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Docket Nos.: 52-025

ND-19-1015
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
ITAAC Closure Notification on Completion of ITAAC 2.1.02.08d.v [Index Number 36]

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 2.1.02.08d.v [Index Number 36] for verifying the discharge location and elevation of the Automatic Depressurization System (ADS) Stage 4 valves and the elevation of the ADS spargers. 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.

Southern Nuclear Operating Company (SNC) previously submitted a notification of Uncompleted ITAAC 225-Days Prior to Initial Fuel Load for item 2.1.02.08d.v [Index Number 36] in ND-16-2134 [ML16316A019] dated November 10, 2016. The elevation determination methodology of the ADS stage 4 valves described in ND-16-2134 was changed in this closure notification to a combination of as-built reactor coolant system (RCS) line elevations with vendor measurements of the valve body outlet circular dimensions determined during ADS stage 4, 14" squib valve manufacture.

This letter contains no new NRC regulatory commitments. 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 & 4Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 3
Completion of ITAAC 2.1.02.08d.v [Index Number 36]

MJY/GDL/sfr

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. D. H. Jones (w/o enclosures)

Mr. G. Chick

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. J. L. Hughes

Ms. K. M. Stacy

Ms. A. C. Chamberlain

Mr. J. C. Haswell

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cc:

Nuclear Regulatory Commission

Mr. W. Jones (w/o enclosures)

Mr. F. D. Brown

Mr. C. P. Patel

Mr. G. J. Khouri

Ms. S. E. Temple

Mr. N. D. Karlovich

Mr. A. Lerch

Mr. C. J. Even

Mr. B. J. Kemker

Ms. N. C. Coover

Mr. C. Welch

Mr. J. Gaslevic

Mr. V. Hall

Mr. G. Armstrong

Ms. T. Lamb

Mr. M. Webb

Mr. T. Fredette

Mr. C. Weber

Mr. S. Smith

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
Ms. L. G. Iller
Mr. Z. S. Harper
Mr. J. L. Coward

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
Completion of ITAAC 2.1.02.08d.v [Index Number 36]**

ITAAC Statement

Design Commitment

8.d) The RCS provides automatic depressurization during design basis events.

Inspections/Tests/Analyses

- v) Inspections of the elevation of the ADS stage 4 valve will be conducted.
- vi) Inspections of the ADS stage 4 valve discharge will be conducted.
- viii) Inspection of the elevation of each ADS sparger will be conducted.

Acceptance Criteria

- v) The minimum elevation of the bottom inside surface of the outlet of these valves is greater than plant elevation 110 feet.
- vi) The discharge of the ADS stage 4 valves is directed into the steam generator compartments.
- viii) The centerline of the connection of the sparger arms to the sparger hub is ≤ 11.5 feet below the IRWST overflow level.

ITAAC Determination Basis

Multiple ITAAC are performed to demonstrate that the Vogtle Electric Generating Plant (VEGP) Unit 3 Reactor Coolant System (RCS) provides automatic depressurization during design basis events. This ITAAC requires that inspections be conducted to verify that the minimum elevation of the bottom inside surface of the outlet of the Automatic Depressurization System (ADS) stage 4 valves is greater than plant elevation 110 feet, that the discharge of the ADS stage 4 valves is directed into the steam generator compartments, and that for each ADS sparger (Sparger A and Sparger B) the centerline of the connection of the sparger arms to the sparger hub is ≤ 11.5 feet below the In-containment Refueling Water Storage Tank (IRWST) overflow level.

During fabrication of the ADS stage 4 valves, the vendor measured key dimensions, including the valve body outlet circular dimension, which when halved and subtracted from the RCS line centerline elevation, is the elevation of the bottom inside surface of the outlet of the ADS stage 4 valves. The dimensional inspections were performed at the vendor's facility using both standard industry measurement techniques and specialized equipment. Due to the nature of the manufacturing process of the ADS stage 4 valves (i.e., 14" squib valves), it was necessary to verify measurements were within the acceptable ITAAC ranges prior to shipment. Completion of these measurements at the vendor's facility is standard industry practice and was specified in the procurement specification. Completing these measurements at the vendor's facility meets the definition of "as-built inspections" per NEI 08-01, Section 9.5, "As-built Inspections" (Reference 1). The results of the measurements were included in the Vogtle Unit 3 ADS-4 Stage Valve Quality Release & Certificate of Conformance (Reference 2).

An inspection of the routing of the RCS lines associated with the ADS stage 4 valves was performed during a walk down of the as-built lines in accordance with the site walk down inspection procedure (Reference 3) to confirm that the discharge of ADS stage 4 valves, which are installed at the end of the RCS lines, is directed into the steam generator compartments.

The elevation of the RCS lines, Sparger A and B hub centerlines, and IRWST overflow level was determined using survey equipment in accordance with site survey and measurement procedures (Reference 4).

The walk down and survey inspection results are documented in the Unit 3 inspection reports (References 5 and 6) and reflected in Attachments A and B, which demonstrate that the acceptance criteria of the ITAAC have been met.

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 ITAAC Completion Package for ITAAC 2.1.02.08d.v (Reference 7) and available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.02.08d.v 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. NEI 08-01, Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52
2. SV3-PV70-VQQ-002 Revision 3, "Quality Release & Certificate of Conformance (QR & C of C) 14" Squib Valve Assembly"
3. NCSP 02-24 Rev 3, "ITAAC Support Activities"
4. 4MP-T81C-N3201 Rev 5 "Construction Survey"
5. SV3-RCS-P0K-800036 Rev 1 "ADS Stage 4 Valves Elevation of Bottom Inside Surface of Outlet And Direction of Discharge"
6. SV3-MW01-V0K-891550 Rev 1 "UNIT 3 ADS SPARGER AS-BUILT ELEVATION VERIFICATION"
7. 2.1.02.08d.v-U3-CP-Rev0, ITAAC Completion Package

Attachment A

ADS-4 Valve Discharge and Measured Elevations (Reference 5)

Component Name*	Tag No.*	ADS-4 Valve Discharge	RCS Line/Plant Elevation (Feet)	Half Valve Outlet Dimension (Feet)	ADS-4 Valve Outlet Bottom Inside Surface Plant Elevation (Feet)
Fourth-stage ADS Squib Valve	RCS-PL-V004A	East (SG-1) Room 11301	RCS-PL-L133A /+111.888	1.092	+110.796
Fourth-stage ADS Squib Valve	RCS-PL-V004B	West (SG-2) Room 11302	RCS-PL-L133B /+112.028	1.092	+110.936
Fourth-stage ADS Squib Valve	RCS-PL-V004C	East (SG-1) Room 11301	RCS-PL-L137A /+111.985	1.092	+110.893
Fourth-stage ADS Squib Valve	RCS-PL-V004D	West (SG-2) Room 11302	RCS-PL-L137B /+111.928	1.092	+110.836

* Excerpt from COL Appendix C, Table 2.1.2-1

Attachment B

ADS Sparger/IRWST Overflow Measured Elevations (Reference 6)

Component Name#	Tag No.#	IRWST Overflow Elevation	Elevation of Centerline of Connection of Sparger Arms to Sparger Hub	Sparger Hub Centerline Distance Below IRWST Overflow Level
ADS Sparger A	PXS-MW-01A	131.9 feet	121.0 feet	11.0 feet
ADS Sparger B	PXS-MW-01B	131.9 feet	120.9 feet	11.0 feet

Excerpt from COL Appendix C, Table 2.1.2-5