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Docket No.: 52-025

**DEC 28 2016**

ND-16-2745  
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 2.5.02.04 [Index Number 526]

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 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.5.02.04 [Index Number 526] for environmental qualification of the Protection and Safety Monitoring System (PMS) Class 1E equipment identified in Combined License (COL) Appendix C, Table 2.5.2-1. 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 David Woods at 706-848-6903.

Respectfully submitted,

  
Michael J. Yox  
Regulatory Affairs Director Vogtle 3&4

MJY/HMA/amm

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.5.02.04 [Index Number 526]

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**Southern Nuclear Operating Company  
ND-16-2745  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.5.02.04 [Index Number 526]**

### **ITAAC Statement**

#### **Design Commitment:**

4. The Class 1E equipment, identified in Table 2.5.2-1, can withstand the room ambient temperature, humidity, pressure, and mechanical vibration conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.

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

Type tests, analyses, or a combination of type tests and analyses will be performed on the Class 1E equipment identified in Table 2.5.2-1.

#### **Acceptance Criteria:**

A report exists and concludes that the Class 1E equipment identified in Table 2.5.2-1 can withstand the room ambient temperature, humidity, pressure, and mechanical vibration conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.

### **ITAAC Determination Basis**

This Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) requires type tests, analyses, or a combination of type tests and analyses to be performed on the Class 1E equipment identified in COL Appendix C, Table 2.5.2-1 (Attachment A) to demonstrate the equipment can withstand the room ambient temperature, humidity, pressure, and mechanical vibration conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.

The Class 1E equipment identified in COL Appendix C, Table 2.5.2-1 were qualified by a combination of type testing and analysis in accordance with The Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 323-1974 (Reference 1) and Regulatory Guide 1.89, "Qualification of Class 1E Equipment for Nuclear Power Plants", to meet the requirements of 10 CFR 50.49, "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants", and to demonstrate the equipment can withstand the room ambient temperature, humidity, pressure, and mechanical vibration conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function. Additional information about the methods used to qualify safety-related equipment supplied for the AP1000 is provided in the VEGP Units 3&4 Updated Final Safety Analysis Report, 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 the equipment identified in COL Appendix C, Table 2.5.2-1, can withstand the room ambient temperature, humidity, pressure, and mechanical

vibration conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the 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 3 ITAAC Completion Package for ITAAC 2.5.02.04 (Reference 11) and available for NRC inspection.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.5.02.04 was performed for Vogtle Unit 3 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 STD 323-1974, "IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations"
2. 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\_004527, Attachment 1, "Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 3 ITAAC 2.5.02.04 [COL Index Number 526] (PMS Equipment Qualification Temp and Humidity)"

**Attachment A**

**Equipment Qualification ITAAC Compliance Table**

**Excerpt from VEGP Unit 3 COL Appendix C Table 2.5.2-1\***

**SYSTEM: PROTECTION AND SAFETY MONITORING SYSTEM1**

<b>Equipment Name*</b>	<b>Class 1E*</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 A	Yes	Type Tests & Analyses	APP-OCS-VBR-006 APP-OCS-VBR-008
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 Display, Division D	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