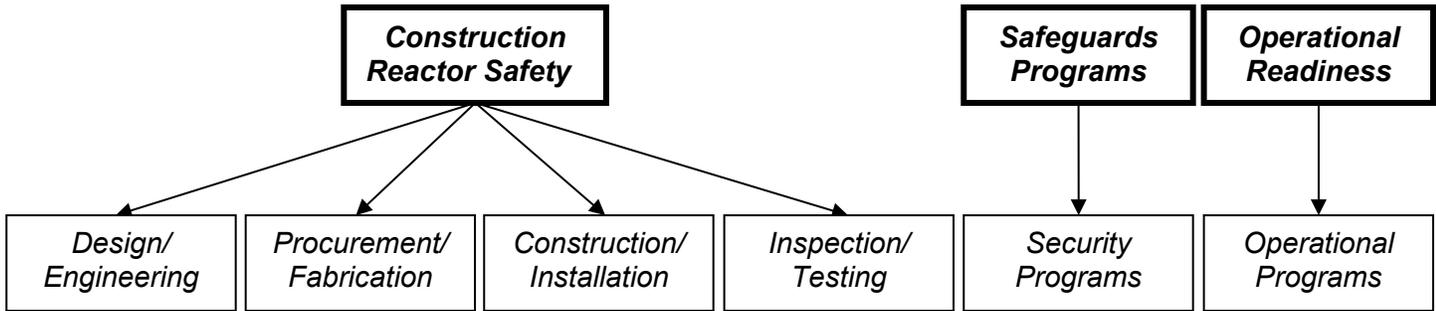


Vogtle Unit 3 1Q/2021 Performance Summary

[Construction Action Matrix Column:](#)
[Licensee Response](#)



Most Significant Inspection Findings

1Q/2021	No findings this quarter	No findings this quarter	No findings this quarter	<u>G</u>	No findings this quarter	No findings this quarter
4Q/2020	<u>G</u>	No findings this quarter	No findings this quarter	<u>G</u>	No findings this quarter	No findings this quarter
3Q/2020	No findings this quarter	No findings this quarter	<u>G</u>	<u>G</u>	No findings this quarter	No findings this quarter
2Q/2020	No findings this quarter	No findings this quarter	<u>G</u>	No findings this quarter	No findings this quarter	No findings this quarter

Additional Inspection and Assessment Information

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Design Engineering

Identified By: NRC

Identification Date: 11/04/2020

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Integrated Inspection Reports 05200025/2020004, 05200026/2020004

Item Number: 05200025/2020004-01

Note: Closed in Report (NCV)

ASME Code Section III Level C Service Limits May Not Be Met for Containment Penetrations 44 and 45

The inspectors identified a construction finding of very low safety significance with an associated NCV of Title 10 of the Code of Federal Regulations Part 50 (10 CFR 50), Appendix B, Criterion III, "Design Control" for the licensee's failure to have design control measures for the 18-inch diameter carbon steel guard pipes for containment vessel penetrations P44 and P45. Specifically, the site previously performed a structural analysis that omitted the guard pipe portion of the penetrations and did not consider how the guard pipe exclusion would infringe upon the design margin for ensuring the requirement for American Society of Mechanical Engineers (ASME) Code Section III, Level C service limits were not exceeded, in accordance with the current licensing basis. The Licensee entered this issue into its corrective action program (CAP) as condition report (CR) 50053621 and updated its structural model calculations as part of the corrective action.

The performance deficiency was of more than minor safety significance, and thus a finding, because it represented an adverse condition that rendered the quality of a structure, system, and component (SSC), unacceptable or indeterminate, and required substantive corrective action. This finding was not associated with an inspection, test, analyses, and acceptance criteria (ITAAC); it was not associated with a security program; it was not associated with an IMC 2504 operational/construction program; and it was not associated with a repetitive, NRC-identified omission of a program critical attribute. This finding was of very low safety significance because the licensee was able to demonstrate the design function of the applicable structure or system (containment vessel) would not be impaired by the deficiency by successfully reperforming a structural model calculation. The inspectors determined the finding was indicative of present licensee performance and was associated with the cross-cutting aspect "Documentation," in the area of Human Performance, in accordance with IMC 0613, Appendix F, "Construction Cross-Cutting Areas and Aspects." Specifically, the licensee did not ensure its calculations were reflective of the ASME Level C service limit requirements for the P44 and P45 penetration guard pipes. [H.7] (Section 1A08)

