



JAN 26 2018

Docket Nos.: 52-025  
52-026

Michael J. Yox  
Regulatory Affairs Director  
Vogtle 3 & 4

7825 River Road  
Waynesboro, GA 30830  
706-848-6459 tel  
410-474-8587 cell  
myox@southernco.com

ND-18-0087  
10 CFR 52.99(c)(3)

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

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3 and Unit 4  
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load  
Item 2.3.10.05a.i [Index Number 437]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of January 23, 2018, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.10.05a.i [Index Number 437] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing this ITAAC. Southern Nuclear Operating Company will, at a later date, provide additional notifications for ITAAC that have not been completed 225-days prior to initial fuel load.

This notification is informed by 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. In accordance with NEI 08-01, this notification includes ITAAC for which required inspections, tests, or analyses have not been performed or have been only partially completed. All ITAAC will be fully completed and all Section 52.99(c)(1) ITAAC Closure Notifications will be submitted to NRC to support the Commission finding that all acceptance criteria are met prior to plant operation, as required by 10 CFR 52.103(g).

This letter contains no new NRC regulatory commitments.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,

Michael J. Yox  
Regulatory Affairs Director Vogtle 3 & 4

U.S. Nuclear Regulatory Commission

ND-18-0087

Page 2 of 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.3.10.05a.i [Index Number 437]

MJY/PGL/amw

**To:**

**Southern Nuclear Operating Company / Georgia Power Company**

Mr. D. A. Bost (w/o enclosures)

Mr. M. D. Rauckhorst (w/o enclosures)

Mr. M. D. Meier

Mr. D. H. Jones (w/o enclosures)

Mr. D. L. McKinney

Mr. M. J. Yox

Mr. D. L. Fulton

Mr. J. D. Williams

Mr. F. H. Willis

Ms. A. L. Pugh

Mr. A. S. Parton

Mr. W. A. Sparkman

Mr. C. E. Morrow

Ms. K. M. Stacy

Mr. M. K. Washington

Mr. J. P. Redd

Ms. A. C. Chamberlain

Mr. D. R. Culver

Mr. R. L. Beilke

Mr. T. G. Petrak

Document Services RTYPE: VND.LI.L06

File AR.01.02.06

**cc:**

**Nuclear Regulatory Commission**

Mr. W. Jones (w/o enclosures)

Ms. J. M. Heisserer

Mr. C. P. Patel

Mr. M. E. Ernstes

Mr. G. J. Khouri

Mr. T. E. Chandler

Ms. S. E. Temple

Ms. P. Braxton

Mr. T. C. Brimfield

Mr. A. J. Lerch

Mr. C. J. Even

Mr. F. D. Brown

Mr. B. J. Kemker

Ms. A. E. Rivera-Varona

**Oglethorpe Power Corporation**

Mr. K. T. Haynes

Mr. R. B. Brinkman

**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 (w/o enclosures)

Mr. D. C. Durham (w/o enclosures)

Mr. M. M. Corletti

Ms. L. G. Iller

Mr. D. Hawkins

Ms. S. DiTommaso

Mr. J. L. Coward

Ms. N. E. Deangelis

**Other**

Mr. J. E. Hesler, *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*

Ms. S. W. Kernizan, *Georgia Public Service Commission*

Mr. K. C. Greene, *Troutman Sanders*

Mr. S. Blanton, *Balch Bingham*

**Southern Nuclear Operating Company  
ND-18-0087  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.3.10.05a.i [Index Number 437]**

### **ITAAC Statement**

#### **Design Commitment:**

5.a) The seismic Category I equipment identified in Table 2.3.10-1 can withstand seismic design basis loads without loss of safety function.

#### **Inspections, Tests, Analyses:**

- i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.3.10-1 is located on the Nuclear Island.
- ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performed.
- iii) Inspection will be performed for the existence of a report verifying that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

#### **Acceptance Criteria:**

- i) The seismic Category I equipment identified in Table 2.3.10-1 is located on the Nuclear Island.
- ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.
- iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

### **ITAAC Completion Description**

This ITAAC requires that inspections, tests, and analyses be performed and documented to ensure the Liquid Radwaste System (WLS) components identified as seismic Category I in the Combined License (COL) Appendix C, Table 2.3.10-1 (the Table) are designed and constructed in accordance with applicable requirements.

#### **i) The seismic Category I equipment identified in Table 2.3.10-1 is located on the Nuclear Island.**

To assure that seismic Category I components can withstand seismic design basis loads without loss of safety function, all the components in the Table are designed to be located on the seismic Category I Nuclear Island. In accordance with Equipment Qualification (EQ) Walkdown ITAAC Guideline (Reference 1), an inspection is conducted of the WLS to confirm the satisfactory installation of the seismically qualified components. The inspection includes verification of equipment make/model/serial number and verification of equipment location (Building, Elevation, Room). The EQ As-Built Reconciliation Reports (EQRR) (Reference 2) identified in Attachment A document the results of the inspection and conclude that the seismic Category I components are located on the Nuclear Island.

ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.

Seismic Category I components in the Table require type tests and/or analyses to demonstrate structural integrity and operability. Structural integrity of the seismic Category I valves, as well as other passive seismic Category I mechanical equipment, is demonstrated by analysis in accordance with American Society of Mechanical Engineers (ASME) Code Section III (Reference 3). Functionality of the subset of active safety-related valves under seismic loads is determined using the guidance of ASME QME-1-2007 (Reference 4).

