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U.S. Nuclear Regulatory Commission  
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Southern Nuclear Operating Company  
Vogtle Electric Generating Plant Unit 4  
ITAAC Closure Notification on Completion of ITAAC 2.1.03.02c [Index Number 71]

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 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.1.03.02c [Index Number 71] for verifying the reactor system (RXS) reactor vessel arrangement shown in the VEGP Unit 4 Combined License (COL) Appendix C, Figure 2.1.3-3. 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 David Woods at 706-848-6903.

Respectfully submitted,

Michael J. Yox  
Regulatory Affairs Director Vogtle 3&4

MJY/RDH/amm

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.1.03.02c [Index Number 71]

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**Southern Nuclear Operating Company  
ND-16-2796  
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4  
Completion of ITAAC 2.1.03.02c [Index Number 71]**

### **ITAAC Statement**

#### **Design Commitment:**

2.c) The reactor vessel arrangement is as shown in Figure 2.1.3-3.

#### **Inspections, Tests, Analyses:**

Inspection of the as-built system will be performed.

#### **Acceptance Criteria:**

The as-built RXS will accommodate the reactor vessel arrangement shown in Figure 2.1.3-3.

### **ITAAC Determination Basis**

An inspection was performed of the reactor vessel to verify the as-built reactor system (RXS) will accommodate the reactor vessel arrangement shown in the Combined License (COL) Appendix C, Figure 2.1.3-3.

During and following fabrication, the vendor measured key dimensions of the reactor vessel (as shown in Figure 2.1.3-3) and verified that they were within the COL Appendix C, Table 2.1.3-4 (Attachment A) acceptance criteria.

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 reactor vessel, it was necessary to verify measurements were within the acceptable ITAAC ranges prior to application of reactor cladding and shipment. Completion of reactor vessel 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).

As documented in the Vogtle Unit 4 reactor vessel Quality Release & Certificate of Conformance (Reference 2), the reactor vessel arrangement key dimensions are within the criteria (Attachment A) and meets the ITAAC acceptance criteria.

### **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 document number is included in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 2.1.03.02c (Reference 3) and available for NRC inspection.

**ITAAC Completion Statement**

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.1.03.02c 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)**

