

Michael J. Yox  
Regulatory Affairs Director  
Vogtle 3 & 4  
Nuclear Development

Southern Nuclear  
Operating Company, Inc.  
7825 River Road  
Waynesboro, GA 30830  
Tel: 706.848.6459



Docket No.: 52-026

**DEC 28 2016**

ND-16-2798  
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 4  
ITAAC Closure Notification on Completion of ITAAC 2.5.02.02.ii [Index Number 523]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), 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 2.5.02.02.ii [Index Number 523] for verifying that a report exists and concludes that the seismic Category I equipment in the Protection and Safety Monitoring System (PMS) can withstand seismic design basis loads without loss of safety function. 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

MJY/bh/amm

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.5.02.02.ii [Index Number 523]

**To:**

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

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

Mr. M. D. Meier

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

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

Ms. K. D. Fili

Mr. D. L. McKinney

Mr. D. L. Fulton

Mr. C. E. Morrow

Mr. M. J. Yox

Mr. D. Woods

Ms. A. L. Pugh

Ms. K. M. Stacy

Mr. A. S. Parton

Mr. W. A. Sparkman

Mr. J. P. Redd

Mr. D. R. Culver

Mr. F. H. Willis

Ms. A. C. Chamberlain

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. J. D. Fuller

Mr. T. E. Chandler

Ms. S. E. Temple

Ms. P. Braxton

Mr. T. C. Brimfield

Mr. A. J. Lerch

Mr. C. J. Even

Ms. V. L. Ordaz

**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

**WECTEC**

Mr. C. A. Castell

**Westinghouse Electric Company, LLC**

Mr. R. Easterling (w/o enclosures)

Mr. G. Koucheravy (w/o enclosures)

Mr. F. Gill

Ms. L. Iller

Mr. J. Hopkins

Mr. D. Hawkins

Mr. C. F. Landon

Mr. M. Y. Shaqqo

Ms. S. DiTommaso

Mr. A. F. Dohse

**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

U.S. Nuclear Regulatory Commission  
ND-16-2798 Enclosure  
Page 1 of 4

**Southern Nuclear Operating Company  
ND-16-2798  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.5.02.02.ii [Index Number 523]**

### **ITAAC Statement**

#### **Design Commitment:**

2. The seismic Category I equipment, identified in Table 2.5.2-1, can withstand seismic design basis loads without loss of safety function.

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

- ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performed.

#### **Acceptance Criteria:**

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

### **ITAAC Determination Basis**

Multiple Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) are performed to demonstrate that the seismic Category I equipment identified in Vogtle Electric Generating Plant (VEGP) Combined License (COL) Appendix C, Table 2.5.2-1 (Attachment A) can withstand seismic design basis loads without loss of safety function. The subject ITAAC requires type tests, analyses, or a combination of type tests and analyses to be performed on seismic Category I equipment identified in VEGP COL Table 2.5.2-1.

The seismic Category I equipment identified in VEGP COL Appendix C Table 2.5.2-1 were qualified using a combination of type tests and analyses to demonstrate structural integrity and operability. Safety-related (Class 1E) electrical equipment identified in VEGP COL Appendix C Table 2.5.2-1 was seismically qualified by type testing and analysis in accordance with the Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 344-1987 (Reference 1). The specific qualification method (i.e., type testing, analysis, or combination) used for each equipment is identified in Attachment A. Additional information about the methods used to qualify safety-related equipment supplied for the AP1000 is provided in VEGP Unit 4&4 Updated Final Safety Analysis (UFSAR) Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment", (Reference 2).

The results of the tests and analysis are documented in Equipment Qualification Data Packages (EQDPs) and Equipment Qualification Summary Reports (EQSRs) (References 3 through 10) identified in Attachment A and conclude that seismic Category I equipment identified in VEGP COL Appendix C, Table 2.5.2-1, can withstand seismic design basis loads without loss of safety function.

