

Docket No.: 52-025

ND-20-0762  
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 2.3.01.03.ii [Index Number 281]

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 2.3.01.03.ii [Index Number 281], for verifying the following:

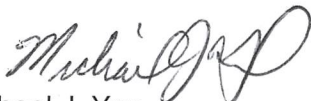
- The Component Cooling Water System (CCS) provides the nonsafety-related functions of transferring heat from the Normal Residual Heat Removal System (RNS) during shutdown and the Spent Fuel Pool Cooling System (SFS) during all modes of operation to the Service Water System (SWS);
- Controls exist in the Main Control Room (MCR) to cause the pumps identified in Combined License (COL) Appendix C Table 2.3.1-1 to perform the listed function;
- Displays of parameters identified in COL Appendix C Table 2.3.1-1 can be retrieved in the MCR.

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 is 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 3  
Completion of ITAAC 2.3.01.03.ii [Index Number 281]

**To:**

**Southern Nuclear Operating Company/ Georgia Power Company**

Mr. Peter P. Sena III (w/o enclosures)  
Mr. D. L. McKinney (w/o enclosures)  
Mr. M. D. Meier (w/o enclosures)  
Mr. G. Chick  
Mr. S. Stimac  
Mr. P. Martino  
Mr. M. J. Yox  
Mr. A. S. Parton  
Ms. K. A. Roberts  
Mr. T. G. Petrak  
Mr. C. T. Defnall  
Mr. C. E. Morrow  
Mr. R. L. Beilke  
Mr. S. Leighty  
Ms. A. C. Chamberlain  
Mr. J. C. Haswell  
Document Services RTYPE: VND.LI.L06  
File AR.01.02.06

cc:

**Nuclear Regulatory Commission**

Ms. M. Bailey (w/o enclosures)  
Mr. M. King  
Mr. H. K. Nieh  
Mr. C. P. Patel  
Mr. G. J. Khouri  
Mr. C. J. Even  
Mr. B. J. Kemker  
Ms. N. C. Covert  
Mr. C. Welch  
Mr. J. Gaslevic  
Mr. O. Lopez-Santiago  
Mr. G. Armstrong  
Mr. M. Webb  
Mr. T. Fredette  
Mr. C. Santos  
Mr. B. Davis  
Mr. J. Vasquez  
Mr. J. Eargle  
Mr. E. Davidson  
Mr. T. Fanelli  
Mr. S. Rose  
Ms. K. McCurry

U.S. Nuclear Regulatory Commission

ND-20-0762

Page 3 of 3

**Oglethorpe Power Corporation**

Mr. R. B. Brinkman

Mr. E. Rasmussen

**Municipal Electric Authority of Georgia**

Mr. J. E. Fuller

Mr. S. M. Jackson

**Dalton Utilities**

Mr. T. Bundros

**Westinghouse Electric Company, LLC**

Dr. L. Oriani (w/o enclosures)

Mr. D. C. Durham (w/o enclosures)

Mr. M. M. Corletti

Mr. Z. S. Harper

Mr. J. L. Coward

**Other**

Mr. S. W. Kline, *Bechtel Power Corporation*

Ms. L. Matis, *Tetra Tech NUS, Inc.*

Dr. W. R. Jacobs, Jr., Ph.D., *GDS Associates, Inc.*

Mr. S. Roetger, *Georgia Public Service Commission*

Mr. R. L. Trokey, *Georgia Public Service Commission*

Mr. K. C. Greene, *Troutman Sanders*

Mr. S. Blanton, *Balch Bingham*

**Southern Nuclear Operating Company  
ND-20-0762  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3  
Completion of ITAAC 2.3.01.03.ii [Index Number 281]**

## **ITAAC Statement**

### **Design Commitment**

3. The CCS provides the nonsafety-related functions of transferring heat from the RNS during shutdown and the spent fuel pool cooling system during all modes of operation to the SWS.
4. Controls exist in the MCR to cause the pumps identified in Table 2.3.1-1 to perform the listed functions.
5. Displays of the parameters identified in Table 2.3.1-1 can be retrieved in the MCR.

