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SOUTHERN NUCLEAR
A SOUTHERN COMPANY

Docket No.: 52-025

SEP 30 2016

ND-16-1876
10 CFR 52.99(c)(3)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load
Item 3.2.00.03.iii [Index Number 748]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of September 30, 2016, Vogtle Electric Generating Plant (VEGP) Unit 3 Uncompleted Inspection, Test, Analysis, and Acceptance Criteria (ITAAC) Item 3.2.00.03.iii [Index Number 748] has not been completed greater than 225-days prior to initial fuel load. Enclosure 1 describes the plan for completing ITAAC 3.2.00.03.iii [Index Number 748]. Southern Nuclear Operating Company will at a later date provide additional notifications for ITAAC that have not been completed 225-days prior to initial fuel load.

This notification is informed by the guidance described in NEI-08-01, *Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52,* which was endorsed by the NRC in Regulatory Guide 1.215. In accordance with NEI 08-01, this notification includes ITAAC for which required inspections, tests, or analyses have not been performed or have been only partially completed. All ITAAC will be fully completed and all Section 52.99(c)(1) ITAAC Closure Notifications will be submitted to NRC to support the Commission finding that all acceptance criteria are met prior to plant operation, as required by 10 CFR 52.103(g).

This letter contains no new NRC regulatory commitments.

If there are any questions, please contact David Woods at 706-848-6903.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3&4

MJY/KMS/amm

Enclosure:

1. Vogtle Electric Generating Plant (VEGP) Unit 3 Completion Plan for Uncompleted ITAAC Item 3.2.00.03.iii [Index Number 748]

To:

Southern Nuclear Operating Company/Georgia Power Company

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Southern Nuclear Operating Company

ND-16-1876

Enclosure 1

Vogtle Electric Generating Plant (VEGP) Unit 3

Completion Plan for Uncompleted ITAAC Item 3.2.00.03.iii [Index No. 748]

Subject: Uncompleted ITAAC 3.2.00.03.iii [Index No. 748]

ITAAC Statement

Design Commitment

3. The MCR provides a suitable workspace environment for use by the MCR operators.

Inspections/Tests/Analyses

iii) See subsection 2.6.3, Class 1E dc and UPS System.

Acceptance Criteria

iii) See subsection 2.6.3, Class 1E dc and UPS system.

ITAAC Completion Description

This ITAAC's design commitment is met by reference to ITAAC Items 1, 2.i, 2.ii, 2.iii, 3, 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4i, 5a, 5b, 5c, 5d.i, 5d.ii, 6, 7, 8, 9, 10, and 11 in VEGP Unit 3 Combined License (COL) Appendix C, Table 2.6.3-3. Item 1 verifies that the functional arrangement of the as-built Class 1E dc and uninterruptible powers supply system (IDS) conforms to the functional arrangement described in the Design Description of VEGP Unit 3 COL Appendix C Section 2.6.3. Item 2.i verifies that the seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.6.3-1 is located on the Nuclear Island. Item 2.ii verifies that seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.6.3-1 can withstand seismic design basis loads without loss of safety function. Item 2.iii verifies that that the as-built equipment seismic Category I equipment identified in VEGP Unit 3 COL Appendix C Table 2.6.3-1, including anchorage, is seismically bounded by the tested or analyzed conditions.

Item 3 demonstrates that separation is provided between Class 1E division cables, and between Class 1E division cables and non-Class 1E cable in certain plant areas by reference to item 7d in Table 3.3-6. Item 7d in Table 3.3-6 has thirteen (13) subparts. The subparts address separation requirements for different areas of the plant. See Attachment A for the listing of referenced items (ITAAC) and the plant areas addressed in each subpart.

Item 4a verifies that a simulated test signal exists at the Class 1E equipment identified in VEGP Unit 3 COL Appendix C Table 2.6.3-1 when the assigned Class 1E division is provided the test signal. Item 4b verifies that the isolation devices (battery chargers, regulating transformers, and isolation fuses) prevent credible faults from propagating between the non-Class 1E ac power system into the Class 1E dc and Uninterruptible Power Supply system (IDS). Item 4c verifies that each IDS 24-hour as-built battery bank's battery terminal voltage is greater than or equal to 210 V after a period of no less than 24 hours with an equivalent load that equals or exceeds the