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Procurement/Fabrication

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Construction/Installation

Identified By: NRC

Identification Date: 07/17/2020

Significance: Green

Item Type: ITAAC Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Integrated Inspection Reports

05200025/2020003, 05200026/2020003

Item Number: 05200025/2020003-01

Note: Closed in Report (NCV)

Failure to Perform ASME Section III Leakage Examinations

The inspectors identified a construction finding of very low safety significance (Green) with an associated NCV of Title 10 of the Code of Federal Regulations (10 CFR 50), Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to perform leakage examinations of two American Society of Mechanical Engineers (ASME) Class 2, pressure-retaining, weld joints for containment penetrations P27 and P28 to satisfy the requirements of ASME Section III.

The performance deficiency was of more than minor safety significance, and thus a finding, because it represented an adverse condition that rendered the quality of a structure unacceptable or indeterminate, and required substantive corrective action. The inspectors determined this finding was not associated with an ITAAC; it was not associated with a security program; it was not associated with an IMC 2504 operational/construction program; and it was not associated with a repetitive, NRC-identified omission of a program critical attribute. The inspectors determined this finding was of very low safety significance because the licensee was able to demonstrate the design function of the applicable structure (containment vessel) would not be impaired by successfully reperforming a pneumatic test of the affected welds. The licensee entered this issue into its corrective action program as condition report (CR) 50056351. The inspectors determined the finding was indicative of present licensee performance and was associated with the cross-cutting aspect Avoid Complacency, in the area of Human Performance. Specifically, the licensee failed to ensure the contract individuals recognized and planned for the possibility of mistakes, latent problems, or inherent risk, even while expecting successful outcomes. The licensee did not ensure the contractor understood the location of the welds, ensure obstructions were not present, and ensure supporting procedures or drawings were referenced to satisfactorily perform targeted ASME Section III weld examinations during the pneumatic test. [H.12] (Section 1A07)

Identified By: NRC

Identification Date: 05/01/2020

Significance: Green

Item Type: ITAAC Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Integrated Inspection Reports

05200025/2020002, 05200026/2020002

Item Number: 05200025/2020002-01

Note: Closed in Report (NCV)

Failure to Correct Inadequate Thread Engagement for TZ Hilti Bolts

The inspectors identified a construction finding of very low safety significance with an 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 correct a condition adverse to quality related to inadequate thread engagement for TZ Hilti Bolts identified in condition report (CR) 50004237. Specifically, CR 50004237 was written to address specification SV3/SV4-SS01-Z0-011, Revision 0, which allowed post-installed anchors to be installed so that the end of the bolt was flush with the nut. In the instance of the TZ Hilti Bolts, bolt ends are tapered and when installed flush with the bolt resulted in inadequate thread engagement. This issue was entered into the licensee's corrective action program as CR 50039089. The licensee performed immediate corrective actions and was able to demonstrate with reasonable assurance that the lack of thread engagement would not affect the anchors ability to perform their intended safety function.

The performance deficiency was of more than minor safety significance, and thus a finding, because it represented an adverse condition that rendered the quality of a structure, system, and component (SSC), unacceptable or indeterminate, and required substantive corrective action. The inspectors determined this finding was not associated with an ITAAC; it was not associated with a security program; and it was not

associated with a repetitive, NRC identified omission of a program critical attribute. The inspectors determined this 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 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 Problem Identification and Resolution, in the area of Resolution. Specifically, the licensee failed to thoroughly evaluate the issue to ensure that the resolution addressed the extent of condition for inadequate thread engagement identified in CR 50004237.

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Inspection/Testing

Identified By: NRC

Identification Date: 1/29/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-01

Note: Closed in Report (NCV)

Failure to Correct NRC Identified Violation

The NRC inspectors identified a construction finding of very low safety significance and a non-cited violation (NCV) of Title 10 of the Code of Federal Regulations, Part 50 (10 CFR 50), Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to correct a deficiency in their Class 1E Direct Current (DC) and Uninterruptible Power Supply (UPS) (IDS) preoperational test procedure, 3-IDS-ITPP-501. The licensee entered this finding into their corrective action program as condition reports (CR) 50076165 and 50078235, and corrective action report (CAR) 80004604, to correct the preoperational test procedure.