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

- ii) Testing will be performed to confirm that the CCS can provide cooling water to the RNS HXs while providing cooling water to the SFS HXs.

Testing will be performed to actuate the pumps identified in Table 2.3.1-1 using controls in the MCR.

Inspection will be performed for retrievability of the parameters in the MCR.

### **Acceptance Criteria**

- ii) Each pump of the CCS can provide at least 2685 gpm of cooling water to one RNS HX and at least 1200 gpm of cooling water to one SFS HX while providing at least 4415 gpm to other users of cooling water.

Controls in the MCR operate to cause pumps listed in Table 2.3.1-1 to perform the listed functions.

Displays identified in Table 2.3.1-1 can be retrieved in the MCR.

## **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Component Cooling Water System (CCS) provides the nonsafety-related functions of transferring heat from the Normal Residual Heat Removal System (RNS) during shutdown and the Spent Fuel Pool Cooling System (SFS) during all modes of operation to the Service Water System (SWS), that controls exist in the Main Control Room (MCR) to cause the pumps identified in VEGP Combined License (COL) Appendix C Table 2.3.1-1 to perform the listed function, and displays of the parameters identified in COL Appendix C Table 2.3.1-1 can be retrieved in the Main Control Room (MCR).

This ITAAC requires testing and inspections to be performed to confirm that the CCS can provide cooling water to the RNS Heat Exchangers (HXs) while providing cooling water to the SFS HXs, that controls in the MCR operate to actuate the pumps in COL Appendix C Table 2.3.1-1, and displays listed in COL Attachment C Table 2.3.1-1 can be retrieved in the MCR.

ii) Each pump of the CCS can provide at least 2685 gpm of cooling water to one RNS HX and at least 1200 gpm of cooling water to one SFS HX while providing at least 4415 gpm to other users of cooling water.

The testing was performed in accordance with component test Work Order 1220982 (Reference 1) to verify that each CCS pump can provide at least 2685 gpm (gallons per minute) of cooling water to one RNS HX and at least 1200 gpm of cooling water to one SFS HX while providing at least 4415 gpm to other users of cooling water.

The test was conducted by running each CCS pump, individually, to supply one RNS HX, one SFS HX and other users of CCS in the Auxiliary, Containment, and Turbine Buildings. CCS pump B was placed into service and when steady flow was established to SFS HX A, RNS HX A, and other users of cooling water, flow was measured using a combination of permanently installed and temporarily installed flow instrumentation. The flow values were recorded and verified to meet the acceptance criteria. This testing was repeated using CCS Pump A with the SFS HX A, RNS HX A and the other users of CCS in service. The results of the testing were documented in ITAAC Technical Report SV3-CCS-ITR-800281 (Reference 2). The component flows measured during testing are summarized in Attachment A.

To demonstrate the flow was comparable through the SFS HX B and RNS HX B, the flow to the SFS HX A and RNS HX A from CCS pump A was isolated and flow from the CCS pump A was established to the SFS HX B and RNS HX B and measured with permanently installed and temporarily installed flow instrumentation. The values were recorded and verified to meet the acceptance criteria. The component flows measured during testing are summarized in Attachment A.

The completed component test Work Order confirmed that each CCS pump for Unit 3 provides at least 2685 gpm of cooling water to one RNS HX and at least 1200 gpm of cooling water to one SFS HX while providing at least 4415 gpm to other users of cooling water and provided evidence that the ITAAC Acceptance Criteria were met.

Controls in the MCR operate to cause pumps listed in Table 2.3.1-1 to perform the listed functions.

The testing was performed in accordance with Unit 3 component test Work Order SNC920980 (Reference 3) to verify that controls exist in the MCR and the controls operated to cause the pumps listed in Table 2.3.1-1 (Attachment B) to perform the listed functions.

The component test began with the pumps in Attachment B in the shutdown condition with an operator stationed locally to monitor and verify pump operation. The B CCS pump was started using PLS controls and the pump start was verified locally and in the MCR. The A CCS pump was started and the verification was repeated with the A CCS pump. The results of the testing were documented in ITAAC Technical Report SV3-CCS-ITR-801281 (Reference 4).

