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SCE&G®
A SCANA COMPANY

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NND-14-0016
10 CFR 52.99(c)(1)

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Virgil C. Summer Nuclear Station (VCSNS) Unit 2
Combined License No. NPF-93
Docket Number 52-027
Completion of ITAAC 2.1.03.08

Attachments: References

The purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Virgil C. Summer Nuclear Station (VCSNS) Unit 2 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.1.03.08 for verifying that the measured Inside Diameter (ID) of the Direct Vessel Injection (DVI) nozzle flow limiting venturi results in a nozzle throat area of no greater than 12.57 in^2. The closure process for this ITAAC is based on the guidance described in NEI 08-01 (Reference 1), which was endorsed by the NRC in Regulatory Guide 1.215.

ITAAC Statement

Design Commitment:

8. 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 12.57in^2.

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ITAAC Determination Basis

An inspection of the DVI nozzle flow limiting venturi was conducted by the reactor vessel vendor to determine that the throat area was less than or equal to 12.57 in^2. This dimension will limit RCS blowdown following a break of a direct vessel injection line.

As shown in the V.C. Summer Updated Final Safety Analysis Report, Figure 5.3-5 (Reference 4), the two DVI nozzles are located at the 0 degree and 180 degree azimuth positions on the reactor vessel, and are circular with a maximum diameter of 4.00 inches, which equates to a throat area of 12.57 in^2. Inspection was performed to measure the throat diameter of each of the DVI nozzles. The results are documented in the V.C. Summer 2 Reactor Vessel Quality Release and Certificate of Conformance (Reference 2). The measured diameters and corresponding areas are summarized in Table 1 below.

Table 1

	Measured Value
Description	Diameter (in) / Area (in^2)
DVI Nozzle 0-degree azimuth	3.98 / 12.44
DVI Nozzle 180-degree azimuth	3.97 / 12.38

The throat area of each of the DVI nozzles meets the acceptance criteria of ≤ 12.57in^2.

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, SCE&G 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 2.1.03.08 (Reference 3) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SCE&G hereby notifies the NRC that ITAAC 2.1.03.08 was performed for VCSNS Unit 2 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.

We request NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99(e)(1).

If there are any questions, please contact Ryder Thompson at (803) 941-9812.

Sincerely,

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RCT/AP/jl

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References (available for NRC inspection):

1. NEI 08-01, Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52.
2. VS2-MV01-VQQ-001, V.C. Summer 2 Reactor Vessel Quality Release & Certificate of Conformance
3. ITAAC 2.1.03.08 Completion Package
4. V.C. Summer Nuclear Station, Units 2 and 3 Updated Final Safety Analysis Report, Chapter 5, Figure 5.3-5