The performance deficiency was of more than minor safety significance and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. The finding was determined to be of very low safety significance (Green) because the finding did not impair a design function. The inspectors concluded that this finding affected the cross-cutting area of human performance and the crosscutting aspect of avoiding complacency. The proximate cause was attributed to a failure to use proper human error reduction techniques, namely inadequate verification by personnel. [H.12]

Identified By: NRC

Identification Date: 2/1/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-02

Note: NCV

Failure to Use Worst Case Load Profile for IDS Battery Service Test

The NRC inspectors identified a performance deficiency and ITAAC finding of very low safety significance (Green), and a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control" for the licensee's failure to translate the most limiting accident load profiles and load currents that envelope the battery bank design duty cycle into the battery service tests specified by procedure 3-IDS-ITPP-501, "Class 1E DC and UPS Preoperational Test." The licensee entered this finding into their corrective action program as CR

50078637 and changed their procedure to test the worst-case load profile with the worst-case load currents for battery divisions IDSA, IDSB, IDSC, and IDSS service tests.

The performance deficiency was of more than minor safety significance and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. The finding was determined to be of very low safety significance (Green) because the finding did not impair a design function. The inspectors concluded that this finding affected the cross-cutting area of human performance and crosscutting aspect of challenge the unknown. Specifically, the licensee failed to adequately investigate which profiles were the most limiting for each division and the spare battery to ensure the test procedure encompassed the requirements. [H.11]

Identified By: NRC

Identification Date: 2/1/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-03

Note: NCV

Failure to Place IDSB Battery on Float for 72 hours After Being on Equalize Voltage

The NRC inspectors identified a construction finding of very low safety significance and a NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to place the IDSB 24-hour battery on float voltage for 72 hours subsequent to it being on equalize voltage. The licensee entered this finding into their corrective action program as CR 50085270 to reperform the IDSB service test with the appropriate requisite float voltage.

The performance deficiency was of more than minor safety significance and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. The finding was determined to be of very low safety significance (Green) because the finding did not impair a design function. The inspectors concluded that this finding affected the cross-cutting area of human performance and crosscutting aspect of conservative bias. Specifically, the licensee proceeded with testing without questioning whether a 72-hour float was required. [H.14]

Identified By: NRC

Identification Date: 2/2/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-04

Note: NCV

Failure to Translate Design Requirements into IDS Test Procedure

The NRC inspectors identified a construction finding with three examples of very low safety significance and a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to translate the design requirements and acceptance limits in applicable design documents into preoperational test procedure 3-IDS-ITPP-501, "Class 1E DC and UPS Preoperational Test." Specifically, the licensee failed to translate design requirements from NEMA PE 5-1985, "Utility Type Battery Chargers," SV3-IDS-T1-503, "Class 1E DC and Uninterruptible Power Supply System Preoperational Test Specification," and the UFSAR Section 14.2.9.1.14. The licensee entered this finding into their corrective action program as CRs 50080097, 50079776, and 50089774, respectively, to restore compliance. The performance deficiency was of more than minor safety significance and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function.

The finding was determined to be of very low safety significance (Green) because the finding did not impair a design function. The inspectors concluded that this finding affected the cross-cutting area of human performance and crosscutting aspect of consistent process. Specifically, the licensee used an inconsistent approach to ensure that all requirements were translated into the procedure. [H.13]

Identified By: NRC

Identification Date: 2/24/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-05

Note: NCV

Failure to Control Design Calculation for Three Battery Cells Bypassed

The NRC inspectors identified a construction finding of very low safety significance and a NCV of 10 CFR 50, Appendix B, Criterion VII, "Control of Purchased Material, Equipment, and Services," for the licensee's failure to control the quality of design requirements and acceptance criteria in calculations used to determine voltage margins after battery discharge. The licensee entered this into their corrective action program as CR 50080010 and CAP IR 2021-2177. Corrective actions included using a different battery profile that used a higher final cell voltage which ensured at least 210VDC after 24 hours of discharge following a design basis accident with three cells bypassed.

The performance deficiency was of more than minor safety significance and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. The finding was determined to be of very low safety significance (Green) because the finding did not impair a design function. The inspector concluded that this finding affected the cross-cutting area of human performance and crosscutting aspect of documentation. Specifically, the licensee failed to consider all potential scenarios for the battery calculation. [H.7]

Identified By: NRC

Identification Date: 1/20/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-06

Note: NCV

Inadequate Startup Testing Procedures for Establishing Initial Criticality

The NRC inspectors identified a construction finding of very low safety significance (Green) and a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to correctly translate applicable regulatory requirements and the design basis into specifications and procedures for performing the Unit 3 initial plant startup testing activities of achieving initial criticality in a controlled manner, measuring the isothermal temperature coefficient (ITC), and calculating the moderator temperature coefficient (MTC) of reactivity. The licensee entered this finding into its corrective action program as CR 50086434 for evaluation and identification of appropriate corrective actions.

