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ND-23-0577  
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission  
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Washington, DC 20555-0001

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 4  
ITAAC Closure Notification on Completion of ITAAC 2.2.03.11c.i [Index Number 212]

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 2.2.03.11c.i [Index Number 212] which confirms that valves identified in Combined License (COL) Appendix C, Table 2.2.3-1 as having Diverse Actuation System (DAS) control, perform their active function after receiving a signal from the DAS. 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 Kelli Roberts at 706-848-6991.

Respectfully submitted,



Jamie M. Coleman  
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.2.03.11c.i [Index Number 212]

JMC/TL/sfr

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cc: Regional Administrator, Region II  
Director, Office of Nuclear Reactor Regulation (NRR)  
Director, Vogtle Project Office NRR  
Senior Resident Inspector – Vogtle 3 & 4

**Southern Nuclear Operating Company  
ND-23-0577  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.2.03.11c.i [Index Number 212]**

## **ITAAC Statement**

### **Design Commitment**

11.c) The valves identified in Table 2.2.3-1 as having DAS control perform their active function after receiving a signal from the DAS.

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

i) Testing will be performed on the squib valves identified in Table 2.2.3-1 using real or simulated signals into the DAS without stroking the valve.

### **Acceptance Criteria**

i) Squib valves receive an electrical signal at the valve electrical leads that is capable of actuating the valve after a signal is input to the DAS.

## **ITAAC Determination Basis**

Multiple ITAAC were performed to verify that the valves identified in Combined License (COL) Appendix C Table 2.2.3-1 as having Diverse Actuation System (DAS) control perform an active function after receiving a signal from DAS. The subject ITAAC performed testing on the squib valves listed in Attachment A.

Testing was performed in accordance with Unit 4 work order and preoperational test procedure listed in Reference 1 to verify that the valves identified in Attachment A as having DAS control perform an active function after receiving a signal from DAS. Testing was performed on the squib valves using real signals into the DAS without stroking the valve and ensured the squib valves received an electrical signal at the valve electrical leads that was capable of actuating the valve.

Circuit resistance was measured and inside and outside containment temperatures were measured at multiple locations and were used to calculate the circuit resistance expected during accident conditions. During testing each squib valve identified in Attachment A had the squib valve igniters replaced with test resistor fixtures. Test resistance was modified to be greater than the calculated maximum resistance expected during accident conditions. The squib valves were armed using the manual controls on the DAS panel and then actuated with the DAS actuation controls. A Data Acquisition (DAQ) system was used to measure both firing current and signal duration.

The minimum signal necessary to actuate the squib valves was specified in valve design information as at least 3.7 amperes for 10 milliseconds. The information recorded during testing of duration and firing current was utilized to confirm that a sufficient test signal was received at each of the squib valves.

The completed test results (Reference 1), confirmed that each squib valve, identified in the Attachment A, received an electrical signal at the valve electrical leads that was capable of actuating the squib valve after a signal is input to the DAS.

Reference 1 is available for NRC inspection as part of the Unit 4 ITAAC Completion Package (Reference 2).

**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 there were no relevant findings associated with this ITAAC. The review is documented in the ITAAC Completion Package (Reference 2) and is available for NRC review.

**ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC ITAAC 2.2.03.11c.i was performed for VEGP 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. SV4-PXS-ITR-800212, Rev 0, "ITAAC Technical Report, Unit 4 Testing Results of PXS Squib Valves: ITAAC 2.2.03.11c.i, NRC Index Number 212"
2. 2.2.03.11c.i-U4-CP-Rev 0, ITAAC Completion Package

## Attachment A

\*Excerpt from COL Appendix C Table 2.2.3-1

<b>Equipment Name*</b>	<b>Tag No.*</b>	<b>Control PMS/ DAS*</b>
Containment Recirculation A Squib Valve	PXS-PL-V118A	Yes/Yes
Containment Recirculation B Squib Valve	PXS-PL-V118B	Yes/Yes
Containment Recirculation A Squib Valve	PXS-PL-V120A	Yes/Yes
Containment Recirculation B Squib Valve	PXS-PL-V120B	Yes/Yes
IRWST Injection A Squib Valve	PXS-PL-V123A	Yes/Yes
IRWST Injection B Squib Valve	PXS-PL-V123B	Yes/Yes
IRWST Injection A Squib Valve	PXS-PL-V125A	Yes/Yes
IRWST Injection B Squib Valve	PXS-PL-V125B	Yes/Yes