

JUN 11 2019

Docket Nos.: 52-025  
52-026ND-19-0702  
10 CFR 52.99(c)(3)U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3 and Unit 4  
Notice of Uncompleted ITAAC 225-days Prior to Initial Fuel Load  
Item 2.3.07.07c [Index Number 408]

Ladies and Gentlemen:

Pursuant to 10 CFR 52.99(c)(3), Southern Nuclear Operating Company hereby notifies the NRC that as of June 10, 2019, Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4 Uncompleted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.07.07c [Index Number 408] has not been completed greater than 225-days prior to initial fuel load. The Enclosure describes the plan for completing this ITAAC. Southern Nuclear Operating Company will, at a later date, provide additional notifications for ITAAC that have not been completed 225-days prior to initial fuel load.

This notification is informed by 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. In accordance with NEI 08-01, this notification includes ITAAC for which required inspections, tests, or analyses have not been performed or have been only partially completed. All ITAAC will be fully completed and all Section 52.99(c)(1) ITAAC Closure Notifications will be submitted to NRC to support the Commission finding that all acceptance criteria are met prior to plant operation, as required by 10 CFR 52.103(g).

This letter contains no new NRC regulatory commitments.

If there are any questions, please contact Tom Petrak at 706-848-1575.

Respectfully submitted,

  
Michael J. Yox  
Regulatory Affairs Director Vogtle 3 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.3.07.07c [Index Number 408]

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Document Services RTYPE: VND.LI.L06

File AR.01.02.06

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**Southern Nuclear Operating Company  
ND-19-0702  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4  
Completion Plan for Uncompleted ITAAC 2.3.07.07c [Index Number 408]**

## **ITAAC Statement**

### **Design Commitment**

7c) The SFS provides check valves in the drain line from the refueling cavity to prevent flooding of the refueling cavity during containment flooding.

8. The SFS provides the nonsafety-related function of removing spent fuel decay heat using pumped flow through a heat exchanger.

9. Safety-related displays identified in Table 2.3.7-1 can be retrieved in the MCR.

10. Controls exist in the MCR to cause the pumps identified in Table 2.3.7-3 to perform their listed functions.

11. Displays of the SFS parameters identified in Table 2.3.7-3 can be retrieved in the MCR.

### **Inspections/Tests/Analyses**

Exercise testing of the check valves with active safety-functions identified in Table 2.3.7-1 will be performed under pre-operational test pressure, temperature and flow conditions.

ii) Testing will be performed to confirm that each SFS pump provides flow through its heat exchanger when taking suction from the SFP and returning flow to the SFP.

Inspection will be performed for retrievability of the safety-related displays in the MCR.

Testing will be performed to actuate the pumps identified in Table 2.3.7-3 using controls in the MCR.

Inspection will be performed for retrievability in the MCR of the displays identified in Table 2.3.7-3.

### **Acceptance Criteria**

Each check valve changes position as indicated on Table 2.3.7-1.

ii) Each SFS pump produces at least 900 gpm through its heat exchanger.

Safety-related displays identified in Table 2.3.7-1 can be retrieved in the MCR.

Controls in the MCR cause pumps identified in Table 2.3.7-3 to perform the listed functions.

Displays of the SFS parameters identified in Table 2.3.7-3 are retrieved in the MCR.

## **ITAAC Completion Description**

Testing is performed to demonstrate that the Spent Fuel Pool Cooling System (SFS) provides check valves in the drain line from the refueling cavity to prevent flooding of the refueling cavity during containment flooding, verifies the SFS provides the nonsafety-related function of removing spent fuel decay heat using pumped flow through a heat exchanger, and that controls

exist in the Main Control Room (MCR) to cause the pumps identified in Table 2.3.7-3 to perform their listed functions. Inspections are performed to verify that safety-related displays identified in Table 2.3.7-1 can be retrieved in the MCR and that displays of the SFS parameters identified in Table 2.3.7-3 can be retrieved in the MCR.

Each check valve changes position as indicated on Table 2.3.7-1.

Testing is performed in accordance with the Unit 3 and Unit 4 Preoperational Tests 3-SFS-ITPP-502 and 4-SFS-ITPP-502 (References 1 and 2) with the initial conditions of refueling cavity drain isolation valve closed, refueling cavity level of approximately 28 ft., temporary drain hose attached to the cavity drain with a valve attached and routed to a floor drain, and non-intrusive valve disk monitoring installed on SFS-PL-V071 and SFS-PL-V072. The refueling cavity drain isolation valve and the temporary valve on the drain hose is opened to initiate flow and both check valves are verified to open by flow and the non-intrusive monitoring instruments. The temporary valve on the drain hose is closed to stop flow and both check valves are verified to close using the non-intrusive monitoring instruments. This flow path is depicted on Piping and Instrument Drawing 3-SFS-M6-001.

This testing verifies that for Unit 3 and Unit 4 each check valve changes position as indicated on Table 2.3.7-1 (Attachment A).

ii) Each SFS pump produces at least 900 gpm through its heat exchanger.

Testing is performed in accordance with the Unit 3 and Unit 4 preoperational test procedures 3-SFS-ITPP-502 and 4-SFS-ITPP-502 (References 1 and 2). The test is conducted by running each of the SFS pumps individually, taking suction from and returning flow to the SFP. Once steady flow is established, instrument readings are taken at the respective SFS pump discharge flow sensor, recorded in the test procedure and corrected for measurement uncertainty. The test is performed using multiple system alignments with the demineralizers in/out of service and single and dual pump configurations.

