



April R. Rice  
Manager  
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November 13, 2015  
NND-15-0616  
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  
ITAAC Closure Notification for 2.3.01.03.i [Index Number 280]

Attachments: References

The purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) in accordance with 10 CFR 52.99(c)(1) of the completion of Virgil C. Summer Nuclear Station (VCSNS) Unit 2 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.01.03.i for verifying that a report exists and concludes that the product of the overall heat transfer coefficient and the effective heat transfer area, UA, of each CCS heat exchanger is greater than or equal to 14.0 million BTU/hr-°F. 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 was endorsed by the NRC in Regulatory Guide 1.215.

### **ITAAC Statement**

#### **Design Commitment:**

*3. The CCS provides the nonsafety-related functions of transferring heat from the RNS during shutdown and the spent fuel pool cooling system during all modes of operation to the SWS.*

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

*i) Inspection will be performed for the existence of a report that determines the heat transfer capability of the CCS heat exchangers.*

Acceptance Criteria:

*i) A report exists and concludes that the UA of each CCS heat exchanger is greater than or equal to 14.0 million Btu/hr-°F.*

**ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the Component Cooling Water System (CCS) provides the nonsafety-related functions of transferring heat from the Normal Residual Heat Removal System (RNS) during shutdown and the Spent Fuel Pool Cooling System (SFS) during all modes of operation to the Service Water System (SWS). This ITAAC verifies the heat transfer capability of the CCS heat exchangers, CCS-ME-01A and CCS-ME-01B.

A report exists and concludes that the acceptance criteria are met and that the UA of each CCS heat exchanger is greater than or equal to the value specified in the acceptance criteria as 14.0 million Btu/hr-°F.

The vendor validated that the CCS heat exchangers are capable of meeting the specified heat transfer performance requirements using detailed modeling, calculations, and analyses. A “Quality Release and Certificate of Conformance – HX, CCS, Counterflow, C/S” document (Reference 2) was generated identifying the heat exchangers’ design and performance characteristics, including the UA of each heat exchanger.

An inspection was performed of the “Quality Release and Certificate of Conformance – HX, CCS, Counterflow, C/S” document (Reference 2). The purpose of the inspection was to confirm that the UA of each CCS heat exchanger was greater than or equal to 14.0 million Btu/hr-°F. The UA of each CCS heat exchanger is 17.246 million Btu/hr-°F.

The “Quality Release and Certificate of Conformance – HX, CCS, Counterflow, C/S” document (Reference 2) exists and concludes that the UA of each CCS heat exchanger is greater than or equal to 14.0 million Btu/hr-°F.

**ITAAC Finding Review**

In accordance with plant procedures for ITAAC completion, SCE&G performed a review of all 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 2.3.01.03.i (Reference 3) and available for NRC inspection.

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**ITAAC Completion Statement**

Based on the above information, SCE&G hereby notifies the NRC that ITAAC 2.3.01.03.i 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 Nick Kellenberger at (803) 941-9834.

Sincerely,



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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-ME3A-VQQ-001, Quality Release and Certificate of Conformance – HX, CCS, Counterflow, C/S
3. V.C. Summer Unit 2 ITAAC 2.3.01.03.i Completion Package