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U.S. Nuclear Regulatory Commission  
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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3  
ITAAC Closure Notification on Completion of ITAAC 2.3.06.07a.i [Index Number 366]

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 2.3.06.07a.i [Index Number 366] for the site verification of Normal Residual Heat Removal System (RNS) Class 1E equipment qualified to harsh environments as identified in VEGP Unit 3 COL Appendix C, Table 2.3.6-1. 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

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.3.06.07a.i [Index Number 366]

MJY/bh/amm

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**Southern Nuclear Operating Company  
ND-16-2814  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.3.06.07a.i [Index Number 366]**

## **ITAAC Statement**

### **Design Commitment:**

7.a) The Class 1E equipment identified in Tables 2.3.6-1 as being qualified for a harsh environment can withstand the environmental 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:**

i) Type tests, analyses, or a combination of type tests and analyses will be performed on Class 1E equipment located in a harsh environment.

### **Acceptance Criteria:**

i) A report exists and concludes that the Class 1E equipment identified in Table 2.3.6-1 as being qualified for a harsh environment can withstand the environmental 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**

Multiple Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) are performed to demonstrate that the Class 1E equipment identified in Vogtle Electric Generating Plant (VEGP) Unit 3 Combined License (COL) Appendix C, Table 2.3.6-1 (Attachment A) as being qualified for a harsh environment can withstand the environmental 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 subject ITAAC requires type tests, analyses, or a combination of type tests and analyses to be performed on Class 1E equipment located in a harsh environment.

The Class 1E equipment identified in COL Appendix C, Table 2.1.3-1 were qualified by a combination of type testing and analysis in accordance with The Institute of Electrical and Electronics Engineers, Inc. (IEEE) 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 that the equipment can withstand the environmental 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. For safety-related mechanical equipment, such as valves, type testing meets the requirements of Appendix A to 10 CFR Part 50, General Design Criterion 4, "Environmental and Dynamic Effects Design Bases." Additional information about the methods used to qualify safety-related equipment supplied for the AP1000 is provided in the Vogtle 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 Package (EQDP) and Equipment Qualification Summary Report (EQSR) (References 3 through 7) identified in Attachment A and conclude the equipment identified in COL Appendix C, Table 2.3.6-1, can

withstand the environmental 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 two relevant ITAAC findings associated with this ITAAC.

- Nonconformance 99900404/2012-201-05
- Nonconformance 99900404/2012-201-04

The corrective actions for each finding have been completed and each finding is closed. The ITAAC completion review document number is included in the Vogtle Unit 3 ITAAC Completion Package for ITAAC 2.3.06.07a.i (Reference 8) and available for NRC inspection.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.06.07a.i 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 Standard for Qualifying Class IE 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-PV01-VBR-012, Revision 0, "Equipment Qualification Data Package for Flowserve Flex Wedge Gate Valves with Limitorque Motor Operators for Use in the AP1000 Plant"
4. APP-PV01-VBR-011, Revision 0, "Equipment Qualification Summary Report for Flowserve Flex Wedge Gate Valves with Limitorque Motor Operators for Use in the AP1000 Plant"
5. APP-PV14-VBR-002, Revision 1, "Equipment Qualification Data Package for Fisher HPNS Control Valves for Use in the AP1000 Plant" (as modified by Reference 7)
6. APP-PV14-VBR-001, Revision 1, "Equipment Qualification Summary Report for Fisher HPNS Control Valves for Use in the AP1000 Plant" (as modified by Reference 7)
7. APP-GW-GEF-1844, Revision 0, "Reduced Qualified Life of ASCO Solenoid Valves for PV10, PV14, and PV20 Commodities to Address CAPAL #100435653"

8. SVP\_SV0\_004518, Attachment 1, "Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 3 ITAAC 2.3.06.07a.i (COL Index Number 366) (RNS System Class 1E Equipment Harsh Environment)"

**Attachment A**

**Equipment Qualification ITAAC Compliance Table**

**Excerpt from VEGP Unit 3 COL Appendix C Table 2.3.6-1\***

**SYSTEM: NORMAL RESIDUAL HEAT REMOVAL SYSTEM**

<b>Equipment Name*</b>	<b>Tag No.*</b>	<b>Class 1E / Qual. For Harsh Envir.*</b>	<b>EQSR#</b>	<b>EQDP#</b>
RCS Inner Hot Leg Suction Motor- operated Isolation Valve	RNS-PL-V001A	Yes/Yes	APP-PV01-VBR-011	APP-PV01-VBR-012
RCS Inner Hot Leg Suction Motor- operated Isolation Valve	RNS-PL-V001B	Yes/Yes	APP-PV01-VBR-011	APP-PV01-VBR-012
RCS Outer Hot Leg Suction Motor- operated Isolation Valve	RNS-PL-V002A	Yes/Yes	APP-PV01-VBR-011	APP-PV01-VBR-012
RCS Outer Hot Leg Suction Motor- operated Isolation Valve	RNS-PL-V002B	Yes/Yes	APP-PV01-VBR-011	APP-PV01-VBR-012
RNS Suction from IRWST Motor- operated Isolation Valve	RNS-PL-V023	Yes/Yes	APP-PV01-VBR-011	APP-PV01-VBR-012
RNS Return from Chemical and Volume Control System (CVS) Containment Isolation Valve	RNS-PL-V061	Yes/Yes	APP-PV14-VBR-001	APP-PV14-VBR-002