

## Vogtle PEmails

---

**From:** Gleaves, Bill  
**Sent:** Wednesday, April 4, 2018 2:39 PM  
**To:** Vogtle PEmails  
**Subject:** Final Audit Plan for LAR-17-039 "Unqualified Service Level 1 Coatings Program"  
**Attachments:** Vogtle LAR-17-039 Final Audit Plan 4-04-18.pdf

This email is to put the subject final audit plan into ADAMS for public release.

Billy  
William (Billy) Gleaves  
Senior Project Manager  
Licensing Branch 4  
Office OWFN 8H17  
US NRC, Office of New Reactors

The contents of this message may be sensitive. If this message has been received in error, please delete it without reading it. Your receipt of this message is not intended to waive any applicable privilege. Do not disseminate this message without the permission of the author. Communications by this author are not binding on The Commission.

**Hearing Identifier:** Vogtle\_COL\_Docs\_Public  
**Email Number:** 248

**Mail Envelope Properties** (CY1PR09MB09082077502DE0ECE3E995C09FA40)

**Subject:** Final Audit Plan for LAR-17-039 "Unqualified Service Level 1 Coatings Program"  
**Sent Date:** 4/4/2018 2:38:50 PM  
**Received Date:** 4/4/2018 2:38:53 PM  
**From:** Gleaves, Bill

**Created By:** Bill.Gleaves@nrc.gov

**Recipients:**  
"Vogtle PEmails" <Vogtle.PEmails@nrc.gov>  
Tracking Status: None

**Post Office:** CY1PR09MB0908.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	597	4/4/2018 2:38:53 PM
Vogtle LAR-17-039 Final Audit Plan 4-04-18.pdf		127760

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

**PLAN FOR THE REGULATORY AUDIT OF**  
**SOUTHERN NUCLEAR OPERATING COMPANY, INC.,**  
**VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4,**  
**PROTECTIVE COATINGS PROGRAM**  
**DOCKET NOS. 52-025 AND 52-026**

**LICENSEE:**

Southern Nuclear Operating Company, Inc. (SNC)

**LICENSEE CONTACTS:**

- Adam Quarles, SNC

**DURATION:**

38 days

April 4, 2018 through May 11, 2018

**LOCATIONS:**

Local SNC Office

Electronic Reading Room (eRR)

**AUDIT TEAM:**

- Gregory L. Makar (Office of New Reactors (NRO)/Materials and Chemical Engineering Branch (MCB), Materials Engineer, Audit Lead)
- Leslie S. Terry (NRO/MCB, Materials Engineer)
- Matthew A. Mitchell (NRO/MCB, Branch Chief)
- Billy Gleaves (NRO, Project Manager (PM))
- Supporting staff (as needed)

**BACKGROUND AND OBJECTIVES**

By letter dated November 3, 2017 (Accession No. ML17307A201 in the U.S. Nuclear Regulatory Commission's (NRC) Agencywide Documents Access and Management System), SNC requested NRC approval of an amendment to Combined License Numbers NPF-91 and NPF-92 for Vogtle Electric Generating Plant (VEGP), Units 3 and 4; and a permanent exemption from certain elements of the generic Advanced Passive 1000 (AP1000) Design Control Document

Enclosure

(DCD). This license amendment request (LAR) was designated by SNC as LAR 17-039. Specifically, the amendment and exemption are related to a proposed administrative program to manage a limited quantity of unqualified coatings in Service Level I areas (areas inside containment). Section 6.3.2.2.7.1 in Revision 19 of the AP1000 DCD, "General Screen Design Criteria," describes limits on the amount of coatings in the debris mixture following a postulated loss of coolant accident (LOCA).

Protective coatings are addressed in Section 6.1.2.1, "Protective Coatings," in Tier 2 of the Updated Final Safety Analysis Report (UFSAR) for VEGP, Units 3 and 4. As part of the overall technical review of LAR 17-039, and in order to understand how the proposed program would be implemented within the overall program for coatings in containment, the NRC staff determined it is necessary to audit information supporting the VEGP, Units 3 and 4, protective coatings program. Specifically, the NRC staff intends to audit information supporting the LAR, such as tracking documents being used to ensure the potential coating debris is maintained within the licensing basis limits (i.e., nonconforming coatings and other coating types), the technical evaluation and tracking process for nonconformances and managing unqualified coatings (i.e., periodic reassessment and tracking document updates), and the process for assessing the effect of nonconformances on other design and licensing limits. The NRC staff will conduct this audit in accordance with the guidance in NRO-REG-108, "Regulatory Audits."

The objectives of this audit are to enable the NRC staff to:

- Gain a better understanding of information underlying the VEGP, Units 3 and 4, protective coatings program; and
- Identify information that fundamentally supports the basis of the regulatory decision which may require docketing.

