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10 CFR 52.99(c)(1)

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.1.02.12a.iv [Index Number 56]

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 2.1.02.12a.iv [Index Number 56] for verifying that each Reactor Coolant System (RCS) automatic depressurization squib valve changes position as indicated in Combined License (COL) Appendix C, Table 2.1.2-1 under design conditions. 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 David Woods at 706-848-6903.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3&4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.1.02.12a.iv [Index Number 56]

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**Southern Nuclear Operating Company
ND-16-1563
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.1.02.12a.iv [Index Number 56]**

ITAAC Statement

Design Commitment:

12.a) The automatic depressurization valves identified in Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table.

Inspections, Tests, Analyses:

iv) Tests or type tests of squib valves will be performed that demonstrate the capability of the valve to operate under its design conditions.

Acceptance Criteria:

iv) A test report exists and concludes that each squib valve changes position as indicated in Table 2.1.2-1 under design conditions.

ITAAC Determination Basis

Multiple Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) are performed to demonstrate that the automatic depressurization valves identified in VEGP Unit 4 Combined License (COL) Appendix C, Table 2.1.2-1 perform an active safety-related function to change position as indicated in the table. The subject ITAAC requires tests or type tests of squib valves to be performed to demonstrate the capability of the valve to operate under its design conditions.

The functional qualification program for the AP1000 squib valves was developed based on American Society of Mechanical Engineers (ASME) QME-1-2007, "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants" (Reference 1). The qualification was based on the ASME QME-1-2007 requirements for power operated valve assemblies.

Functional qualification was performed under the design conditions identified in the design specification for the valves (Reference 2) to demonstrate that each squib valve is qualified to perform its designated function when used in its intended service. In accordance with ASME QME-1-2007, qualification is substantiated by demonstrating the relationship between the service requirements and the type-testing and analysis that was conducted as part of this qualification program.

Type testing was performed, including natural frequency determination, sealing capability testing, functional operation, and flow characteristics, for the ranges of the pressure, temperature and flow for each valve. In accordance with ASME QME-1-2007, the functional qualification process for these valves also included valve internal inspections, actuator inspection and testing, orientation requirements, leakage limitations, diagnostic data collection and analysis methods, static and dynamic flow diagnostic testing, and thermal binding evaluations.

The results of the qualification are documented in the Equipment Qualification Data Package (Reference 3) and the Equipment Qualification Summary Report (Reference 4) which are identified in Attachment A for each applicable valve. These reports summarize the test methodology and ASME QME-1-2007 functional qualification that demonstrate that each squib valve changes position as indicated in VEGP Unit 4 COL Appendix C Table 2.1.2-1 under design conditions.

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 two (2) closed notices of nonconformance (NON) associated with this ITAAC:

1. 99900080/2012-201-01
2. 99900080/2013-201-01

The corrective actions for the findings have been completed and the findings are closed. The ITAAC completion review document number is referenced in the Vogtle Unit 4 ITAAC completion package for ITAAC 2.1.02.12a.iv (Reference 5) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.02.12a.iv was performed for VEGP Unit 4 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. American Society of Mechanical Engineers (ASME) QME-1-2007, "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants"
2. APP-PV70-Z0-001 Revision 6, "Squib (Pyrotechnic Actuated) Valves, ASME Boiler and Pressure Vessel Code, Section III Class 1"
3. APP-PV70-VBR-005 Revision 0, "Equipment Qualification Data Package for 14" Squib Valves for Use in the AP1000 Plant"
4. APP-PV70-VBR-004 Revision 0, "Equipment Qualification Summary Report for 14" Squib Valves for Use in the AP1000 Plant"
5. SVP_SV0_004090, Attachment 1, "Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.1.02.12a.iv [COL Index Number 56] (RCS Squib Valves Position)"

Attachment A

Excerpt from COL Appendix C Table 2.1.2-1

SYSTEM: REACTOR COOLANT SYSTEM

Equipment Name	Tag No.	Active Function	EQSR Report Number	EQDP Report Number
Fourth-stage ADS Squib Valve	RCS-PL-V004A	Transfer Open	APP-PV70-VBR-004	APP-PV70-VBR-005
Fourth-stage ADS Squib Valve	RCS-PL-V004B	Transfer Open	APP-PV70-VBR-004	APP-PV70-VBR-005
Fourth-stage ADS Squib Valve	RCS-PL-V004C	Transfer Open	APP-PV70-VBR-004	APP-PV70-VBR-005
Fourth-stage ADS Squib Valve	RCS-PL-V004D	Transfer Open	APP-PV70-VBR-004	APP-PV70-VBR-005