### **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 document number is included in the

Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.5.02.02.ii (Reference 11) and available for NRC inspection.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.5.02.02.ii was performed for Vogtle 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. IEEE Standard 344-1987, "IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations"
2. VEGP 3&4 Updated Final Safety Analysis Report, Appendix 3D, "Methodology for Qualifying AP1000 Safety-Related Electrical and Mechanical Equipment"
3. APP-PMS-VBR-002 Revision 6, "Equipment Qualification Data Package for PMS Cabinets and NIS Auxiliary Panels for Use in the AP1000 Plant"
4. APP-PMS-VBR-003 Revision 7, "Equipment Qualification Summary Report for PMS Cabinets and NIS Auxiliary Panels for Use in the AP1000 Plant"
5. APP-JY50-VBR-003 Revision 4, "Equipment Qualification Data Package for the Reactor Trip Switchgear for Use in the AP1000 Plant"
6. APP-JY50-VBR-002 Revision 5, "Equipment Qualification Summary Report for the Reactor Trip Switchgear for Use in the AP1000 Plant"
7. APP-JW03-VBR-002 Revision 3, "Equipment Qualification Data Package for the Main Control Room (MCR)/Remote Shutdown Room (RSR) Transfer Panel"
8. APP-JW03-VBR-001 Revision 4, "Equipment Qualification Summary Report for the Main Control Room (MCR)/Remote Shutdown Room (RSR) Transfer Panel for Use in the AP1000 Plant"
9. APP-OCS-VBR-006 Revision 3, "Equipment Qualification Summary Report for PDSP, SDSP, and RO Consoles Line-up for Use in the AP1000 Plant"
10. APP-OCS-VBR-008 Revision 1, "Equipment Qualification Data Package for PDSP, SDSP, and RO Consoles Line-up for Use in the AP1000 Plant"
11. SVP\_SV0\_004526, Attachment 1, "Submittal of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.5.02.02.ii [COL Index Number 523] (PMS System Seismic Category I Equipment Design Basis Loads)"

**Attachment A**

**Equipment Qualification ITAAC Compliance Table**

**Excerpt from VEGP Unit 4 COL Appendix C Table 2.5.2-1\***

**SYSTEM: PROTECTION AND SAFETY MONITORING SYSTEM**

<b>Equipment Name*</b>	<b>Seismic Cat. I*</b>	<b>Type of Qualification</b>	<b>Qualification Report Number</b>
PMS Cabinets, Division A	Yes	Type Tests & Analyses	APP-PMS-VBR-002 APP-PMS-VBR-003
PMS Cabinets, Division B	Yes	Type Tests & Analyses	APP-PMS-VBR-002 APP-PMS-VBR-003
PMS Cabinets, Division C	Yes	Type Tests & Analyses	APP-PMS-VBR-002 APP-PMS-VBR-003
PMS Cabinets, Division D	Yes	Type Tests & Analyses	APP-PMS-VBR-002 APP-PMS-VBR-003
Reactor Trip Switchgear, Division A	Yes	Type Tests & Analyses	APP-JY50-VBR-002 APP-JY50-VBR-003
Reactor Trip Switchgear, Division B	Yes	Type Tests & Analyses	APP-JY50-VBR-002 APP-JY50-VBR-003
Reactor Trip Switchgear, Division C	Yes	Type Tests & Analyses	APP-JY50-VBR-002 APP-JY50-VBR-003
Reactor Trip Switchgear, Division D	Yes	Type Tests & Analyses	APP-JY50-VBR-002 APP-JY50-VBR-003
MCR/RSW Transfer Panels	Yes	Type Tests & Analyses	APP-JW03-VBR-001 APP-JW03-VBR-002
MCR Safety-related Display, Division B	Yes	Type Tests & Analyses	APP-OCS-VBR-006 APP-OCS-VBR-008
MCR Safety-related Display, Division C	Yes	Type Tests & Analyses	APP-OCS-VBR-006 APP-OCS-VBR-008
MCR Safety-related Controls	Yes	Type Tests & Analyses	APP-OCS-VBR-006 APP-OCS-VBR-008