

September 4, 2015 NND-15-0104 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 3

Combined License No. NPF-94

Docket Number 52-028

ITAAC Closure Notification for ITAAC 2.3.11.02.ii [Index No. 451]

Attachments: 1. References

2. Excerpt from COL Appendix C Table 2.3.11-1

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 3 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.3.11.02.ii for verifying a report exists and concludes that the Gaseous Radwaste System (WGS) Activated Carbon Delay Beds can withstand appropriate seismic design basis loads without the loss of loss of their structural integrity function. 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:

2. The equipment identified as having seismic design requirements in Table 2.3.11-1 can withstand seismic design basis loads without loss of its structural integrity function.

#### Inspections, Tests, Analyses:

*ii)* Type tests, analyses, or a combination of type tests and analyses of seismically designed equipment will be performed.

#### Acceptance Criteria:

ii) A report exists and concludes that the seismically designed equipment can withstand appropriate seismic design basis loads without loss of its structural integrity function.

## **ITAAC Determination Basis**

Multiple ITAAC are performed to demonstrate that the equipment in V.C. Summer Unit 3 COL Appendix C Table 2.3.11-1 (see Attachment 2) can withstand seismic design basis loads without the loss of its structural integrity function. The equipment identified in Table 2.3.11-1 as having seismic design requirements are the Gaseous Radwaste System (WGS) Activated Carbon Delay Beds; WGS-MV-02A and WGS-MV-02B. The subject ITAAC requires that type tests, analyses, or a combination of type tests and analyses be performed on the WGS Activated Carbon Delay Beds.

Seismic loads for the equipment were established using one-half of the AP1000 Safe Shutdown Earthquake (SSE) floor response spectra. Seismic analyses of the WGS Activated Carbon Delay Beds, identified in Table 2.3.11-1, were performed to demonstrate structural integrity in accordance with American Society of Mechanical Engineers Boiler and Pressure Vessel Code Section VIII, Rules for Construction of Pressure Vessels (Reference 2). The analyses are documented in the WGS Delay Bed Design Report (Reference 3) and conclude that the equipment identified in VCSNS Unit 3 COL Appendix C Table 2.3.11-1 as having seismic design requirements can withstand appropriate seismic design basis loads without loss of its structural integrity function.

### **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 2.3.11.02.ii (Reference 4) and available for NRC inspection.

#### **ITAAC Completion Statement**

Based on the above information, SCE&G hereby notifies the NRC that ITAAC 2.3.11.02.ii was performed for VCSNS 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.

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).

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If there are any questions, please contact Nick Kellenberger at (803) 941-9834.

Sincerely,

April R. Rice

Manager
Nuclear Licensing
New Nuclear Deployment

NK/AR/vk

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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.
- American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section VIII, Rules for Construction of Pressure Vessels, 2001 Edition with 2003 Addenda
- 3. APP-MV6H-VDR-001, AP1000 MV6H WGS Delay Bed Design Report
- 4. ITAAC 2.3.11.02.ii Completion Package

# **Excerpt from COL Appendix C Table 2.3.11-1**

# SEISMICALLY DESIGNED EQUIPMENT ITAAC COMPLIANCE TABLE

SYSTEM: Gaseous Radwaste System

Equipment Name	Tag Number	Seismic Category I	Type of Qualification	Design Report Number
WGS Activated Carbon Delay Bed A	WGS-MV-02A	No <sup>(1)</sup>	Analysis	APP-MV6H-VDR-001
WGS Activated Carbon Delay Bed B	WGS-MV-02B	No <sup>(1)</sup>	Analysis	APP-MV6H-VDR-001

<sup>(1)</sup> The WGS activated carbon delay beds (WGS-MV-02A and WGS-MV-02B) are designed to one-half SSE.