

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 7, 2020

MEMORANDUM TO: Victor Hall, Chief

Vogtle Project Office

Office of Nuclear Reactor Regulation

FROM: William (Billy) Gleaves, Sr. Project Manager /RA/

Vogtle Project Office

Office of Nuclear Reactor Regulation

SUBJECT: Audit Plan for Vogtle Electric Generating Plant Units 3 and 4,

Request for License Amendment and Exemption: Auxiliary

Building Room Heat-up (LAR-19-010)

By letter dated November 22, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML19326D430), Southern Nuclear Operating Company (the licensee) requested an amendment and exemption for Combined License (COL) Numbers NPF-91 and NPF-92, for Vogtle Electric Generating Plant (VEGP) Units 3 and 4.

The requested amendment proposes to depart from Updated Final Safety Analysis Report (UFSAR) Tier 2 information (which includes the plant-specific Design Control Document (DCD) Tier 2 information), involves related changes to plant-specific Tier 1 information, with corresponding changes to the associated COL Appendix C information. The changes address potential effects within AP1000 Auxiliary Building spaces following loss of heating, ventilation and air conditioning (HVAC) or loss of ac power events.

The staff's review plan for this LAR includes an audit to gain a better understanding of the proposed changes and to review related documentation and non-docketed information in order to evaluate the acceptability of the proposed changes to the license.

Docket Nos.: 52-025 and 52-026

Enclosure:

Regulatory Audit Plan

cc: See next page

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AUDIT PLAN FOR VOGTLE ELECTRIC GENERATING PLANT UNITS 3 AND 4, REQUEST FOR LICENSE AMENDMENT AND EXEMPTION: AUXILIARY BUILDING ROOM HEAT-UP (LAR-19-010) DATED: February 7, 2020

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# NRR-001

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# U.S. NUCLEAR REGULATORY COMMISSION REGULATORY AUDIT OF VOGTLE UNITS 3 AND 4 LICENSE AMENDMENT REQUEST LAR 19-010 AUXILIARY BUILDING ROOM HEAT-UP

Docket Nos. 52-025 and 52-026

# **AUDIT PLAN**

LICENSEE: Southern Nuclear Operating Company

LICENSEE CONTACT: Eddie Grant

LOCATION: U.S. Nuclear Regulatory Commission

One White Flint North 11555 Rockville Pike Rockville, Maryland 20852

## I. BACKGROUND

By letter dated November 22, 2019, Southern Nuclear Operating Company (SNC) submitted license amendment request (LAR) 19-010, "Auxiliary Building Room Heat-Up." SNC is the combined license (COL) holder for the Vogtle Electric Generating Plant (VEGP), Units 3 and 4 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML14100A106 and ML14100A135).

In LAR 19-010, SNC requests changes to the licensing basis documents to address potential effects following loss of heating, ventilation, and air conditioning (HVAC) or loss of alternating current (ac) power events. The changes include revising heat loads in Auxiliary Building spaces and the event evaluation related to the revised heat loads. SNC states that the evaluations demonstrate that the temperature limits of the affected rooms in the Auxiliary Building are met based on design basis accidents heat-up analysis.

To facilitate the NRC staff's evaluation of LAR 19-010 and to complete its safety review in a timely manner, the NRC staff is planning an audit that includes:

- Review of applicable documents provided by SNC in its electronic reading room (eRR) in support of the proposed changes described in the LAR. The NRC staff may conduct audit telephone conferences with SNC to discuss the specific documents.
- Determination of the need for any requests for additional information (RAIs) to modify or clarify the information provided in the LAR.

Enclosure

## **II. PURPOSE AND REGULATORY AUDIT BASES**

The purpose of this audit is for the staff to examine and evaluate non-docketed information supporting the LAR to verify the information and conclusions in the "Request for License Amendment: Auxiliary Building Room Heat-Up (LAR 19-010)."

