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Docket No.: 52-026

ND-18-0324 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 2.1.02.08c [Index Number 31]

#### 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 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.1.02.08c [Index Number 31] for verifying that each Reactor Coolant Pump (RCP) flywheel assembly can withstand a design overspeed condition of no less than 125% of operating speed. 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 Tom Petrak at 706-848-1575.

Respectfully submitted,

Michael J. Yox

Regulatory Affairs Director Vogtle 3 & 4

Enclosure:

Vogtle Electric Generating Plant (VEGP) Unit 4

Completion of ITAAC 2.1.02.08c [Index Number 31]

MJY/LBP/amw

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## Southern Nuclear Operating Company ND-18-0324 Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4 Completion of ITAAC 2.1.02.08c [Index Number 31]

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### **ITAAC Statement**

### **Design Commitment**

8.c) Each RCP flywheel assembly can withstand a design overspeed condition.

### Inspections, Tests, Analyses:

Shop testing of each RCP flywheel assembly will be performed at the vendor facility at overspeed conditions.

### Acceptance Criteria:

Each RCP flywheel assembly has passed an overspeed condition of no less than 125% of operating speed.

### **ITAAC Determination Basis**

The Reactor Cooling System contains four pumps, and each pump contains an upper and a lower flywheel assembly. The subject Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) requires each Reactor Coolant Pump (RCP) flywheel assembly pass an overspeed condition test of no less than 125% of operating speed to demonstrate each RCP flywheel can withstand a design overspeed condition.

An overspeed test has been performed by the vendor on each flywheel assembly at 2250 revolutions per minute (rpm) (125% of synchronous speed of 1800 rpm). Following the overspeed test, a visual inspection of the flywheel assembly and liquid penetrant tests of the outside diameter of the flywheel retaining rings and the inside diameter of the hubs was performed and results documented in a flywheel overspeed test report.

The flywheel assembly overspeed test reports are documented in the quality data packages for each RCP (Reference 1 to 4). The test reports show the RCP flywheel assemblies listed below passed the test which meets the ITAAC criteria.

- 1. RCP Serial Number 509
  - Upper flywheel Serial Number: 250-6D71650G01-04
  - Lower flywheel Serial Number: 287-6D71651G01-05
- 2. RCP Serial Number 510
  - Upper flywheel Serial Number: 251-6D71650G01-04
  - Lower flywheel Serial Number: 288-6D71651G01-04
- 3. RCP Serial Number 511
  - Upper flywheel Serial Number: 239-6D71650G01-05
  - Lower flywheel Serial Number: 281-6D71651G01-04
- 4. RCP Serial Number 512
  - Upper flywheel Serial Number: 252-6D71650G01-05
  - Lower flywheel Serial Number: 286-6D71651G01-05

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### **ITAAC Finding Review**

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC. This finding review is included in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.1.02.08c (Reference 5) and available for NRC inspection.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.02.08c was performed for VEGP Unit 4 and that the prescribed acceptance criteria were 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. SV4-MP01-VQQ-006 Revision 0, AP1000 Vogtle Unit 4 Quality Release and Certificate of Conformance, Reactor Coolant Pump (SN 509)
- 2. SV4-MP01-VQQ-007 Revision 0, AP1000 Vogtle Unit 4 Quality Release and Certificate of Conformance, Reactor Coolant Pump (SN 511)
- 3. SV4-MP01-VQQ-008 Revision 0, AP1000 Vogtle Unit 4 Quality Release and Certificate of Conformance, Reactor Coolant Pump (SN 510)
- 4. SV4-MP01-VQQ-009 Revision 0, AP1000 Vogtle Unit 4 Quality Release and Certificate of Conformance, Reactor Coolant Pump (SN 512)
- 5. 2.1.02.08c-U4-CP-Rev 0, Completion Package for Unit 4 ITAAC 2.1.02.08c [COL Index Number 31] (RCS Pump Flywheel Overspeed)