### **REGULATORY AUDIT BASIS**

An audit is required to examine detailed information related to the licensee's protective coatings program, and reach a safety conclusion on the license amendment and exemption request described above. The NRC staff must have sufficient information to ensure that acceptable risk and reasonable assurance of safety can be documented in the NRC staff's safety evaluation.

This regulatory audit is based on the following regulations:

- General Design Criteria (GDC) 1, "Quality standards and records," of Appendix A to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"
- GDC 4, "Environmental and dynamic effects design bases," of Appendix A to 10 CFR Part 50
- GDC 35, "Emergency core cooling," of Appendix A to 10 CFR Part 50
- GDC 38, "Containment heat removal," of Appendix A to 10 CFR Part 50
- 10 CFR 50.46(b)(5), "Long-term cooling"
- 10 CFR 52, Appendix D, "Design Certification Rule for the AP1000 Design"

- Regulatory Guide (RG) 1.54, "Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants"
- RG 1.82, "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident"
- Enclosure 2, "Coatings Evaluation Guidance for NRC Review of Generic Letter 2004-02 Supplemental Responses Prepared by the Office of Nuclear Reactor Regulation, Division of Component Integrity," of "Revised Guidance for Review of Final Licensee Responses to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated March 28, 2008

### **REGULATORY AUDIT SCOPE**

The specific scope of this audit is information related to tracking documents being used to ensure the potential coating debris is maintained within the licensing basis limits (i.e., nonconforming coatings and other coating types), the technical evaluation and tracking process for nonconformances and managing unqualified coatings (i.e., periodic reassessment and tracking document updates), and the process for assessing the effect of nonconformances on other design and licensing limits.

The documents supporting the technical areas listed above are to be made available to the NRC staff in the SNC eRR or at the local SNC office. The documents already identified by the NRC staff are listed below. Additional documents will be requested by the NRC staff as needed (when referenced by a document being audited by the NRC staff, for instance), and these documents will be added to the audit report prepared by the NRC staff following the conclusion of the audit.

#### **Documents Requested**

- SV3-AX01-GEC-000001, Revision B "Unqualified Coatings Log for Vogtle Unit 3"
- W2-9.14-102, Field Deviation Report, Westinghouse Level 2 Procedure
- APP-GW-GAP-428, Revision 14 "Nonconformance and Disposition Report (N&D)"
- APP-GW-GAP-420, Revision 14 "Engineering and Design Coordination Reports"
- APP-GW-Z0-604, Revision 9 "Application of Protective Coatings to Systems, Structures and Components"
- APP-GW-HT-002, Revision 4 "Containment Coating Functional Requirements"
- APP-G1-X0-001, Revision 8 "Protective Coatings Design Requirements (Safety Class C & Seismic Category N/A)"
- APP-PXS-M3C-013, Revision 4 "Post LOCA Coating Debris from Zone of Influence"

### **DATE/TIME/LOCATION/SPECIAL REQUESTS**

The audit will include an entrance meeting on April 10, 2018, via conference call.

The NRC staff asks that the requested documents be available to the NRC auditors in the SNC eRR during the period of April 3, 2018 thru May 11, 2018. Use of the eRR allows multiple auditors in different geographic locations to examine the same document at the same time which improves the efficiency and reduces the cost of the audit. Additional documents may be identified as the review progresses. When the NRC staff's review of the documents associated with a specific issue is complete the NRC staff will notify either the NRO PM or SNC that these documents can be removed from the eRR. The NRC staff also expects that SNC personnel knowledgeable in the audit topics be available to the NRC staff (if the request comes with reasonable notification).

If the audit is expanded such that information is required to be reviewed at the local SNC office, then in addition to the previous requests, the NRC staff requests that a conference room with a speaker phone be available.

### **AUDIT ACTIVITIES AND DELIVERABLES**

The NRC staff acknowledges that the information requested may be proprietary or sensitive. It will be handled appropriately throughout the audit. While the NRC staff will take notes, they will not remove hard copy or electronic files from the audit site(s), and the notes will be marked accordingly. SNC will be informed if any NRC contractors are participating in the audit. Any materials generated will be evaluated and approved through standard NRC processes for handling sensitive material.

The NRC will hold two status calls and/or meetings with SNC, no later than April 20, 2018, and May 4, 2018, to identify issues that have been closed or will be resolved by other mechanisms, such as requests for additional information or public meetings. In the status meetings, the NRC will also identify any emerging information needs as well as documents that can be removed from the eRR. The NRC will hold a conference call or meeting to exit the audit.

If necessary, any circumstances related to the conduct of the audit will be communicated to the NRC Project Manager, Billy Gleaves at 301-415-5848 or [Bill.Gleaves@nrc.gov](mailto:Bill.Gleaves@nrc.gov).