This regulatory audit is based on the following:

- VEGP Unit 3, Current Facility Combined License NPF-91, revised April 30, 2019, License Condition 2.D.(2)(a) (ADAMS Accession No. ML14100A106).
- VEGP Unit 4, Current Facility Combined License NPF-92, revised April 30, 2019, License Condition 2.D.(2)(a) (ADAMS Accession No. ML14100A135).
- VEGP Units 3 and 4 UFSAR Tier 1, Revision 12, June 14, 2019 (ADAMS Accession No. ML19171A096).
- VEGP Units 3 and 4 UFSAR Tier 2, Revision 8, Section 9.4.1.2.3.2, Revision 8, June 14, 2019 (ADAMS Accession No. ML19171A096).
- 10 CFR Part 50, Appendix A, GDC 4, "Environmental and Dynamic Effects Design Bases"
- 10 CFR 50.49, "Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants"
- NRO Office Instruction NRO-REG-108, Rev 0, "Regulatory Audits"

## III. REGULATORY AUDIT SCOPE

The audit team will view the documentation that provides technical support for LAR 19-010 with respect to verifying that the temperatures in the Auxiliary Building remain within safety limits. The team will also review a sample of the licensee's equipment qualification documents that provide support for LAR 19-010 to ensure that the licensee has adequately addressed the impact of the proposed changes on the environmental qualification of electrical equipment in the rooms/areas/zones affected by the proposed changes.

In addition, the audit team might request to discuss with subject matter expert(s) the content of the supporting documentation.

## IV. DOCUMENTS/INFORMATION NECESSARY FOR THE AUDIT

SNC should make available documents pertaining to the review areas listed in Section III of this audit plan. Additionally, the staff requests that the following documents be made available in the eRR:

- 1. APP-1200-VPC-001, Rev. 1, Base Model for AP1000 Auxiliary Building Room Heat-Up Analysis Using GOTHIC
- 2. E&DCR APP-GW-GEF-2370, Rev. 0
- 3. APP-GW-VP-030, Rev. 6, AP1000 Environmental Conditions
- 4. Environmental qualification binders for the equipment in the rooms/areas/zones affected by the proposed changes

Other documents may be requested during the staff's review. The staff acknowledges and will observe appropriate handling and protection of proprietary information made available for the audit.

#### V. AUDIT TEAM

The following are the NRC audit team members:

- Billy Gleaves, Senior Project Manager
- Nan (Danny) Chien, Reactor Systems Engineer
- Matthew McConnell, Senior Electrical Engineer

#### VI. AUDIT SCHEDULE

Date: February 10, 2020 - April 30, 2020

The review of documents supporting LAR 19-010, and identified in Section IV of this audit plan, will be conducted at NRC Headquarters via the applicant's eRR.

Location: NRC Headquarters

Two White Flint North 11555 Rockville Pike

Rockville, MD 20852-2738

## **VII. SPECIAL REQUESTS**

If necessary, the staff requests that subject matter expert(s) be made available to discuss the reviewed documentation.

Billy Gleaves, NRC Senior Project Manager, can be reached at 301-415-5848 or bill.gleaves@nrc.gov.

## VIII. AUDIT ACTIVITIES AND DELIVERABLES

The NRC staff will perform the audit by reviewing the documentation made available in the eRR by SNC. The staff will review the documents from their NRC workstations. If necessary, the staff will conduct meetings or telephone conferences with SNC to discuss issues or questions regarding the documents.

The NRC staff acknowledges the proprietary nature of the information requested and will handle it appropriately throughout the audit. The NRC staff will not remove hard copies or electronic files from the eRR.

The NRC staff will conduct a non-public entrance telephone conference on, or as close as possible to March 10, 2020, and a non-public telephone conference around April 30, 2020, at the end of the audit to announce closure of the audit.

The staff will prepare an audit report to document the results of the audit. This report will be made publicly available in ADAMS.

If necessary, any circumstances related to the conduct of the audit will be communicated to the NRC Senior Project Manager, Billy Gleaves, 301-415-5848.