



Michael J. Yox  
Regulatory Affairs Director  
Vogtle 3 & 4

7825 River Road  
Waynesboro, GA 30830  
706-848-6459 tel  
410-474-8587 cell  
myox@southernco.com

SEP 13 2018

Docket No.: 52-025  
52-026

ND-18-0696  
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 3 and Unit 4  
ITAAC Closure Notification on Completion of ITAAC 2.2.05.07a.ii [Index Number 266]

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 2.2.05.07a.ii [Index Number 266] for verifying the Main Control Room Emergency Habitability System Air Storage Volume. 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,

*Amanda Pugh for Michael J. Yox*

Michael J. Yox  
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion of ITAAC 2.2.05.07a.ii [Index Number 266]

MJY/GCW/amw

**To:**

**Southern Nuclear Operating Company/ Georgia Power Company**

Mr. D. A. Bost (w/o enclosures)

Mr. D. L. McKinney (w/o enclosures)

Mr. M. D. Meier (w/o enclosures)

Mr. D. H. Jones (w/o enclosures)

Mr. J. B. Klecha

Mr. G. Chick

Mr. M. J. Yox

Mr. A. S. Parton

Ms. A. L. Pugh

Mr. T. G. Petrak

Mr. W. A. Sparkman

Mr. C. T. Defnall

Mr. C. E. Morrow

Mr. J. L. Hughes

Ms. K. M. Stacy

Ms. A. C. Chamberlain

Mr. C. T. Defnall

Mr. J. C. Haswell

Document Services RTYPE: VND.LI.L06

File AR.01.02.06

**cc:**

**Nuclear Regulatory Commission**

Mr. W. Jones (w/o enclosures)

Mr. F. D. Brown

Ms. J. M. Heisserer

Ms. A. E. Rivera-Varona

Mr. M. E. Ernestes

Mr. C. P. Patel

Mr. G. J. Khouri

Ms. S. E. Temple

Mr. N. D. Karlovich

Mr. A. J. Lerch

Mr. C. J. Even

Mr. B. J. Kemker

Ms. N. C. Coover

**Oglethorpe Power Corporation**

Mr. R. B. Brinkman

Mr. E. Rasmussen

**Municipal Electric Authority of Georgia**

Mr. J. E. Fuller

Mr. S. M. Jackson

**Dalton Utilities**

Mr. T. Bundros

**Westinghouse Electric Company, LLC**

Dr. L. Oriani (w/o enclosures)  
Mr. D. C. Durham (w/o enclosures)  
Mr. M. M. Corletti  
Ms. L. G. Iller  
Ms. J. Monahan  
Mr. J. L. Coward

**Other**

Mr. J. E. Hesler, *Bechtel Power Corporation*  
Ms. L. Matis, *Tetra Tech NUS, Inc.*  
Dr. W. R. Jacobs, Jr., Ph.D., *GDS Associates, Inc.*  
Mr. S. Roetger, *Georgia Public Service Commission*  
Ms. S. W. Kernizan, *Georgia Public Service Commission*  
Mr. K. C. Greene, *Troutman Sanders*  
Mr. S. Blanton, *Balch Bingham*

U.S. Nuclear Regulatory Commission  
ND-18-0696 Enclosure  
Page 1 of 3

**Southern Nuclear Operating Company  
ND-18-0696  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion of ITAAC 2.2.05.07a.ii [Index Number 266]**

## **ITAAC Statement**

### **Design Commitment**

7.a) The VES provides a 72-hour supply of breathable quality air for the occupants of the MCR.

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

ii) Analysis of storage capacity will be performed based on manufacturers data.

### **Acceptance Criteria**

ii) The calculated storage capacity is greater than or equal to 327,574 scf.

## **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Main Control Room Emergency Habitability System (VES) provides a 72-hour supply of breathable quality air for the occupants of the Main Control Room (MCR). This ITAAC requires an analysis be performed using manufacturers data to demonstrate that the capacity of the VES emergency air storage tanks is greater than or equal to 327,574 standard cubic feet (scf).

After fabrication, the free volume of the 32 emergency air storage tanks for each Unit 3 and Unit 4 were measured by the manufacturer. To calculate the free volume of each tank, the manufacturer determined the weight of each air storage tank when empty and when filled with water using a scale. The weight of the empty air storage tank was subtracted from the weight of the water-filled air storage tank to determine the weight of the water within the contained volume of each air storage tank. The water weight was converted to volume using the density of water, compensated for temperature at the time of measurement. The total free volume in cubic feet for each Units' 32 tanks is the summation of the individual tanks' free volume. The total storage capacity in scf of air is calculated by converting the total free volume of compressed air at the bounding temperature and pressure conditions to an expanded volume in scf at standard pressure and temperature conditions.

The results of the analysis are documented in the Vogtle Units 3 & 4 Air Tanks Volume Calculations (Reference 1). The results verify the total calculated storage capacity of the VES emergency air storage tanks is 328,086 scf for Unit 3 and 327,997 scf for Unit 4 which meet the ITAAC acceptance criteria.

Reference 1 is available for NRC inspection as part of the Unit 3 and Unit 4 ITAAC 2.2.05.07a.ii Completion Packages (References 3 and 4, respectively).

### **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 Packages for ITAAC 2.2.05.07a.ii for Unit 3 and Unit 4 (References 2 and 3 respectively) and are available for NRC review.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.05.07a.ii was performed for VEGP Unit 3 and Unit 4 and that the prescribed acceptance criteria were 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. SV0-MS23-VDR-001, Revision 0 "Vogtle Units 3 & 4 Air Tanks Volume Calculations"
2. 2.2.05.07a.ii-U3-CP-Rev 0, "Completion Package for the Unit 3 ITAAC 2.2.05.07a.ii [Index number 266]"
3. 2.2.05.07a.ii-U4-CP-Rev 0, "Completion Package for the Unit 4 ITAAC 2.2.05.07a.ii [Index number 266]"