Southern Nuclear

Michael J. Yox
Regulatory Affairs Director
Vogtle 3 & 4

7825 River Road
Waynesboro, GA 30830
706-848-6459 tel

JUL 0 6 2020

Docket Nos.: 52-025

ND-20-0699
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 2.1.02.08e [Index Number 40]

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 2.1.02.08e [Index Number 40]. This ITAAC verified that the capacity of the reactor vessel head vent is sufficient to pass not less than 9.0 lbm/sec at 2500 psia in the RCS. 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" (Reference 1), 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 ITAAC Closure Notification on Completion of 2.1.02.08e [Index Number 40]

MJY/TST/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. Page
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
Mr. W. Jones (w/o enclosures)
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. Coovert
Mr. C. Welch
Mr. J. Gaslevic
Mr. V. Hall
Mr. G. Armstrong
Mr. M. Webb
Mr. T. Fredette
Mr. S. Smith
Mr. C. Santos
Mrs. M. Bailey
Mr. S. Rose
Mr. B. Davis
Mr. J. Vasquez
Mr. J. Eargle
Ms. K. Carrington
Mr. P. Heher
Mr. M. King
Mr. E. Davidson

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. 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*

Southern Nuclear Operating Company
ND-20-0699
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 3
ITAAC Closure Notification on Completion of ITAAC 2.1.02.08e [Index Number 40]

ITAAC Statement

Design Commitment:

8.e) The RCS provides emergency letdown during design basis events.

Inspections, Tests, Analyses:

Inspections of the reactor vessel head vent valves and inlet and outlet piping will be conducted.

Acceptance Criteria:

A report exists and concludes that the capacity of the reactor vessel head vent is sufficient to pass not less than 9.0 lbm/sec at 2500 psia in the RCS.

ITAAC Determination Basis

The Reactor Coolant System (RCS) provides emergency letdown during design basis events. This ITAAC performs inspections of the reactor vessel head vent (RVHV) valves and inlet and outlet piping to verify that the capacity of the reactor vessel head vent is sufficient to pass not less than 9.0 lbm/sec at 2500 psia in the RCS.

The flow capacity of the RVHV pipe routing is restricted (choked) up to the orifice downstream of the RVHV valves RCS-PL-V150C and D. The flow resistance of the RVHV valves and inlet and outlet piping was calculated with Darcy's formula using line routing information (i.e., pipe length, pipe diameter, number and type of pipe fittings, entrance/exit losses and valves) (Reference 3). Following installation, inspections of construction records were performed to verify the line routing information of the RVHV inlet and outlet piping including valves up to the downstream orifice is consistent with the information in the flow capacity design calculation. The inspection results documented in Reference 2 verify that there is negligible difference between the as-designed and as-built RVHV piping configuration. The calculated RVHV flow capacity of 12.34 lbm/sec at 2500 psia in the RCS remains valid for the as-built system configuration.

The inspection results documented in Reference 2 verify that the capacity of the reactor vessel head vent is sufficient to pass not less than 9.0 lbm/sec at 2500 psia in the RCS, which meets the ITAAC acceptance criteria. The design calculation and inspection results (References 3 and 2 respectively) are available for NRC inspection as part of the ITAAC Completion Package (Reference 4).

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.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.02.08e 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 Rev. 5 corrected 6-30-2014, *Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52*
2. SV3-RCS-ITR-800040, Rev 0, "Unit 3 Inspections and Associated Analysis of the RCS Reactor Vessel Head Vent Line: ITAAC 2.1.02.08e, NRC Index Number: 40"
3. APP-RCS-M3C-067, Rev 4, "Orifice Functional Requirements for RCS Reactor Vessel Head Vent Flow Orifices (APP-RCS-PY-R01A/B)"
4. 2.1.02.08e-U3-CP-Rev0, ITAAC Completion Package