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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3  
ITAAC Closure Notification on Completion of ITAAC 2.2.02.07a.iii [Index Number 137]

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 2.2.02.07a.iii [Index Number 137]. This ITAAC verified by inspection that the Passive Containment Cooling Water Storage Tank (PCCWST) volume, standpipe elevations, and the Passive Containment Cooling Ancillary Water Storage Tank (PCCAWST) volume meet the Unit 3 COL Appendix C acceptance criteria. 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 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 2.2.02.07a.iii [Index Number 137]

MJY/JFV/sfr

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**Southern Nuclear Operating Company  
ND-20-1340  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.2.02.07a.iii [Index No. 137]**

## **ITAAC Statement**

### **Design Commitment**

7.a) The PCS delivers water from the PCCWST to the outside, top of the containment vessel.

7.f) The PCS provides a flow path for long-term water makeup from the PCCWST to the spent fuel pool.

8.a) The PCCAWST contains an inventory of cooling water sufficient for PCS containment cooling from hour 72 through day 7.

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

iii) Inspection will be performed to determine the PCCWST standpipes elevations.

ii) Inspection of the PCCWST will be performed.

Inspection of the PCCAWST will be performed.

### **Acceptance Criteria**

iii) The elevations of the standpipes above the tank floor are:

- 16.8 ft ± 0.2 ft
- 20.3 ft ± 0.2 ft
- 24.1 ft ± 0.2 ft

ii) The volume of the PCCWST is greater than 756,700 gallons.

The volume of the PCCAWST is greater than 780,000 gallons.

### **ITAAC Determination Basis**

Multiple ITAAC were performed to demonstrate that the Passive Containment Cooling System (PCS); delivers water from the Passive Containment Cooling Water Storage Tank (PCCWST) to the outside, top of the containment vessel; provides a flow path for long-term water makeup from the PCCWST to the spent fuel pool; and the Passive Containment Cooling Ancillary Water Storage Tank (PCCAWST) contains an inventory of cooling water sufficient for PCS containment cooling from hour 72 through day 7. The subject ITAAC requires that an inspection be performed to determine the PCCWST standpipes elevations are 16.8 +/- 0.2 ft, 20.3 ft +/- 0.2 ft, and 24.1 ft +/- 0.2 ft; an inspection be performed of the PCCWST to verify that the volume of the PCCWST is greater than 756,700 gallons; and an inspection be performed of the PCCAWST to verify that the volume of the PCCAWST is greater than 780,000 gallons.

iii) The elevations of the standpipes above the tank floor are:

- 16.8 ft ± 0.2 ft
- 20.3 ft ± 0.2 ft
- 24.1 ft ± 0.2 ft

The inspection to determine the PCCWST standpipes elevations was performed in the PCCWST module after its installation at the top of the shield building. The PCCWST standpipes are identified in the VEGP 3&4 Updated Final Safety Analysis Report (UFSAR), Table 6.2.2-2, Component Data Passive Containment Cooling System (Nominal) (Reference 1) as the Third Standpipe, Second Standpipe, and Top Standpipe. The PCCWST standpipes elevations were measured using survey equipment in accordance with site survey and measurement procedure (Reference 2). The elevations of the standpipes above the PCCWST tank floor were determined by measuring the distance between the PCCWST floor and the opening at the high point of the inlet at each standpipe.

The inspection results were documented in the SV3-PCS-FSK-800137, "Vogtle Unit 3 PCS Standpipes Elevations", Principal Closure Document (Reference 3), and determined that the elevations of the standpipes above the tank floor are:

- 16.8 ft (Third Standpipe)
- 20.3 ft (Second Standpipe)
- 24.0 ft (Top Standpipe)

The inspection results verified that the elevations of the standpipes above the tank floor are:

- 16.8 ft± 0.2 ft (Third Standpipe)
- 20.3 ft± 0.2 ft (Second Standpipe)
- 24.1 ft ± 0.2 ft (Top Standpipe)

Unit 3 Principal Closure Document, Reference 3, is available for NRC inspection as part of the Unit 3 ITAAC 2.2.02.07a.iii Completion Package (Reference 6).

ii) The volume of the PCCWST is greater than 756,700 gallons.

