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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3 and Unit 4
ITAAC Closure Notification on Completion of ITAAC 3.2.00.01d [Index Number 743]

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 and Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 3.2.00.01d [Index Number 743] for verifying the Human Factors Engineering (HFE) design issue resolution verification was conducted in conformance with the implementation plan. 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 G. Petrak at 706-848-1575.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion of ITAAC 3.2.00.01d [Index Number 743]

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**Southern Nuclear Operating Company
ND-18-0831
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion of ITAAC 3.2.00.01d [Index Number 743]**

ITAAC Statement

Design Commitment

1. The HFE verification and validation program is performed in accordance with the HFE verification and validation implementation plan and includes the following activities:

d) Issue resolution verification

Inspections/Tests/Analyses

d) An evaluation of the implementation of the HFE design issue resolution verification will be performed.

Acceptance Criteria

d) A report exists and concludes that: HFE design issue resolution verification was conducted in conformance with the implementation plan and includes verification that human factors issues documented in the design issues tracking system have been addressed in the final design.

ITAAC Determination Basis

Multiple ITAAC are performed to verify that the Human Factors (HF) Engineering (HFE) verification and validation (V&V) program, as described in VEGP 3 & 4 Updated Final Safety Analysis Report, Section 18.11, "Human Factors Engineering Verification and Validation" (Reference 1), is performed in accordance with the HFE V&V implementation plan. The subject ITAAC requires that an evaluation of the implementation of the HFE design issue resolution verification be performed.

Human Engineering Discrepancies (HEDs) are departures of the AP1000 design from the HFE design guidance and/or human performance criteria as identified during the execution of the HFE V&V activities. The objective of the HFE issue resolution verification was to ensure that HEDs are documented, tracked, and adequately addressed in the final AP1000 design. The HFE issue resolution verification was conducted in accordance with "AP1000 Human Factors Engineering Discrepancy Resolution Process" (Reference 2).

The HED plan for the AP1000 plant was developed based on the information and guidance described in "Human Factors Engineering Program Review Model," NUREG-0711 (Reference 3). The HFE V&V activities, which include HFE design issue resolution verification, confirm the adequacy of Human-System Interface (HSI) resources and Operation and Control Center System (OCS) design. The overall objective of HFE design issue resolution verification is to ensure that the AP1000 design attains a high standard of HF adequacy and thereby contributes to the safety, operability and maintainability of the plant. The HEDs identified during previous HFE V&V activities and ITAAC completion were prioritized and placed into the Human Factors Tracking System and assigned to a specialist or relevant group for resolution.

For HED design resolutions associated with the HFE Design Verification, the HFE Task Support Verification, or the HFE Integrated System Validation, independent verifiers evaluated the HSI design changes using the same standards, guidance and methodology as described in the

corresponding verification plan. The purpose of the evaluation was to provide reasonable assurance that the HSI resources and OCS design satisfy the applicable criteria.

The results of the HFE issue resolution process are documented in "AP1000 Human Engineering Discrepancy Resolution Summary Report" (Reference 4) and conclude that the HFE design issue resolution verification was conducted in conformance with Reference 2 and includes verification that human factors issues documented in the design issues tracking system are addressed in the final design.

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the Unit 3 and Unit 4 ITAAC Completion Package for ITAAC 3.2.00.01d (Reference 5) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 3.2.00.01d was performed for Vogtle Units 3 and 4 and that the prescribed acceptance criteria are 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. Updated Final Safety Analysis Report, Section 18.11, "Human Factors Engineering Verification and Validation"
2. APP-OCS-GEH-420, Rev 2, "AP1000 Human Factors Engineering Discrepancy Resolution Process"
3. NUREG-0711, "Human Factors Engineering Program Review Model"
4. APP-OCS-GER-420, Rev 0, "AP1000 Human Engineering Discrepancy Resolution Summary Report"
5. 3.2.00.01d-U0-CP-Rev0, ITAAC Completion Package