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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3  
ITAAC Closure Notification on Completion of ITAAC 2.2.01.07.i [Index Number 107]

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 2.2.01.07.i [Index Number 107], for verifying the leakage rate from containment for the integrated leak rate test is less than  $L_a$ . 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 is 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 2.2.01.07.i [Index Number 107]

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**Southern Nuclear Operating Company  
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Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.2.01.07.i [Index Number 107]**

## **ITAAC Statement**

### **Design Commitment**

7. The CNS provides the safety-related function of containment isolation for containment boundary integrity and provides a barrier against the release of fission products to the atmosphere.

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

i) A containment integrated leak rate test will be performed.

### **Acceptance Criteria**

i) The leakage rate from containment for the integrated leak rate test is less than  $L_a$ .

## **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Containment System (CNS) provides the safety-related function of containment isolation for containment boundary integrity and provides a barrier against the release of fission products to the atmosphere. The subject ITAAC performed a Type A containment integrated leak rate test (ILRT) to confirm that the leakage rate from containment was less than  $L_a$ .  $L_a$  is defined as the maximum allowable containment leakage as defined in 10 CFR 50 Appendix J.

The ILRT was performed in accordance with Unit 3 test procedure (Reference 1), to demonstrate that the leakage rate from containment was less than  $L_a$ . The testing was consistent with the applicable Type A testing guidance contained in ANSI/ANS-56.8-1994 (Reference 3).

The ILRT test included prerequisites that verified the local leak rate testing (LLRT) was completed to support performance of the ILRT. Containment isolation valves were placed in their post-accident positions and closure was accomplished by normal operation and with no preliminary exercising or adjustments. Those portions of fluid systems that are part of the reactor coolant pressure boundary and are open directly to the containment atmosphere under post-accident conditions and become an extension of the boundary of the containment, were opened or vented to the containment atmosphere prior to and during the test. When required, portions of the systems inside containment that penetrate containment and could rupture as a result of a loss of coolant accident were vented to the containment atmosphere and drained of water to the extent necessary to provide exposure of the containment isolation valves to containment air test pressure and allowed them to be subjected to the full differential test pressure. Tanks inside the containment were vented to the containment atmosphere as necessary to protect them from the effects of external test pressure and/or to preclude leakage which could have affected the accuracy of the test results. Similarly, instrumentation and other components that could be adversely affected by the test pressure were vented or removed from containment.

The containment was pressurized and time was allotted for outgassing. Containment pressure was then increased to full test pressure, allowed to stabilize and then the leak test was commenced. During the test, containment pressure, calculated mass, dry bulb temperature and dew-point temperature were recorded. After the required data was obtained, a slow, monitored

pressure decrease was started and utilized to verify the accuracy of the leak rate data obtained during the ILRT.

The leakage rate from containment was corrected for measurement uncertainty and calculated utilizing the methodology described in ANSI/ANS-56.8-1994. The containment leakage rate for Unit 3 was 0.0269  $L_a$ . The Unit 3 completed ILRT test (Reference 1) confirmed the leakage rate from containment was less than  $L_a$  and is documented in Reference 2.

References 1 and 2 are available for NRC inspection as well as the Unit 3 ITAAC 2.2.01.07.i Completion Package (Reference 4).

### **ITAAC Finding Review**

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 one finding of a performance deficiency documented in Inspection Report 05200025/2020009 for failure to complete the containment system prior to commencing the Unit 3 ILRT. This condition was related to retaining rings for the containment Electrical Penetration Assemblies (EPAs) not being installed prior to the performance of the ILRT. To address this concern, the following actions were taken, as part of Corrective Action Report (CAR) 80003535.

- Pressure retaining rings were installed around the affected welds
- ASME pressure testing (solution film testing) was performed on the retaining rings
- LLRT testing was performed on each pressure retaining ring
- LLRT data was added to the type B and C testing

The LLRT results were added to the Upper Confidence Level calculation and the impact was negligible.

The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.2.01.07.i (Reference 4) and is available for NRC review.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.01.07.i was performed for VEGP Unit 3 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. 3-CNS-ITPP-501, Rev 6.0, "Containment Integrated Leak Rate Test (Type A)"
2. SV3-CNS-ITR-800107, Rev 0, "Unit 3 Recorded Results of Containment Integrated Leak Rate Test: ITAAC 2.2.01.07.i"
3. ANSI/ANS-56.8-1994, "Containment System Leakage Testing Requirements"
4. 2.2.01.07.i-U3-CP-Rev0, ITAAC Completion Package