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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 4  
ITAAC Closure Notification on  
Completion of ITAAC 2.2.03.08c.xi [Index Number 196]

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.xi [Index Number 196] for verifying that the Core Makeup Tank (CMT) inlet diffusers have a flow area  $\geq 165$  in<sup>2</sup>. 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 David Woods at 706-848-6903.

Respectfully submitted,

Michael J. Yox  
Regulatory Affairs Director Vogtle 3&4

MJY/RDH/amm

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.2.03.08c.xi [Index Number 196]

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**Southern Nuclear Operating Company  
ND-16-1283  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.2.03.08c.xi [Index Number 196]**

### **ITAAC Statement**

#### **Design Commitment:**

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

#### **Inspections, Tests, Analyses:**

- xi) Inspection of the as-built CMT inlet diffuser will be conducted.

#### **Acceptance Criteria:**

- xi) The CMT inlet diffuser has a flow area  $\geq 165 \text{ in}^2$ .

### **ITAAC Determination Basis**

Multiple Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) are performed to demonstrate that the Passive Core Cooling System (PXS) provides Reactor Coolant System (RCS) makeup, boration, and safety injection during design basis events. This ITAAC requires inspections to be performed of each Core Makeup Tank (CMT) inlet diffuser to verify it has a flow area  $\geq 165 \text{ in}^2$ .

Following fabrication of the diffuser inside the CMTs, the vendor performed a dimensional inspection by measuring the inner diameter of each of the 900 holes in each CMT inlet diffuser. The flow area was calculated based on the minimum measured diameter using the area equation for a circle multiplied by the total number of diffuser holes.

Each CMT has an inlet diffuser which is welded inside the CMT during fabrication. Because it would be impractical to perform measurements of dimensions of the inlet diffusers at the plant site, the as-built inspections were conducted at the supplier's site in accordance with NEI 08-01 (Reference 1), Section 9.5, "As-built Inspections."

As documented in the Vogtle Unit 4 CMT As-Built Report (Reference 2), the calculated flow area of the inlet diffuser inside CMT 1 and CMT 2 is  $177 \text{ in}^2$  and meets the ITAAC 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.xi (Reference 3) and available for NRC inspection.

**ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.03.08c.xi 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. NEI 08-01, *Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52*
2. SV4-MT01-Z0R-201, AP1000 Core Makeup Tank-Vogtle Unit 4 (SV4) As-Built Analysis, Rev. 0
3. SVP\_SV0\_004041, Attachment 1, Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.2.03.08c.xi [COL Index Number 196] (Core Makeup Tank Inlet Diffuser)