Southern Nuclear

Michael J. Yox
Regulatory Affairs Director
Vogtle 3 & 4

7825 River Road
Waynesboro, GA 30830
706-848-6459 tel

FEB 25 2022

Docket No.: 52-025

ND-22-0134
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 2.6.02.02b [Index Number 594]

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 2.6.02.02b [Index Number 594]. This ITAAC confirms that EDS load group 1, 2, 3, and 4 batteries can supply the corresponding DC switchboard load for a period of 2 hours without recharging. The closure process for this ITAAC is based on guidance described in Nuclear Energy Institute (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) request 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 A. Roberts at 706-848-6991.

Respectfully submitted,

Michael J. Yox
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.6.02.02b [Index Number 594]

MJY/DCH/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. J.B. Williams
Mr. M. J. Yox
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

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
Mr. T. Fanelli
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
Mr. J. L. Coward

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-22-0134

Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.6.02.02b [Index Number 594]

ITAAC Statement

Design Commitment:

2.b) Each EDS load group 1, 2, 3, and 4 battery supplies the corresponding dc switchboard bus load for a period of 2 hours without recharging.

Inspections, Tests, Analyses:

Testing of each as-built battery will be performed by applying a simulated or real load, or a combination of simulated or real loads. The test will be conducted on a battery that has been fully charged and has been connected to a battery charger maintained at 135 ±1 V for a period of no less than 24 hours prior to the test.

Acceptance Criteria:

The battery terminal voltage is greater than or equal to 105 V after a period of no less than 2 hours, with an equivalent load greater than 850 amps.

ITAAC Determination Basis

Testing was performed in accordance with Unit 3 component test work orders documented in Reference 1 to verify that each Non-Class 1E direct current (dc) and Uninterruptible Power Supply System (EDS) load group 1, 2, 3, and 4 battery supplies the corresponding dc switchboard bus load for a period of 2 hours without recharging.

A battery service test, as defined in Institute of Electrical and Electronics Engineers (IEEE) Standard 450-1995, was performed using a load bank to apply a load on the battery that results in a discharge current greater than 850 amps. The component test is performed on each fully charged as-built EDS battery that has been connected to a charger maintained at 135 ±1 V for a period of no less than 24 hours prior to the test. The EDS battery is disconnected from the battery charger and a load bank is then connected to the output of the battery, adjusted to a discharge current greater than 850 amps. Discharge current and battery terminal voltage at the start of the test and upon completion of the 2-hour test from the component test package work orders are included in Reference 1. The EDS battery discharge current and terminal voltage measurements are summarized in Attachment A and demonstrate that each EDS battery meets the acceptance criteria.

The Unit 3 component test results confirm the battery terminal voltage is greater than or equal to 105 V after a period of no less than 2 hours with an equivalent load greater than 850 amps.

Reference 1 is available for NRC inspection as part of the Unit 3 ITAAC 2.6.02.02b 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 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 2.6.02.02b 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-EDS-ITR-800594, Rev. 0, "ITAAC Technical Report, Unit 3 Test Results of Non Class 1E DC and UPS System: ITAAC 2.6.02.02b [NRC Index Number 594]"

2. 2.6.02.02b-U3-CP-Rev0, ITAAC Completion Package

Attachment A

System: Non-Class 1E dc and Uninterruptible Power Supply System

Unit	Component Name*	Tag No.*	Pre-test Date	Pre-test Voltage & Time	Test Discharge Current, Voltage & Time at Start	Test Discharge Current, Voltage & Time at End (>2 Hours)
3	Load Group 1 Battery	EDS1-DB-1	1/7/22	135 V 15:32 hrs	890 Amp / 126.4 V 15:32 hrs	890 Amp / 111.6 V 17:48 hrs
3	Load Group 2 Battery	EDS2-DB-1	1/22/22	135 V 17:37 hrs	870 Amp / 127.2 V 17:37 hrs	870 Amp / 111.5 V 19:52 hrs
3	Load Group 3 Battery	EDS3-DB-1	1/30/22	134.9 V 10:49 hrs	[1] 973 Amp / 126.9 V 10:49 hrs	[1] 766 Amp / 105 V 16:40 hrs
3	Load Group 4 Battery	EDS4-DB-1	2/15/22	135 V 9:15 hrs	[2] 973 Amp / 126.9 V 9:15 hrs	[2] 766 Amp / 105 V 14:53 hrs

* Excerpt from COL Appendix C, Table 2.6.2-2

NOTES:

Modified performance tests were performed for Load Group 3 and 4 batteries in lieu of a service test, in accordance with IEEE standard 450-1995. The battery terminal voltage stayed above 105 V until the end of the load sequence for Load Group 3 and 4 batteries. See the load sequence for each test below:

1. Group 3:
   Load sequence = 1 min @ 973 A, 1hr 59 min @850A, 2hr @150A, and 1 hr 50min @ 766A

2. Group 4:
   Load sequence = 1 min @ 973 A, 1hr 59 min @850A, 2hr @150A, and 1 hr 37min @ 766A