The performance deficiency was of more than minor safety significance, and thus a finding, because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. This finding was associated with an SSC (i.e. reactor system) and was a licensee performance deficiency of very low safety significance (Green) because the procedure was not implemented. The inspectors concluded this finding affected the cross-cutting area of human performance and the cross-cutting aspect of teamwork. Consistency between the procedures and test

specification required a coordinated effort between three organizations. This was not effectively done during initial drafting of the procedures. [H.4]

Identified By: NRC

Identification Date: 2/12/2021

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 – NRC Initial Test Program and Operational Programs Integrated Inspection Reports 05200025/2021002, 05200026/2021002

Item Number: 05200025/2021002-07

Note: NCV

Inadequate Startup Testing Procedures for Initial Fuel Loading

The NRC inspectors identified a construction finding of very low safety significance (Green) and a NCV of 10 CFR 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to correctly translate applicable regulatory requirements and the design basis into specifications and procedures for performing the Unit 3 initial plant startup testing activity of initial fuel loading. The licensee entered this finding into its corrective action program as CR 50086035 for evaluation and identification of appropriate corrective actions.

The performance deficiency was of more than minor safety significance, and thus a finding, because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. This finding was associated with an SSC (i.e. reactor system) and was a licensee performance deficiency of very low safety significance (Green) because the procedure was not implemented. The inspectors concluded this finding affected the cross-cutting area of human performance and the cross-cutting aspect of documentation. The proximate cause of the performance deficiency was primarily attributed to the failure to create accurate documentation. Revision 1 of the test procedure was archived without sufficient development and it was not adequately reviewed prior to approval. [H.7]

Identified By: NRC

Identification Date: 11/04/2020

Significance: Green

Item Type: ITAAC Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Integrated Inspection Reports 05200025/2020004, 05200026/2020004

Item Number: 05200025/2020004-02

Note: Closed in Report (NCV)

Failure to Construct and Perform Quality Inspections on the Battery Racks for the Class 1E DC and Uninterruptible Power Supply System

The inspectors identified an ITAAC finding of very low safety significance with an associated NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings." The licensee failed to construct and perform quality inspections on Unit 3 and Unit 4 Class 1E DC and uninterruptible power supply system (IDS) battery racks for the 250 Vdc 24-hour, 72-hour, and spare batteries in accordance with ITAAC 2.6.03.02.i and the approved design requirements for Vogtle Units 3 and 4. The licensee entered this finding into its CAP as CR 50066999, conducted engineering analysis of the nonconforming conditions, and performed rework on the battery racks to correct the nonconforming conditions.

This performance deficiency was of more than minor safety significance, and thus a finding, because it was material to the acceptance criteria of an ITAAC and invalidated the Inspection, Test, or Analyses described in the ITAAC 2.6.03.02.i. This finding was not associated with a security program; it was not associated with an IMC 2504 operational or construction program; and it was not associated with a repetitive, NRC-identified omission of a program critical attribute. This finding was a licensee performance

deficiency of very low safety significance because it was associated with the IDS and there was reasonable assurance the design function of the system would not have been impaired by the deficiency based on engineering analysis of the nonconforming conditions identified. The inspectors determined this finding was indicative of present licensee performance and affected the cross-cutting area of human performance and the cross-cutting aspect of avoiding complacency. The proximate cause of the performance deficiency was primarily attributed to a failure to perform a thorough review of the work instructions and to plan the activity every time without relying on past successes and assumed conditions. [H.12] (Section 1A15)

Identified By: NRC

Identification Date: 10/08/2020

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Initial Test Program and Operational Programs Integrated Reports 05200025/2020010, 05200026/2020010

Item Number: 05200025/2020010-01

Note: Closed in Report (NCV)

Failure to Complete Procedure B-GEN-ITPCI-019 sub-procedures as Written

The inspectors identified a performance deficiency and a construction finding of very low safety significance (Green) and an associated non-cited violation (NCV) of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow safety related procedure B-GEN-ITPCI-019, "PMS Sensor Channel Calibration," for the calibration of reactor coolant system (RCS) pressure transmitters.

