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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 2.1.01.06.ii [Index Number 7]

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 2.1.01.06.ii [Index Number 7] for verifying that a report exists and concludes that the Refueling Machine (RM) and Fuel Handling Machine (FHM) can withstand seismic design basis dynamic loads without loss of load carrying or structural integrity functions. 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/KJD/amm

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.1.01.06.ii [Index Number 7]

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**Southern Nuclear Operating Company  
ND-16-1263  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.1.01.06.ii [Index Number 7]**

### **ITAAC Statement**

#### **Design Commitment:**

6. The RM and FHM are designed to maintain their load carrying and structural integrity functions during a safe shutdown earthquake.

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

- ii) Type test, analysis, or a combination of type tests and analyses of the RM and FHM will be performed.

#### **Acceptance Criteria:**

- ii) A report exists and concludes that the RM and FHM can withstand seismic design basis dynamic loads without loss of load carrying or structural integrity functions.

### **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Refueling Machine (RM) and the Fuel Handling (FHM) are designed to maintain their load carrying and structural integrity functions during a safe shutdown earthquake. The subject ITAAC requires that type test, analysis, or a combination of type tests and analyses of the RM and FHM be performed to verify that the RM and the FHM can withstand seismic design basis dynamic loads without loss of load carrying or structural integrity functions.

Seismic loads for the RM and FHM were established using the AP1000 Safe Shutdown Earthquake (SSE) floor response spectra. Seismic analyses of the RM and FHM were performed to demonstrate that the equipment can withstand seismic design basis dynamic loads without loss of structural integrity functions. Additional analyses were also performed to show that the RM and FHM can withstand seismic design basis loads without loss of load carrying function once the handling tools are engaged with a fuel assembly. For the RM, these analyses are documented in the AP1000 Refueling Machine Seismic Analysis Report (Reference 1). For the FHM, these analyses are documented in the AP1000 Fuel Handling Machine Seismic Analysis Report (Reference 2) and Stress Analysis Calculation Note for AP1000 Spent Fuel Assembly Handling Tool (Reference 3). Together, these documents conclude that the RM and FHM can withstand seismic design basis dynamic loads without loss of load carrying or structural integrity functions. The RM and FHM seismic analysis reports are available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

### **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 2.1.01.06.ii (Reference 4) and available for NRC inspection.

**ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.01.06.ii was performed for VEGP 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. APP-FH01-S2C-001, Rev.1, AP1000 Refueling Machine Seismic Analysis Report
2. APP-FH02-S2C-001, Rev.1, AP1000 Fuel Handling Machine Seismic Analysis Report
3. APP-FH52-Z0C-001, Rev.2, Stress Analysis Note for Spent Fuel Assembly Handling Tool
4. SVP\_SV0\_004037, Attachment 1, Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 3 ITAAC 2.1.01.06.ii [COL Index Number 7] (FHS Refueling and Fuel Handling Machines Seismic)