VEGP 3&4 UFSAR, Table 14.3-2, Design Basis Accident Analysis, (Reference 1) references the PCCWST capacity for the spent fuel pool long-term water makeup volume to VEGP 3&4 UFSAR, Table 6.2.2-1, Passive Containment Cooling System Performance Parameters, (Reference 1). UFSAR Tables 14.3-2 and 6.2.2-1 identify that the PCCWST volume for the spent fuel pool long-term water makeup is a minimum of 756,700 gallons. The volume of the PCCWST providing a flow path for long-term water makeup was determined by the following method:

The dimensions of the PCCWST, below the PCCWST standpipe elevation which begins feeding the Fire Protection System (FPS), were measured and recorded following tank installation by both the tank vendor and site. Site measurements were performed using survey equipment in accordance with site survey and measurement procedure (Reference 2). The PCCWST usable volume for the spent fuel pool long-term water makeup was calculated, using the survey measurements, and compared to the ITAAC acceptance criteria of greater than 756,700 gallons.

The inspection results of the PCCWST volume determination were documented in SV3-CB20-FSK-800137, "Vogtle Unit 3 ITAAC Passive Containment Cooling System (PCS) Storage Tank Volume", Principal Closure Document (Reference 4), and determined that the volume of the PCCWST (Tag No. PCS-MT-01) is 758,528 gallons for Unit 3. This confirms that the volume of the PCCWST is greater than 756,700 gallons.

The Unit 3 Principal Closure Document, Reference 4, is available for NRC inspection as part of the Unit 3 ITAAC 2.2.02.07a.iii Completion Package (Reference 6).

The volume of the PCCAWST is greater than 780,000 gallons.

VEGP 3 and 4 Updated Final Safety Analysis Report, Table 6.2.2-2, Component Data Passive Containment Cooling System (Nominal) (Reference 1) identifies that the nominal volume of the PCCAWST is 885,000 gallons. The nominal volume of the PCCAWST was determined by the following method:

As-built measurements of the PCCAWST were taken by the tank vendor and SNC field engineers. These measurements were recorded and used to calculate the nominal volume of the PCCAWST minus unavailable volume due to tank internals, and compared to the volume acceptance criteria of greater than 780,000 gallons.

The inspection results of the PCCAWST volume determination were documented in SV3-PCS-MTK-800137, "Available Volume of the PCCAWST", Principal Closure Document (Reference 5), and the calculated nominal volume of the PCCAWST (Tag No. PCS-MT-05) is 832,561 gallons for Unit 3. This confirms that the volume of the PCCAWST is greater than 780,000 gallons.

The Unit 3 Principal Closure Document, Reference 5, is available for NRC inspection as part of the Unit 3 ITAAC 2.2.02.07a.iii Completion Package (Reference 6).

### **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 these ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.2.02.07a.iii (Reference 6) and is available for NRC review.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.02.07a.iii was performed for VEGP Unit 3 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. VEGP 3&4 UFSAR, Revision 9.1
2. 26139-000-4MP-T81C-N3201, Rev. 5, "Bechtel Construction Survey"
3. SV3-PCS-FSK-800137, Rev. 0, "Vogtle Unit 3 PCS Standpipes Elevations", Principal Closure Document.
4. SV3-CB20-FSK-800137, Rev. 0, "Vogtle Unit 3 ITAAC Passive Containment Cooling System (PCS) Storage Tank Volume", Principal Closure Document.
5. SV3-PCS-MTK-800137, Rev. 0, "Available Volume of the PCCAWST," Principal Closure Document.
6. 2.2.02.07a.iii-U3-CP-Rev0, ITAAC Completion Package.
7. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"