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10 CFR 52.99(c)(1)

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

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on
Completion of ITAAC 2.2.03.08c.vi.01 [Index Number 189]

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 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.2.03.08c.vi.01 [Index Number 189] for verifying that the calculated volume of each of the Core Makeup Tanks (CMTs) is greater than or equal to 2,487 ft³. The closure process for this ITAAC is based on 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.

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 Paulo Albuquerque at 706-848-5531.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3&4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.2.03.08c.vi.01 [Index Number 189]

U.S. Nuclear Regulatory Commission

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**Southern Nuclear Operating Company
ND-15-1840
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.2.03.08c.vi.01 [Index Number 189]**

ITAAC Statement

Design Commitment:

8.c) The PXS provides RCS makeup, boration, and safety injection during design basis events.

Inspections, Tests, Analyses:

vi) Inspections of each of the following tanks will be conducted:

1. CMTs

Acceptance Criteria:

vi) The calculated volume of each of the following tanks is as follows:

1. CMTs $\geq 2487 \text{ ft}^3$

ITAAC Determination Basis

Multiple ITAAC are performed to ensure the Passive Core Cooling System (PXS) provides Reactor Coolant System (RCS) makeup, boration, and safety injection during design basis events. This ITAAC requires an inspection of the Core Makeup Tanks (CMTs) to confirm that the volume is greater than or equal to $2,487 \text{ ft}^3$. Inspections of each of the CMTs were conducted to verify that the calculated volume of each of the CMTs is greater than or equal to $2,487 \text{ ft}^3$.

Upon final fabrication of the CMTs, measurements were taken by the vendor at the manufacturing facility using a laser tracking scanner. For each CMT, internal volumes were calculated using the vendor measurements. The volumes of the upper and lower heads were determined by using the equation for a partial hemisphere. The volume of the cylindrical shell barrel was determined by the cylinder equation. The three section volumes were summed to obtain a total internal volume. The CMT inlet diffuser volume was subtracted from the total CMT internal volume to obtain the final calculated volume of each tank.

The volume of the Unit 4, CMT A is 2519.81 ft^3 , and the Unit 4, CMT B volume is 2518.01 ft^3 . This is documented in AP1000 Core Makeup Tank – Vogtle Unit 4 (SV4) As-Built Analysis (Reference 1).

The calculated volume for each Vogtle Unit 4 CMT is greater than or equal to $2,487 \text{ ft}^3$ and meets ITAAC 2.2.03.08c.vi.01 acceptance criteria.

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 document number is included in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.2.03.08c.vi.01 (Reference 2) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.03.08c.vi.01 was performed for VEGP Unit 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. SV4-MT01-Z0R-201 Rev. 0, AP1000 Core Makeup Tank – Vogtle Unit 4 (SV4) As-Built Analysis
2. SVP_SV0_003475, Attachment 1, Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.2.03.08c.vi.01 (189) (Verification of PXS Core Makeup Tank Volume)