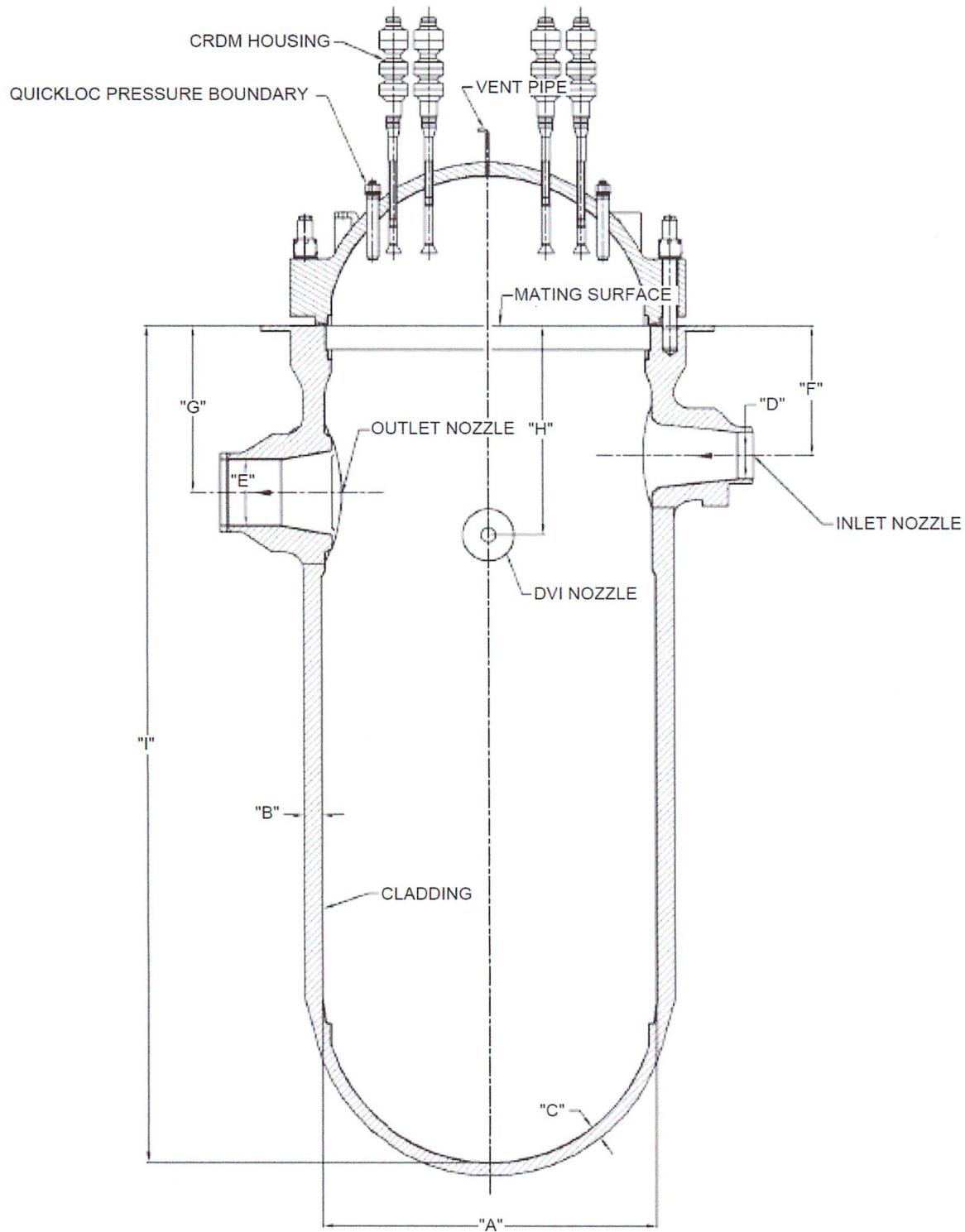
1. NEI 08-01, *Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52*
2. SV4-MV01-VQQ-001 Revision 1, "Quality Release & Certificate of Conformance (QR & C of C)"
3. SVP\_SV0\_004402, Attachment 1, Submittal of Inspections, Test, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 2.1.03.02c [COL Index Number 71] (RXS As-Built Reactor Vessel Arrangement)

**Attachment A**

SYSTEM: Reactor System

Excerpt from COL Appendix C Table 2.1.3-4\*

<b>Table 2.1.3-4*</b> <b>Key Dimensions and Acceptable Variations of the Reactor Vessel (RV)</b> <b>(Figure 2.1.3-3)</b>				
<b>Description*</b>	<b>Dimension or Elevation* (inches)</b>	<b>Nominal Value* (inches)</b>	<b>Acceptable Variation* (inches)</b>	<b>QR &amp; C of C Values – Min. to Max (inches)</b>
RV inside diameter at beltline (inside cladding)	A	159.0	+1.0/-1.0	158.78 – 158.78
RV wall thickness at beltline (without cladding)	B	8.4	+1.0/-0.12	8.41 – 8.41
RV wall thickness at bottom head (without cladding)	C	6.0	+1.0/-0.12	6.059 – 6.059
RV inlet nozzle inside diameter at safe end	D	22.0	+0.35/-0.10	21.98 – 22.00
RV outlet nozzle inside diameter at safe end	E	31.0	+0.35/-0.10	31.00 – 31.00
Elevation from RV mating surface to centerline of inlet nozzle	F	62.5	+0.25/-0.25	62.46 – 62.55
Elevation from RV mating surface to centerline of outlet nozzle	G	80.0	+0.25/-0.25	79.95 – 79.96
Elevation from RV mating surface to centerline of direct vessel injection nozzle	H	100.0	+0.25/-0.25	99.95 – 99.97
Elevation from RV mating surface to inside of RV bottom head (inside cladding)	I	397.59	+1.0/-0.50	397.37 – 397.37



**Figure 2.1.3-3**  
**Reactor Vessel Arrangement**