Southern Nuclear

Jamie M. Coleman
Regulatory Affairs Director
Vogtle 3 & 4

7825 River Road
Waynesboro, GA 30830
706-848-6926 tel

MAY 3 1 2022

Docket No.: 52-025

ND-20-0747
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
ITAAC Closure Notification on Completion of ITAAC 2.1.02.11a.i [Index Number 46]

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 2.1.02.11a.i [Index Number 46] for verification that controls in the MCR operate to cause a signal at the squib valve electrical leads which is capable of actuating the squib valves identified in VEGP Combined License (COL) Appendix C Table 2.1.2-1. 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 Coleman

Jamie M. Coleman
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.1.02.11a.i [Index Number 46]

JMC/DLW/sfr

To:
Southern Nuclear Operating Company/ Georgia Power Company
Mr. Peter P. Sena III
Mr. D. L. McKinney
Mr. H. Nieh
Mr. G. Chick
Mr. S. Stimac
Mr. P. Martino
Mr. D. Pitts
Mr. J.B. Williams
Mr. A. S. Parton
Ms. K. A. Roberts
Ms. J.M. Coleman
Mr. C. T. Defnall
Mr. C. E. Morrow
Mr. K. J. Drudy
Mr. J. M. Fisher
Mr. R. L. Beilke
Mr. S. Leighty
Ms. A. C. Chamberlain
Mr. J. C. Haswell
Document Services RTYPE: VND.LI.L06
File AR.01.02.06

cc:
Nuclear Regulatory Commission
Ms. M. Bailey
Mr. M. King
Mr. G. Bowman
Ms. A. Veil
Mr. C. P. Patel
Mr. G. J. Khouri
Mr. C. J. Even
Mr. B. J. Kemker
Ms. N. C. Coovert
Mr. C. Welch
Mr. J. Gaslevic
Mr. O. Lopez-Santiago
Mr. G. Armstrong
Mr. M. Webb
Mr. T. Fredette
Mr. C. Santos
Mr. B. Davis
Mr. J. Vasquez
Mr. J. Eargle
Ms. K. McCurry
Mr. J. Parent
Mr. B. Griman
Mr. V. Hall

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
Mr. D. C. Durham
Mr. M. M. Corletti
Mr. Z. S. Harper
Ms. S. L. Zwack

Other
Mr. S. W. Kline, *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*
Mr. R. L. Trokey, *Georgia Public Service Commission*
Mr. K. C. Greene, *Troutman Sanders*
Mr. S. Blanton, *Balch Bingham*

Southern Nuclear Operating Company
ND-20-0747
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.1.02.11a.i [Index Number 46]

ITAAC Statement

Design Commitment

11.a) Controls exist in the MCR to cause the remotely operated valves identified in Table 2.1.2-1 to perform active functions.

Inspections/Tests/Analyses

i) Testing will be performed on the squib valves identified in Table 2.1.2-1 using controls in the MCR without stroking the valve.

Acceptance Criteria

i) Controls in the MCR operate to cause a signal at the squib valve electrical leads which is capable of actuating the squib valve.

ITAAC Determination Basis

Multiple ITAAC are performed to verify that controls exist in the Main Control Room (MCR) to cause the remotely operated valves identified in Combined License (COL) Appendix C Table 2.1.2-1 (Attachment A) to perform active functions. The subject ITAAC performed testing on the squib valves listed in Attachment A.

Testing was performed in accordance with the preoperational tests and component test work orders listed in Reference 1 to verify that controls exist in the MCR to cause the valves identified in Attachment A to perform their active functions. Testing was performed on the squib valves using controls in the MCR without stroking the valve and ensured the controls in the MCR operate to cause a signal at the squib valve electrical leads which was capable of actuating the squib valve.

Squib valve actuation signals generated in the Protection and Safety Monitoring System (PMS) were sent to the Component Interface Modules (CIM), resulting in an actuation of the CIM for the respective squib valve. The CIM is a safety-related component located inside the respective PMS cabinets which provides the capability for on/off control of individual safety-related plant components. Squib valve actuation signal output from the actuated CIM is sent to the respective squib valve through the squib valve controller. To provide overlap, the Reference 1 component test work orders verified that when PMS controls were operated in the MCR, the CIM was actuated and a signal was received at the squib valve controller. From the squib valve controller, the Reference 1 preoperational tests used a test tool connected to the squib valve controller to initiate a test signal and verify the signal was received at the squib valve electrical leads.

The Reference 1 component test work orders for each squib valve identified in Attachment A were conducted by manually initiating a PMS signal from the MCR using the PMS Safety Display Panel Automatic Depressurization System (ADS) stage 4 squib valve soft controls. The squib valve actuation signal from the CIM was verified locally by measuring the arming and firing voltages at the Squib Valve Controller (SVC) cabinet. Each squib valve identified in Attachment A had the electrical leads disconnected to prevent stroking the valve.

The Reference 1 preoperational tests for each squib valve identified in Attachment A were conducted by connecting a PMS SVC Test Tool to the SVC. 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. The calculated circuit resistances were verified to meet the minimum and maximum allowable resistances. The circuit resistance information was used to determine the circuit resistance input to the PMS SVC Test Tool. A multimeter along with a temporary data acquisition system was connected to the PMS SVC Test Tool to determine voltage and signal duration. The PMS SVC Test Tool was then used to initiate an arm and test fire sequence. Firing current was determined from the voltage measurements taken during the arm and test fire sequence.

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

The test results identified in Reference 1 confirmed that controls in the MCR operate to cause a signal at the squib valve electrical leads that is capable of actuating the squib valves identified in Attachment A.

Reference 1 is available for NRC inspection as part of the Unit 3 ITAAC 2.1.02.11a.i 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 ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.1.02.11a.i 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 2.1.02.11a.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. SV3-RCS-ITR-800046, Rev. 1, ITAAC Technical Report, "Unit 3 Testing Results of RCS Squib Valve MCR Controls: ITAAC 2.1.02.11a.i, NRC Index Number: 46"
2. 2.1.02.11a.i-U3-CP-Rev0, "ITAAC Completion Package"

Attachment A*

Equipment Name	Tag No.	Control PMS/ DAS
Fourth-stage ADS Squib Valve	RCS-PL-V004A	Yes/Yes
Fourth-stage ADS Squib Valve	RCS-PL-V004B	Yes/Yes
Fourth-stage ADS Squib Valve	RCS-PL-V004C	Yes/Yes
Fourth-stage ADS Squib Valve	RCS-PL-V004D	Yes/Yes

* Excerpt from COL App C Table 2.1.2-1