The specific qualification method (i.e., type testing, analysis, or combination) used for each component in the Table is identified in Attachment A. Additional information about the methods used to qualify AP1000 safety-related equipment is provided in the Updated Final Safety Analysis Report (UFSAR) Appendix 3D (Reference 5). The EQ Reports (Reference 6) identified in Attachment A contain applicable test reports and associated documentation and conclude that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function.

iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

An inspection (Reference 1) is conducted to confirm the satisfactory installation of the seismically qualified components in the Table. The inspection verifies the equipment make/model/serial number, as-designed equipment mounting orientation, anchorage and clearances, and electrical and other interfaces. The documentation of installed configuration of seismically qualified components includes photographs and/or sketches/drawings of equipment/mounting/interfaces.

As part of the seismic qualification program, consideration is given to the definition of the clearances needed around the equipment mounted in the plant to permit the equipment to move during a postulated seismic event without causing impact between adjacent pieces of safety-related equipment. This is done as part of seismic testing by measuring the maximum dynamic relative displacement of the top and bottom of the equipment. EQ Reports (Reference 6) identify the equipment mounting employed for qualification and establish interface requirements for assuring that subsequent in-plant installation does not degrade the established qualification. Interface requirements are defined based on the test configuration and other design requirements.

Attachment A identifies the EQRR (Reference 2) completed to verify that the as-built seismic Category I equipment listed in the Table, including anchorage, are seismically bounded by the tested or analyzed conditions and NRC Regulatory Guide 1.100 (Reference 7).

Together, these reports (References 2 and 6) provide evidence that the ITAAC Acceptance Criteria requirements are met:

- The seismic Category I equipment identified in Table 2.3.10-1 is located on the Nuclear Island;

- A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function; and
- A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.

References 2 and 6 are available for NRC inspection as part of the Unit 3 and Unit 4 ITAAC 2.3.10.05a.i Completion Packages (References 8 and 9, respectively).

### **List of ITAAC Findings**

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 finding review, which included now-consolidated ITAAC Indexes 438 and 439, found no relevant ITAAC findings associated with this ITAAC.

### **References (available for NRC inspection)**

1. ND-xx-xx-001, "EQ Walkdown ITAAC Guideline"
2. EQ As-Built Reconciliation Reports (EQRR) as identified in Attachment A for Units 3 and 4
3. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section III, "Rules for Construction of Nuclear Power Plant Components," 1998 Edition with 2000 Addenda
4. ASME QME-1-2007, "Qualification of Active Mechanical Equipment Used in Nuclear Power Plants," The American Society of Mechanical Engineers, June 2007
5. Vogtle 3&4 Updated Final Safety Analysis Report Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment"
6. Equipment Qualification (EQ) Reports as identified in Attachment A
7. Regulatory Guide 1.100, Rev. 2, "Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants"
8. 2.3.10.05a.i-U3-CP-Rev X, "Completion Package for Unit 3 ITAAC 2.3.10.05a.i [Index Number 437]"
9. 2.3.10.05a.i-U4-CP-Rev X, "Completion Package for Unit 4 ITAAC 2.3.10.05a.i [Index Number 437]"
10. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"



**Attachment A**

System: Liquid Radwaste System (WLS)

<b>Equipment Name *</b>	<b>Tag No. *</b>	<b>Seismic Cat. I *</b>	<b>Type of Qual.</b>	<b>EQ Reports (Reference 6)</b>	<b>As-Built EQ Reconciliation Report (EQRR) (Reference 2)*</b>
WLS Containment Sump Level Sensor	WLS-034	Yes	Type Testing & Analysis	APP-JE27-VBR-XXX / APP-JE27-VBR-YYY	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Containment Sump Level Sensor	WLS-035	Yes	Type Testing & Analysis	APP-JE27-VBR-XXX / APP-JE27-VBR-YYY	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Containment Sump Level Sensor	WLS-036	Yes	Type Testing & Analysis	APP-JE27-VBR-XXX / APP-JE27-VBR-YYY	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Drain from Passive Core Cooling System (PXS) Compartment A (Room 11206) Check Valve	WLS-PL-V071B	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Drain from PXS Compartment A (Room 11206) Check Valve	WLS-PL-V072B	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Drain from PXS Compartment B (Room 11207) Check Valve	WLS-PL-V071C	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Drain from PXS Compartment B (Room 11207) Check Valve	WLS-PL-V072C	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0
WLS Drain from Chemical and Volume Control System (CVS) Compartment (Room 11209) Check Valve	WLS-PL-V071A	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0

<b>Equipment Name <sup>+</sup></b>	<b>Tag No. <sup>+</sup></b>	<b>Seismic Cat. I <sup>+</sup></b>	<b>Type of Qual.</b>	<b>EQ Reports (Reference 6)</b>	<b>As-Built EQ Reconciliation Report (EQRR) (Reference 2)*</b>
WLS Drain from CVS Compartment (Room 11209) Check Valve	WLS-PL- V072A	Yes	Type Testing & Analysis	APP-PV03-VBR-014 / APP-PV03-VBR-013	2.3.10.05a.i-U3- EQRR-PCDXXX- Rev 0

Notes:

<sup>+</sup> Excerpt from COL Appendix C Table 2.3.10-1

\* The Unit 4 As-Built EQRR are numbered "2.3.10.05a.i-U4-EQRR-PCDXXX-Rev 0"