The test results confirmed that controls in Unit 3 MCR operate to cause the pumps listed in Table 2.3.1-1 to perform the listed functions and provided evidence that the ITAAC Acceptance Criteria were met.

Displays identified in Table 2.3.1-1 can be retrieved in the MCR.

The inspection was performed in accordance with Unit 3 component test Work Order SNC920980 (Reference 3) to verify that the displays identified in Table 2.3.1-1 (Attachment C) can be retrieved in the MCR.

This inspection was performed at an operator work station in the Unit 3 MCR. Each display identified in Attachment C was located and verified to be retrievable and displayed on the operator work station. The results of the inspection were documented in ITAAC Technical Report SV3-CCS-ITR-801281 (Reference 4).

The inspection results confirmed that the displays identified in Table 2.3.1-1 could be retrieved in the Unit 3 MCR and provided evidence that the ITAAC Acceptance Criteria were met.

References 1 through 4 are available for NRC inspection as well as Unit 3 ITAAC Completion Package (Reference 5).

### **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. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.3.01.03.ii (Reference 5) and is available for NRC review.

### **ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.01.03.ii was performed for VEGP Unit 3 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. Work Order 1220982, "CCS Initial System Flow Balance"
2. SV3-CCS-ITR-800281, Rev. 1, "Unit 3 Recorded Results of CCS Pump Flow Through RNS HX, SFS HX, & Other Users of CCS Cooling: ITAAC 2.3.01.03.ii Item 3.ii"
3. Work Order SNC920980, "Perform ITAAC 2.3.01.03.ii, Items 4 and 5"
4. SV3-CCS-ITR-801281, Rev. 0, "Unit 3 Recorded Results of CCS Controls and Displays in MCR associated with Table 2.3.1-1: ITAAC 2.3.01.03.ii Items 4 and 5"
5. 2.3.01.03.ii-U3-CP-Rev0, ITAAC Completion Package

**Attachment A**

**CCS Component Flow Values**

<b>CCS Pump</b>	<b>RNS HX Flow (gpm)</b>	<b>SFS HX Flow (gpm)</b>	<b>Other System Flows (gpm)</b>
Unit 3 A	HX A – 2746	HX A – 1308	Train A HXs – 7662
	HX B – 2698	HX B – 1323	Train B HXs – 7826
Unit 3 B	HX A – 2834	HX A – 1332	Train A HXs – 7148

**Attachment B**

\*Excerpt from COL Appendix C Table 2.3.1-1

<b>Equipment Name*</b>	<b>Tag No.*</b>	<b>Control Function*</b>
CCS Pump A	CCS-MP-01A	Start
CCS Pump B	CCS-MP-01B	Start

**Attachment C**

\*Excerpt from COL Appendix C Table 2.3.1-1

<b>Equipment Name*</b>	<b>Tag No.*</b>	<b>Display*</b>
CCS Pump A	CCS-MP-01A	Yes (Run Status)
CCS Pump B	CCS-MP-01B	Yes (Run Status)
CCS Discharge Header Flow Sensor	CCS-101	Yes
CCS to Normal Residual Heat Removal System Heat Exchanger (RNS HX) A Flow Sensor	CCS-301	Yes
CCS to RNS HX B Flow Sensor	CCS-302	Yes
CCS to Spent Fuel Pool Cooling System (SFS) HX A Flow Sensor	CCS-341	Yes
CCS to SFS HX B Flow Sensor	CCS-342	Yes
CCS Surge Tank Level Sensor A	CCS-130	Yes
CCS Surge Tank Level Sensor B	CCS-131	Yes
CCS Heat Exchanger Inlet Temperature Sensor	CCS-121	Yes
CCS Heat Exchanger Outlet Temperature Sensor	CCS-122	Yes
CCS Flow to Reactor Coolant Pump (RCP) 1A Valve (Position Indicator)	CCS-PL-V256A	Yes
CCS Flow to RCP 1B Valve (Position Indicator)	CCS-PL-V256B	Yes
CCS Flow to RCP 2A Valve (Position Indicator)	CCS-PL-V256C	Yes
CCS Flow to RCP 2B Valve (Position Indicator)	CCS-PL-V256D	Yes