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ND-13-1658  
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission  
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Washington, DC 20555-0001

Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 3  
Completion of ITAAC 2.1.03.08 [Index Number 80]

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 2.1.03.08 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 in<sup>2</sup>. 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.

**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.

**Inspection/Test/Analysis**

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 in<sup>2</sup>.

### **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 3&4 Updated Final Safety Analysis Report (UFSAR) (Reference 1), the DVI nozzle flow limiting venturi throat area is circular. Because the DVI nozzle throat inner diameter (ID) is circular, a DVI nozzle flow limiting venturi throat ID less than or equal to 4.00 inches results in a throat area less than or equal to 12.57 in<sup>2</sup>.

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 documented in the Vogtle Unit 3 Quality Release & Certificate of Conformance (Reference 2) and shown in Table 1, the inspection determined that the ID of each DVI nozzle flow limiting venturi throat was 3.98 inches which results in each DVI nozzle flow limiting venturi throat area being 12.44 in<sup>2</sup>.

Description	Measured Value
	Diameter (in) / Area (in <sup>2</sup> )
RV DVI Nozzle 0-degree azimuth	3.98 / 12.44
RV DVI Nozzle 180-degree azimuth	3.98 / 12.44

Table 1. RV DVI Nozzle Diameter and Area

The Vogtle Unit 3 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 in<sup>2</sup>.

### **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 3 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 3 and that the prescribed acceptance criteria are met.

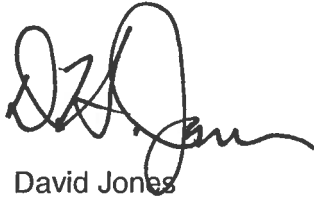
Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

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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 James Davis at 706-826-5544.

Sincerely,

A handwritten signature in black ink, appearing to read "David Jones", written in a cursive style.

David Jones

SNC Technical Compliance Vice President

**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. SV3-MV01-VQQ-001 Revision 2, Vogtle Unit 3 Quality Release & Certificate of Conformance
3. SVP\_SV0\_002004, Attachment 2, Vogtle Unit 3 ITAAC 2.1.03.08 Completion Package

cc:

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