

**JUN 30 2017**Docket Nos.: 52-025  
52-026ND-17-1126  
10 CFR 52.99(c)(3)U.S. Nuclear Regulatory Commission  
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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3 and Unit 4  
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load  
Item 2.2.03.08c.i.01 [Index Number 177]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of June 21, 2017, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspection, Test, Analyses, and Acceptance Criteria (ITAAC) Item 2.2.03.08c.i.01 [Index Number 177] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing ITAAC 2.2.03.08c.i.01 [Index Number 177]. 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)(3) 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,



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Regulatory Affairs Director Vogtle 3 & 4

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Completion Plan for Uncompleted ITAAC 2.2.03.08c.i.01 [Index Number 177]

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**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.2.03.08c.i.01 [Index Number 177]**

## **ITAAC Statement**

### **Design Commitment**

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

### **Inspections/Tests/Analyses**

i) A low-pressure injection test and analysis for each CMT, each accumulator, each IRWST injection line, and each containment recirculation line will be conducted. Each test is initiated by opening isolation valve(s) in the line being tested. Test fixtures may be used to simulate squib valves.

#### **1. CMTs:**

Each CMT will be initially filled with water. All valves in these lines will be open during the test.

### **Acceptance Criteria**

i) The injection line flow resistance from each source is as follows:

#### **1. CMTs:**

The calculated flow resistance between each CMT and the reactor vessel is  $\geq 1.81 \times 10^{-5}$  ft/gpm<sup>2</sup> and  $\leq 2.25 \times 10^{-5}$  ft/gpm<sup>2</sup>.

## **ITAAC Completion Description**

Multiple ITAAC are performed to verify that the Passive Core Cooling System (PXS) provides Reactor Coolant System (RCS) makeup, boration, and safety injection during design basis events. This ITAAC performs a low pressure injection test and analysis for each Core Makeup Tank (CMT) (PXS-MT-02A/B) by calculating the flow resistance of each injection line.

Performance tests are conducted in accordance with the Unit 3 and Unit 4 preoperational test procedures SV3-PXS-T1P-502 and SV4-PXS-T1P-502 (References 1 and 2, respectively) to demonstrate that the flow path from each CMT to the reactor vessel has a flow resistance  $\geq 1.81 \times 10^{-5}$  ft/gpm<sup>2</sup> and  $\leq 2.25 \times 10^{-5}$  ft/gpm<sup>2</sup>.

Each CMT is initially filled with water while measuring the volume of water added and tank level to establish a volume versus level correlation. The test is accomplished by opening both associated CMT discharge isolation valves and gravity draining each tank through the direct vessel injection flow path with all valves in these lines open, while measuring the CMT level during the test period. The constant value for flow resistance is calculated based on the test duration, total head loss and total volume change from the change in measured tank level, adjusted for measurement uncertainty. The calculated flow resistance is compared to the acceptance criteria.

The Unit 3 flow resistance is calculated to be XXX ft/gpm<sup>2</sup> for the CMT A, PXS-MT-02A, flow path and YYY ft/gpm<sup>2</sup> for the CMT B, PXS-MT-02B, flow path. The Unit 4 flow resistance is calculated to be XXX ft/gpm<sup>2</sup> for the CMT A, PXS-MT-02A, flow path and YYY ft/gpm<sup>2</sup> for the CMT B, PXS-MT-02B, flow path. The Unit 3 and Unit 4 preoperational test results reports

SV3-PXS-T2R-502 and SV4-PXS-T2R-502 (References 3 and 4, respectively) confirm that the calculated injection line flow resistance between each CMT and the reactor vessel is  $\geq 1.81 \times 10^{-5}$  ft/gpm<sup>2</sup> and  $\leq 2.25 \times 10^{-5}$  ft/gpm<sup>2</sup>.

Reference 1, 2, 3 and 4 are available for NRC inspection as part of the ITAAC 2.2.03.08c.i.01 Completion Package (Reference 5).

### **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. SV3-PXS-T1P-502, "Passive Core Cooling System Preoperational Test Procedure"
2. SV4-PXS-T1P-502, "Passive Core Cooling System Preoperational Test Procedure"
3. SV3-PXS-T2R-502, "Passive Core Cooling System Preoperational Test Results Report"
4. SV4-PXS-T2R-502, "Passive Core Cooling System Preoperational Test Results Report"
5. ITAAC 2.2.03.08c.i.01 Completion Package
6. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"