Vogtle Unit 3 and Unit 4 ITAAC 760, in that, if left uncorrected, the licensee could not show that the acceptance criteria of these ITAAC were met. The acceptance criteria of Vogtle Unit 3 and Unit 4 ITAAC 760 requires that all deviations between the as-built containment internal structures and the approved design be reconciled (evaluated) such that the as-built structure would withstand the design basis loads without a loss of structural integrity or other safety-related functions. The inspectors determined that the failure of these welds to meet the American Welding Society (AWS) D1.1:2000 and AWS D1.6:1999

visual weld acceptance criteria represented a nonconformance with the approved structural design, which if left uncorrected, represented a deviation from the design that would not have been reconciled by the licensee. The inspectors screened the finding for a possible construction safety focus component (CSFC) aspect in accordance with Appendix F, "Construction Cross-Cutting Areas and Aspects," of IMC 0613, "Power Reactor Construction Inspection Reports." This finding has a cross-cutting aspect in the area of Safety Conscious Work Environment, avoid complacency, because the licensee did not assure that individuals adequately recognized and planned for the possibility of mistakes, latent issues, and inherent risk while expecting successful outcomes, in that multiple QC inspectors failed to consider that the ends of the Complete Joint Penetration (CJP) welds were within the scope of the inspection and even though the front sides of the welds were satisfactory the ends were nonconforming. [H.12]. (Section 1A32)

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