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Docket Nos.: 52-025

ND-20-0531
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3
ITAAC Closure Notification on Completion of 2.5.05.03b [Index Number 570]

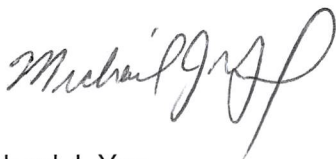
Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.5.05.03b [Index Number 570]. This ITAAC confirms the as-built Class 1E cables between the Incore Thermocouple elements and the connector boxes located on the integrated head package have sheaths. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (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.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,



Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.5.05.03b [Index Number 570]

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**Southern Nuclear Operating Company
ND-20-0531
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.5.05.03b [Index Number 570]**

ITAAC Statement

Design Commitment

3.b) The Class 1E cables between the Incore Thermocouple elements and the connector boxes located on the integrated head package have sheaths.

Inspections/Tests/Analyses

Inspection of the as-built system will be performed.

Acceptance Criteria

The as-built Class 1E cables between the Incore Thermocouple elements and the connector boxes located on the integrated head package have sheaths.

ITAAC Determination Basis

Inspection of the as-built Class 1E cables between the Incore Thermocouple elements and the connector boxes (connection panel) located on the integrated head package was performed to verify that the as-built Class 1E cables between the Incore Thermocouple elements and the connection panel located on the integrated head package have sheaths.

The Incore Thermocouple elements and the connection panel located on the Integrated Head Package (IHP) are connected by 38 Class 1E head area cable assemblies (wires and connectors), which transmit the safety-related core exit thermocouple signals to the protection and safety monitoring system (PMS).

Design specifications require internal metallic sheaths that surround and separate the Class 1E thermocouple wires from non-Class 1E detector wires, which are contained within an external spiral wound sheath. The design specifications also include performance tests for overvoltage, insulation resistance, and continuity. Successful test results indicate that the sheaths protect against credible single faults between the Class 1E and non-Class 1E signals.

The Quality Release and Certificate of Conformance (Reference 1) verifies the cable assembly acceptance test results. The Field Service Report (Reference 2) verifies the as-built cable assemblies were installed in accordance with design drawings and installation specifications issued for construction, and work package requirements.

The as-built Class 1E head area cable assemblies were inspected to verify that the design specification and installation specifications are satisfied, to enable each cable to convey the safety-related core exit thermocouple signals to the PMS, as identified in the Combined License (COL) Appendix C ITAAC 2.5.05.03b, Design Description.

The inspections were performed and documented in accordance with manufacturer and vendor quality verification programs. The results of the inspections are documented in the Unit 3 Principal Closure Documents (References 1 and 2) supporting the ITAAC 2.5.05.03b Completion Package (Reference 3). The inspections confirm that each of the as-built Class 1E cable assemblies between the In-core Thermocouple elements and the connector boxes located on the integrated head package have sheaths.

The Unit 3 Principal Closure Documents (References 1 and 2) are available for NRC inspection as part of the Unit 3 ITAAC 2.5.05.03b Completion Package.

ITAAC Finding Review

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 were no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.5.05.03b (Reference 3) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.5.05.03b was performed for VEGP Unit 3 and that the prescribed acceptance criteria were met. Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV3-EW25-VQQ-002, Rev 0, Quality Release & Certificate of Conformance
2. SV3-MV10-S8R-001, Revision 0, AP1000 - Vogtle 3 Field Service Report - Integrated Head Package Field Assembly, (IHPFA)
3. 2.5.05.03b-U3-CP-Rev0, ITAAC Completion Package