The Unit 3 A SFS pump (SFS-MP-01A) produced a minimum flow of XXX gpm for all alignments and the B SFS pump (SFS-MP-01B) produced a minimum flow of YYY gpm for all alignments during testing. The Unit 4 A SFS pump (SFS-MP-01A) produced a minimum flow of XXX gpm for all alignments and the B SFS pump (SFS-MP-01B) produced a minimum flow of YYY gpm for all alignments during testing.

The Unit 3 and Unit 4 preoperational test results (References 1 and 2) confirm that each SFS pump produces at least 900 gpm through its heat exchanger when taking suction from and returning flow to the SFP.

Safety-related displays identified in Table 2.3.7-1 can be retrieved in the MCR.

The inspection is performed in accordance with Unit 3 and Unit 4 component test packages SNC922101 and SNCXXXXXX (References 3 & 4) to confirm that safety-related displays identified in COL Table 2.3.7-1 (Attachment B) can be retrieved in the MCR.

The inspection visually confirms that when each of the safety-related displays identified in Attachment A is summoned at the MCR Protection and Safety Monitoring System (PMS) Visual Display Units (VDUs), the summoned safety-related display appears on the PMS VDU. This

confirms that the safety-related displays identified in Table 2.3.7-1 can be retrieved in the Unit 3 and Unit 4 MCR.

**Controls in the MCR cause pumps identified in Table 2.3.7-3 to perform the listed functions.**

Testing is performed in accordance with Unit 3 and Unit 4 component test packages SNC922101 and SNCXXXXXX (References 3 & 4) to verify controls in the MCR cause pumps identified in Table 2.3.7-3 (Attachment C) to perform the listed functions.

Testing is performed by ensuring the SFS A Train is filled and vented and then it is started per the operating procedure in the MCR. The pump start is verified locally and documented in the test package. The test then ensures the SFS B Train is filled and vented and then it is started per the operating procedure in the MCR. The pump start is verified locally and documented in the test package. This confirms that controls in the MCR cause pumps identified in Table 2.3.7-3 to perform the listed functions.

**Displays of the SFS parameters identified in Table 2.3.7-3 are retrieved in the MCR.**

The inspection is performed in accordance with Unit 3 and Unit 4 component test packages SNC922101 and SNCXXXXXX (References 3 & 4) to confirm that the displays identified in COL Table 2.3.7-3 (Attachment D) can be retrieved in the MCR.

The inspection visually confirms that when each of the displays of parameters identified in Attachment D is summoned at an MCR workstation, the summoned plant parameter appears on a display monitor at that MCR workstation.

References 1 and 4 are available for NRC inspection as part of Unit 3 and Unit 4 ITAAC Completion Packages (Reference 5 and 6).

**List of ITAAC Findings**

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.

**References (available for NRC inspection)**

1. 3-SFS-ITPP-502, "Spent Fuel Pool Cooling System Flow Path Preoperational Test Procedure"
2. 4-SFS-ITPP-502, "Spent Fuel Pool Cooling System Flow Path Preoperational Test Procedure"
3. SNC922101, "Spent Fuel System Indication and Control Function Verifications – ITAAC: SV3-2.3.07.07c Items 9, 10, & 11"
4. SNCXXXXXX, "Spent Fuel System Indication and Control Function Verifications – ITAAC: SV4-2.3.07.07c Items 9, 10, & 11"
5. 2.3.07.07c-U3-CP-Rev 0, ITAAC Completion Package
6. 2.3.07.07c-U4-CP-Rev 0, ITAAC Completion Package
7. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52"

**Attachment A**

**\*Excerpt from COL Appendix C Table 2.3.7-1**

<b>*Component Name</b>	<b>*Tag No.</b>	<b>*Active Function</b>
Refueling Cavity Drain Line Check Valve	SFS-PL-V071	Transfer Open Transfer Closed
Refueling Cavity Drain Line Check Valve	SFS-PL-V072	Transfer Open Transfer Closed

**Attachment B**

**\*Excerpt from COL Appendix C Table 2.3.7-1**

<b>*Component Name</b>	<b>*Tag No.</b>	<b>*Safety-Related Display</b>
Spent Fuel Pool Level Sensor	SFS-019A	Yes
Spent Fuel Pool Level Sensor	SFS-019B	Yes
Spent Fuel Pool Level Sensor	SFS-019C	Yes
Refueling Cavity Drain to SGS Compartment Isolation Valve	SFS-PL-V031	Yes
Refueling Cavity Drain to Containment Sump Isolation Valve	SFS-PL-V033	Yes
SFS Containment Floodup Isolation Valve	SFS-PL-V075	Yes

**Attachment C**

**\*Excerpt from COL Appendix C Table 2.3.7-3**

<b>*Component Name</b>	<b>*Tag No.</b>	<b>*Control Function</b>
SFS Pump 1A	SFS-MP-01A	Start
SFS Pump 1B	SFS-MP-01B	Start



**Attachment D**

**\*Excerpt from COL Appendix C Table 2.3.7-3**

<b>*Component Name</b>	<b>*Tag No.</b>	<b>*Display</b>
SFS Pump 1A	SFS-MP-01A	Yes (Run Status)
SFS Pump 1B	SFS-MP-01B	Yes (Run Status)
SFS Flow Sensor	SFS-13A	Yes
SFS Flow Sensor	SFS-13B	Yes
Spent Fuel Pool Temperature Sensor	SFS-018	Yes
Cask Loading Pit Level Sensor	SFS-022	Yes