battery bank design duty cycle capacity. Item 4d verifies that each IDS 72-hour as-built battery bank's battery terminal voltage is greater than or equal to 210 V after a period of no less than 72 hours with an equivalent load that equals or exceeds the battery bank design duty cycle capacity. Item 4e verifies that the IDS spare battery bank battery terminal voltage is greater than or equal to 210 V after a period with a load and duration that equals or exceeds the most severe battery bank design duty cycle capacity. Item 4f verifies that each IDS 24-hour inverter supplies a line-to-line output voltage of 208 ± 2% V at a frequency of 60 ± 0.5% Hz under a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 12 kW. Item 4g verifies that each IDS 72-hour inverter supplies a line-to-line output voltage of 208 ± 2% V at a frequency of 60 ± 0.5% Hz under a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 7 kW. Item 4h verifies that two (2) protective and monitoring system (PMS) input signals exist from each 24-hour battery charger indicating loss of ac input voltage when the loss-of-input voltage condition is simulated. Item 4i verifies that the IDS supplies an operating voltage at the terminals of the Class 1 E motor operated valves identified in VEGP3 COL subsections 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.3.2, 2.3.6, and 2.7.1. The motor starter input terminal voltage is greater than or equal 200 vdc with the motor operating. Item 5a verifies that each IDS 24-hour battery charger provides an output current of at least 150 A with an output voltage in the range 210 to 280 V. Item 5b verifies that each IDS 72-hour battery charger provides an output current of at least 125 A with an output voltage in the range 210 to 280 V. Item 5c verifies that each IDS regulating transformer supplies a line-to-line output voltage of 208 ± 2% V under a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 30 kW when powered from the 480V Motor Control Center (MCC). Item 5d.i verifies that IDS Divisions B and C regulating transformers supply their post-72-hour ac loads by ensuring that ancillary diesel generator 1 is electrically connected to regulating transformer IDSC-DT-1. Item 5d.ii verifies that IDS Divisions B and C regulating transformers supply their post-72-hour ac loads by ensuring that ancillary diesel generator 2 is electrically connected to regulating transformer IDSC-DT-1. Item 6 verifies that the safety-related displays identified in VEGP Unit 3 COL Appendix C Table 2.6.3-1can be retrieved in the MCR. Item 7 verifies that the capacities of as-built IDS battery fuses and battery charger circuit breakers, and dc distribution panels, MCCs, and their circuit breakers and fuses, as determined by their nameplate ratings, exceed their analyzed load requirements. Item 8 verifies that the as-built IDS dc electrical distribution system analyzed fault currents do not exceed the interrupt capacity of circuit breakers and fuses in the battery, battery charger, dc distribution panel, and MCC circuits, as determined by their nameplate ratings. Item 9 verifies that the as-built IDS dc electrical distribution system fault current capacities of as-built IDS batteries, battery chargers, dc distribution panels, and MCCs, as determined by manufacturer's ratings, exceed their analyzed fault currents for the time required to clear the fault from its power source as determined by the circuit interrupting device coordination analysis. Item 10 verifies that the as-built IDS dc electrical distribution system cables will withstand the analyzed fault currents, as determined by manufacturer's ratings, for the time required to clear the fault from its power source as determined by the circuit interrupting

device coordination analyses. Item 11 verifies that the safety-related displays identified in VEGP Unit 3 COL Appendix C Table 2.6.3-2 can be retrieved in the MCR.

The ITAAC Closure Notifications (References 1 through 25) summarize the methodology for conducting the Inspections/Tests/Analyses, and the results that demonstrate that the acceptance criteria are met. These closure notifications are submitted to the NRC when the supporting ITAAC closure activities are complete.

The records (Tests, Reports, Completed Procedures, Completed Analyses, etc.) that form the ITAAC determination bases are referenced in the closure notifications for items 1, 2.i, 2.ii, 2.iii, 3, 4a, 4b, 4c, 4d, 4e, 4f, 4g, 4h, 4i, 5a, 5b, 5c, 5d.i, 5d.ii, 6, 7, 8, 9, 10, and 11 from VEGP Unit 3 COL Appendix C Table 2.6.3-3 and are available for NRC inspection as part of the ITAAC Completion Package (Reference 26).

List of ITAAC Findings

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

References (available for NRC inspection)

1. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.01 [Index No. 596]
2. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.02.i [Index No. 597]
3. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.02.ii [Index No. 598]
4. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.02.iii [Index No. 599]
5. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.03 [Index No. 600]
6. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04a [Index No. 601]
7. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04b [Index No. 602]
8. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04c [Index No. 603]
9. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04d [Index No. 604]
10. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04e [Index No. 605]

11. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04f [Index No. 606]
12. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04g [Index No. 607]
13. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04h [Index No. 608]
14. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.04i [609]
15. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.05a [Index No. 610]
16. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.05b [Index No. 611]
17. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.05c [Index No. 612]
18. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.05d.i [Index No. 613]
19. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.05d.ii [Index No. 614]
20. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.06 [Index No. 615]
21. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.07 [Index No. 616]
22. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.08 [Index No. 617]
23. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.09 [Index No. 618]
24. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.10 [Index No. 619]
25. ND-XX-XXXX ITAAC Closure Notification on Completion of ITAAC 2.6.03.11 [Index No. 620]
26. ITAAC 3.2.00.03.iii Completion Package
27. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

Attachment A: Item 4 Reference Information

Referenced ITAAC	Index No.	Plant Area addressed
3.3.00.07d.i	799	Within the main control room and remote shutdown room
3.3.00.07d.ii.a	800	Within other plant areas inside containment (limited hazard areas) (not addressed in other ITAAC)
3.3.00.07d.ii.b	801	Within other plant areas inside the non-radiologically controlled area of the auxiliary building (limited hazard areas)
3.3.00.07d.ii.c	802	Within other plant areas inside the radiologically controlled area of the auxiliary building (limited hazard areas)
3.3.00.07d.iii.a	803	Where minimum raceway separation distances are not met inside containment
3.3.00.07d.iii.b	804	Where minimum raceway separation distances are not met inside the non-radiologically controlled area of the auxiliary building
3.3.00.07d.iii.c	805	Where minimum raceway separation distances are not met inside the radiologically controlled area of the auxiliary building
3.3.00.07d.iv.a	806	Areas inside the non-radiologically controlled area of the auxiliary building
3.3.00.07d.iv.b	807	Areas inside the non-radiologically controlled area of the auxiliary building
3.3.00.07d.iv.c	808	Areas inside the radiologically controlled area of the auxiliary building
3.3.00.07d.v.a	809	Areas inside containment
3.3.00.07d.v.b	810	Areas inside the non-radiologically controlled area of the auxiliary building
3.3.00.07d.v.c	811	Areas inside the radiologically controlled area of the auxiliary building