

Michael J. Yox
Site Licensing Manager
Vogtle 3&4

Southern Nuclear
Operating Company, Inc.
7825 River Road
Waynesboro, GA 30830

Tel 706.826.6459
Fax 205.980.5443
myox@southernco.com



September 2, 2014

Docket No.: 52-026

ND-14-1364
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 4
Completion of ITAAC 2.1.03.08 [Index Number 80]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspection, Test, Analysis and Acceptance Criteria (ITAAC) Item 2.1.03.08 [Index Number 80], for verifying that the throat area of the Direct Vessel Injection (DVI) line nozzle flow limiting venturi is less than or equal to 12.57 in². 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.

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 Paulo Albuquerque at 706-826-5531.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. Yox".

Michael J. Yox

Site Licensing Manager

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.1.03.08 [Index Number 80]

U.S. Nuclear Regulatory Commission

ND-14-1364

Page 2 of 3

cc:

Southern Nuclear Operating Company/ Georgia Power Company

Mr. J. A. Miller

Mr. B. L. Ivey

Mr. M. D. Rauckhorst

Mr. D. H. Jones

Mr. B. H. Whitley

Mr. M. J. Yox

Mr. P. C. Albuquerque

Mr. J. C. Harrelson

Mr. C. B. Meadors

Document Services RTYPE: VND.LI.L00

File AR.01.02.06

Nuclear Regulatory Commission

Mr. V. M. McCree

Mr. M. Delligatti

Mr. L. Burkhart

Mr. D. H. Jaffe

Mr. R. G. Joshi

Mr. B. C. Anderson

Ms. D. L. McGovern

Mr. M. E. Ernstes

Mr. G. Khouri

Mr. J. D. Fuller

Mr. C. B. Abbott

Mr. C. Huffman

Ms. S. Temple

Mr. S. Freeman

Georgia Power Company

Mr. D. J. Clem

Ms. J. L. Hall

State of Georgia

Mr. J. H. Turner

Oglethorpe Power Corporation

Mr. M. W. Price

Mr. K. T. Haynes

Municipal Electric Authority of Georgia

Mr. J. E. Fuller

Mr. S. M. Jackson

Dalton Utilities

Mr. D. Cope

CB&I

Mr. J. Simmons

Ms. K. Stoner

Mr. C. A. Castell

Westinghouse Electric Company, LLC

Ms. J. Falascino

Mr. S. W. Gray

Mr. F. G. Gill

Mr. P. A. Russ

Mr. L. E. Erin

Mr. G. F. Couture

Other

Mr. S. Blanton, Balch Bingham

Southern Nuclear Operating Company

ND-14-1364

Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4

Completion of ITAAC 2.1.03.08 [Index Number 80]

ITAAC Statement

Design Commitment:

The reactor vessel direct vessel injection nozzle limits the blowdown of the RCS following the break of a direct vessel injection line.

Inspections, Tests, Analyses:

An inspection will be conducted to verify the flow area of the flow limiting venturi within each direct vessel injection nozzle.

Acceptance Criteria:

The throat area of the direct vessel injection line nozzle flow limiting venturi is less than or equal to 12.57 in².

ITAAC Determination Basis

Inspections were performed to determine that the Reactor Vessel (RV) DVI nozzle limits blowdown of the RCS following the break of a DVI line.

As shown in the Vogtle Updated Final Safety Analysis Report (UFSAR) (Reference 1) the DVI nozzle flow limiting venturi throat area is circular. Because the DVI nozzle throat ID is circular, a DVI nozzle flow limiting venturi throat Inner Diameter (ID) less than or equal to 4.00 inches results in a throat area less than or equal to 12.57 in².

Following fabrication of the DVI nozzle flow limiting venturi, the vendor performed a dimensional inspection to measure the ID of the DVI nozzle flow limiting venturi throat. The inspection was performed for each of the two RV DVI nozzles; one located at the 0 degree RV position and one located at the 180 degree RV position as seen in reference 1. As documented in the Vogtle Unit 4 Quality Release & Certificate of Conformance (Reference 2) and shown in Table 1, the inspection determined that the IDs of each of the two DVI nozzle flow limiting venturi throats was 3.97 inches in the 0 degree RV position and 3.96 inches in the 180 degree RV position. This resulted in the DVI nozzle flow limiting venturi throat areas being 12.38 in² and 12.32 in² respectively, thereby meeting the ITAAC acceptance criteria for the throat area being less than or equal to 12.57 in².

Table 1. RV DVI Nozzle Diameter and Area

Description	Measured Value
	Diameter (in) / Area (in ²)
RV DVI Nozzle 0-degree azimuth	3.97 / 12.38
RV DVI Nozzle 180-degree azimuth	3.96 / 12.32

The Vogtle Unit 4 Reactor Vessel Quality Release & Certificate of Conformance (Reference 2) verified that the throat area of each direct vessel injection line nozzle flow limiting venturi is less than or equal to 12.57 in².

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 Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.1.03.08 (Reference 3) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.03.08 was performed for VEGP Unit 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. Vogtle Electric Generating Plants, Unit 3 and 4 Updated Final Safety Analysis Report, Chapter 5, Figure 5.3-1
2. SV4-MV01-VQQ-001 Revision 0, Vogtle Unit 4 Quality Release & Certificate of Conformance
3. Vogtle Unit 4 ITAAC 2.1.03.08 Completion Package