

### UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 29, 2020

MEMORANDUM TO: Victor Hall, Chief

Vogtle Project Office

Office of Nuclear Reactor Regulation

FROM: Donald Habib, 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: RECONCILIATION OF ENVIRONMENTAL CONDITIONS INPUTS TO CIVIL STRUCTURAL DESIGN LICENSING BASIS

(LAR 19-019)

By letter dated December 13, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML19347C046), Southern Nuclear Operating Company (the licensee) requested an amendment to Combined License (COL) Numbers NPF-91 and NPF-92, for Vogtle Electric Generating Plant (VEGP) Units 3 and 4.

The requested amendment would change the Updated Final Safety Analysis Report (UFSAR) in the form of departures from the incorporated plant-specific Design Control Document (DCD) Tier 2 and Tier 2\* information.

The requested amendment would revise the normal thermal loads for the passive containment cooling system tank; revise the accident thermal loads for the exterior walls below grade and basemat in the auxiliary building; and update the critical section tables for the auxiliary building basemat, concrete walls, and floors, the shield building roof, and the spent fuel pool west wall in the UFSAR.

CONTACT: Donald Habib, NRR/VPO

301-415-1035

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The Structural, Civil, Geotech, Engineering Branches A and B (ESEA and ESEB) plan to conduct 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: RECONCILIATION OF ENVIRONMENTAL CONDITIONS INPUTS TO CIVIL STRUCTURAL DESIGN LICENSING BASIS (LAR 19-019) DATED: January 29, 2020

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#### ADAMS Accession No.: ML20014D839

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|---|------------|------------|-----------------|-----------------|
| OFFICE  | NRR/VPO/PM | NRR/VPO/LA | NRR/DEX/ESEA/BC | NRR/DEX/ESEB/BC |
| NAME  | DHabib     | RButler    | DWilliams       | JColaccino      |
| DATE  | 1/16/2020  | 1/16/2020  | 1/17/2020       | 1/17/2020       |
| OFFICE  | NRR/VPO/BC |            |                 |                 |
| NAME  | VHall      |            |                 |                 |
| DATE  | 1/28/2020  |            |                 |                 |

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(Revised 11/12/2019)

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# AUDIT OF REPORTS AND CALCULATIONS IN SUPPORT OF REQUEST FOR LICENSE AMENDMENT RELATED TO RECONCILIATION OF ENVIRONMENTAL CONDITIONS INPUTS TO CIVIL STRUCTURAL DESIGN LICENSING BASIS (LAR-19-019)

## SOUTHERN NUCLEAR OPERATING COMPANY VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4 Docket Nos. 52-025 and 52-026

The purpose of the audit is to review the documentation and calculations needed by the U.S. Nuclear Regulatory Commission (NRC) staff to verify the information and conclusions in the "Request for License Amendment: Reconciliation of Environmental Conditions Inputs to Civil Structural Design Licensing Basis (LAR-19-019)" submitted by Southern Nuclear Operating Company (SNC) for the Vogtle Electric Generating Plant (VEGP), Units 3 and 4 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19347C046).

#### A. Background:

In LAR 19-019, SNC requests changes to the Updated Final Safety Analysis Report (UFSAR) in the form of departures from the incorporated plant-specific Design Control Document (DCD) Tier 2 and Tier 2\* information.

The LAR includes proposed changes to revise the normal thermal loads for the passive containment cooling system (PCS) tank; revise the accident thermal loads for the exterior walls below grade and basemat in the auxiliary building; and update the critical section tables for the auxiliary building basemat, concrete walls, and floors, the shield building roof, and the spent fuel pool (SPF) west wall in the UFSAR.

#### **B.** Regulatory Audit Basis

This regulatory audit is based on the following:

- VEGP Units 3 and 4 UFSAR Tier 1, Revision 7, June 14, 2019 (ADAMS Accession No. ML19171A045).
- VEGP Units 3 and 4 UFSAR Tier 2, Revision 8, June 14, 2019 (ADAMS Accession No. ML19171A096).

#### C. Regulatory Audit Scope and Methodology

The audit team will view the documentation and calculations that provide the technical support for LAR 19-019. Information to be reviewed involves the calculations associated with the locations in UFSAR Table 3H.5-9 with no margin (ratio between required and provided is 1.0). These are the design limit for the tension ring (sheet 1 of 3), and the design limit for the air inlet (sheet 2b of 3).

In addition, the audit team will request to discuss these topics with subject matter expert(s).

#### D. Information and Other Material Necessary for the Regulatory Audit

The staff requests that the documents, data, and calculations regarding the aforementioned topics be made available to the staff in the electronic reading room:

The staff acknowledges and will observe appropriate handling and protection of proprietary information made available for the audit.

#### E. Audit Team

The following are the NRC audit team members:

- Pravin Patel, Structural Engineer, Lead
- Bryce Lehman, Structural Engineer
- Donald Habib, Project Manager

The licensee contact is Yasmeen Arafeh.

#### F. Logistics

Date: January 15, 2020 - February 7, 2020

Location: The audit will be conducted remotely using the licensee's electronic reading room and teleconferences. As needed, face-to-face discussions and some document review may occur at:

Westinghouse Electric Company, LLC Washington Operations 11333 Woodglen Drive, Suite 203 Rockville, Maryland 20852 Telephone: 301-881-7040/7042

#### G. Special Requests

None

Donald Habib, NRC Project Manager, can be reached at 301-415-1035 or <a href="mailto:Donald.Habib@nrc.gov">Donald.Habib@nrc.gov</a>.

#### H. Deliverables

On completion of the audit, the staff will prepare an audit summary report that will be declared and entered as an official agency record in ADAMS. The audit outcome may be used to identify any additional information to be submitted for making regulatory decisions and will assist the staff in the issuance of requests for additional information (if necessary) in completing its review of LAR 19-019.