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52-026ND-18-0313
10 CFR 52.99(c)(1)U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 3 and Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.3.06.09a.i [Index Number 372]

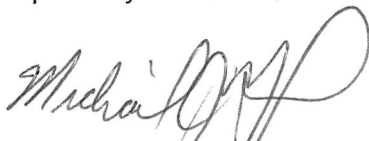
Ladies and Gentlemen:

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 and Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.06.09a.i [Index Number 372] for verifying that the Normal Residual Heat Removal System provides for temperature and overpressure protection during shutdown operations. The closure process for this ITAAC is based on the guidance described in Nuclear Energy Institute (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 G. 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 of ITAAC 2.3.06.09a.i [Index Number 372]

MJY/RAS/amw

To:

Southern Nuclear Operating Company/ Georgia Power Company

Mr. D. A. Bost (w/o enclosures)
Mr. M. D. Rauckhorst (w/o enclosures)
Mr. M. D. Meier
Mr. D. H. Jones (w/o enclosures)
Mr. D. L. McKinney
Mr. M. J. Yox
Mr. D. L. Fulton
Mr. J. B. Klecha
Mr. G. Chick
Mr. F. H. Willis
Ms. A. L. Pugh
Mr. A. S. Parton
Mr. W. A. Sparkman
Mr. C. E. Morrow
Ms. K. M. Stacy
Mr. M. K. Washington
Mr. J. P. Redd
Ms. A. C. Chamberlain
Mr. D. R. Culver
Mr. T. G. Petrak
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cc:

Nuclear Regulatory Commission

Mr. W. Jones (w/o enclosures)
Ms. J. M. Heisserer
Mr. C. P. Patel
Mr. M. E. Ernestes
Mr. G. J. Khouri
Mr. T. E. Chandler
Ms. S. E. Temple
Ms. P. Braxton
Mr. N. D. Karlovich
Mr. A. J. Lerch
Mr. C. J. Even
Mr. F. D. Brown
Mr. B. J. Kemker
Ms. A. E. Rivera-Varona
Ms. L. A. Kent
Mr. P. B. Donnelly
Ms. N. C. Coover

Oglethorpe Power Corporation

Mr. R. B. Brinkman

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
Ms. L. G. Iller
Mr. D. Hawkins
Ms. J. Monahan
Mr. J. L. Coward
Ms. N. E. Deangelis

Other

Mr. J. E. Hesler, *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*
Ms. S. W. Kernizan, *Georgia Public Service Commission*
Mr. K. C. Greene, *Troutman Sanders*
Mr. S. Blanton, *Balch Bingham*

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**Southern Nuclear Operating Company
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Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 3 and Unit 4
Completion of ITAAC 2.3.06.09a.i [Index Number 372]**

ITAAC Statement

Design Commitment:

9.a) The RNS provides LTOP for the RCS during shutdown operations.

Inspections, Tests, Analyses:

i) Inspections will be conducted on the low temperature overpressure protection relief valves to confirm that the capacities of the vendor code plate ratings are greater than or equal to system relief requirements.

Acceptance Criteria:

i) The rated capacities recorded on the valves' vendor code plates are not less than the flow required to provide low-temperature overpressure protection for the RCS, as determined by the LTOPS evaluation based on the pressure-temperature curves developed for the as-procured reactor vessel material.

ITAAC Determination Basis

Multiple ITAAC are performed to demonstrate that the Normal Residual Heat Removal System (RNS) provides Low Temperature Overpressure Protection (LTOP) for the Reactor Coolant System (RCS) during shutdown operations. This ITAAC performs inspections on the LTOP relief valves to confirm that the capacities of the vendor code plate ratings are greater than or equal to system relief requirements.

The Unit 3 and 4 RNS Suction Pressure Relief Valves, RNS-PL-V020 and RNS-PL-V021 (hereafter, RNS relief valves) are arranged per Figure 2.3.6-1 of Appendix C of the Vogtle Combined Licenses. Updated Final Safety Analysis Report (UFSAR) Table 5.4-17 and valve datasheets (Reference 1) document the nominal relieving capacity for the RNS relief valves. An LTOPS analysis (evaluation), which is based on the pressure-temperature curves developed for the as-procured reactor vessel material and considers worst case RCS mass or heat input, provides the basis for the RNS relief valves flow capacities.

As documented in inspection report SV0-RNS-ITR-001 (Reference 1), an inspection of the RNS relief valves' Quality Release & Certificate of Conformance documentation (CoC) was performed. The CoC documentation included photographs of the RNS relief valves' vendor code plates, demonstrating the valves meet the ITAAC acceptance criteria. The RNS relief valves' flow capacity recorded on each American Society of Mechanical Engineers (ASME) Code plate was certified by ASME through the National Board of Boiler and Pressure Vessel (B&PV) Inspectors (NBBPVI). Subsection NC-7700 of the ASME B&PV Code, Section III describes the methods required to certify the relief device capacity and determine a coefficient used in determining capacity in subsequently manufactured valves. The flow capacity for each RNS LTOP relief valve was calculated by a set of equations using the coefficient found in Subsection NC-7700 and in NB-18, Pressure Relief Device Certification, from the NBBPVI. Attachment A to this Enclosure documents the valves' vendor code plate capacity and combined total relief capacity.

An inspection report exists and concludes the rated capacities recorded on the valves' vendor code plates are not less than the flow required to provide low-temperature overpressure protection for the RCS, as determined by the LTOPS evaluation based on the pressure-temperature curves developed for the as-procured reactor vessel material.

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 is documented in the Unit 3 and Unit 4 ITAAC Completion Package for ITAAC 2.3.06.09a.i (References 2 and 3, respectively) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.3.06.09a.i was performed for Vogtle Units 3 and 4 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. SV0-RNS-ITR-001, Revision 1, "Inspection Report of the Low Temperature Overpressure Protection (LTOP) Relief Valve Comparing Rated Capacity and Set Pressure to LTOPs Evaluation Requirements, ITAAC 2.3.06.09a.i & ITAAC 2.3.06.09a.ii"
2. 2.3.06.09a.i-U3-CP-Rev0, ITAAC Completion Package
3. 2.3.06.09a.i-U4-CP-Rev0, ITAAC Completion Package

Attachment A

The following table documents the vendor code plate capacity and combined relief capacity for each RNS relief valve:

RNS Relief Valve Equipment No.	Valve Capacity *	Total Capacity *
Unit 3 RNS-PL-V020	53	1266
Unit 3 RNS-PL-V021	1213	
Unit 4 RNS-PL-V020	53	1266
Unit 4 RNS-PL-V021	1213	

*all values are gallons per minute (gpm)