The performance deficiency was determined to be more than minor because it represented a substantive failure to implement procedures. This finding was associated with the Construction Reactor Safety – Inspection/Testing Cornerstone. Using IMC 2519, Appendix A, "Construction Significance Determination Process," this finding was determined to be of very low safety significance (Green) because it was associated with the protection and safety monitoring system (PMS) and RCS, which are in the high risk column of the AP1000 Construction Significance Determination Matrix, but all trains of the systems were not considered failed, and it was not a repetitive significant condition adverse to quality. In accordance with IMC 0613, Appendix F "Construction Cross-Cutting Areas and Aspects," the finding was determined to be indicative of present licensee performance and was associated with the cross-cutting aspect of Training in the area of Human Performance. Specifically, Southern Nuclear Company (SNC) did not provide adequate training for the calibration of safety-related transmitters to ensure technical competency and maintain nuclear safety values [H.9]. (Section 3P04)

Identified By: NRC

Identification Date: 07/09/2020

Significance: Green

Item Type: ITAAC Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Initial Test Program and Operational Programs Integrated Reports 05200025/2020009, 05200026/2020009

Item Number: 05200025/2020009-01

Note: Closed in Report (NCV)

Failure to Complete Containment Prior to Unit 3 ILRT

The inspectors identified a performance deficiency and an ITAAC finding of very low safety significance (Green) and an associated non-cited violation (NCV) of Title 10 of the Code of Federal Regulations (CFR) Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," for the licensee's failure to complete the containment system in accordance with Option B, "Performance-Based Requirements," prior to commencing the Unit 3 Type A containment integrated leak rate test

(CILRT). The licensee entered this issue into their corrective action program (CAP) as CR 50061137 with planned corrective actions to complete the containment system and perform additional testing.

The performance deficiency was more than minor because it was material to the acceptance criteria of the ITAAC. The finding was associated with the Construction Reactor Safety – Inspection/Testing Cornerstone. Using IMC 2519, Appendix A, “Construction Significance Determination Process,” this finding was determined to be of very low safety significance (Green) because it was associated with the containment system (CNS), which is in the low risk column of the AP1000 Construction Significance Determination Matrix, and was not a repetitive significant condition adverse to quality. In accordance with IMC 0613, Appendix F, “Construction Cross-Cutting Areas and Aspects,” the finding was determined to be indicative of present licensee performance and was associated with the cross-cutting aspect of Change Management in the area of Human Performance. Specifically, rather than maintaining nuclear safety as the overriding priority, the design change associated with the new pressure boundary welds on the EPAs was not adequately evaluated to ensure compliance with regulatory requirements [H.3]. (Section 3T05)

Identified By: NRC

Identification Date: 08/04/2020

Significance: Green

Item Type: Construction Finding

Report: Vogtle Electric Generating Plant, Units 3 And 4 - NRC Initial Test Program and Operational Programs Integrated Reports 05200025/2020009, 05200026/2020009

Item Number: 05200025/2020009-02

Note: Closed in Report (NCV)

Failure to Establish Adequate Procedure for Unit 3 72-hour Battery Performance Test

The inspectors identified a performance deficiency and a construction finding of very low safety significance (Green) and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to establish an adequate procedure for UFSAR required battery performance testing of the Division B and C, Class 1E, 72-hour batteries. The licensee entered this issue into their CAP as CRs 50058111, 50057805 and corrected the procedure prior to implementation.

The performance deficiency was determined to be more than minor and a finding because it represented a substantive failure to establish or implement an adequate program, process, procedure, or quality oversight function. The inspectors concluded the finding was associated with the Inspection/Testing cornerstone and assessed the finding in accordance with IMC 2519, “Construction Significance Determination Process,” Appendix A, “AP 1000 Construction Significance Determination Process,” Section 4. The inspectors determined the finding was of very low safety significance (Green) because the finding was not related to a security or operational program and the test had not been performed. In accordance with IMC 0613 Appendix F, “Construction Cross-Cutting Areas and Aspects,” the inspectors determined the finding had a cross-cutting aspect of Avoid Complacency in the area of Human Performance. Specifically, the licensee did not properly proofread following a copy/paste from a previous section that allowed an incorrect number to propagate through the procedure [H.12]. (Section 3T12)

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