

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

November 8, 2022

Ms. Cheryl A. Gayheart Regulatory Affairs Director Southern Nuclear Operating Co., Inc. 3535 Colonnade Parkway Birmingham, AL 35243

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS REGARDING REVISION TO TECHNICAL SPECIFICATIONS TO RELOCATE AUGMENTED PIPING INSPECTION PROGRAM DETAILS TO A LICENSEE-CONTROLLED DOCUMENT (EPID L-2021-LLA-0235)

Dear Ms. Gayheart:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 216 to Renewed Facility Operating License NPF-68 and Amendment No. 199 to Renewed Facility Operating License NPF-81 for the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2, respectively. The amendments consist of changes to the License and Technical Specifications (TSs) in response to your application dated December 22, 2021, as supplemented by letter dated May 10, 2022.

The amendments would revise the Vogtle, Units 1 and 2, TS by relocating augmented piping inspection detailed information from TS 5.5.16, "MS [Main Steam] and FW [Feedwater] Piping Inspection Program," to the Vogtle, Units 1 and 2, UFSAR. A program description will remain in TS 5.5.16.

The NRC has issued the enclosed Amendment No 244 to Renewed Facility Operating License No. NPF-2 and Amendment No. 241 to Renewed Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant (Farley), Units 1 and 2, respectively, under Agencywide Documents and Access Management System Accession (ADAMS) No. ML22308A059.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

If you have questions, you can contact me at 301-415-3100 or John.Lamb@nrc.gov.

Sincerely,

/**RA**/

John G. Lamb, Senior Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosures:

- 1. Amendment No. 216 to NPF-68
- 2. Amendment No. 199 to NPF-81
- 3. Safety Evaluation for Vogtle

cc: Listserv



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

DOCKET NO. 50-424

VOGTLE ELECTRIC GENERATING PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 216 Renewed License No. NPF-68

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 1 (the facility) Renewed Facility Operating License No. NPF-68 filed by the Southern Nuclear Operating Company, Inc. (the licensee), acting for itself, Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated December 22, 2021, as supplemented by a letter dated May 10, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

 Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-68 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 216, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to License No. NPF-68 and the Technical Specifications

Date of Issuance: November 8, 2022



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA

CITY OF DALTON, GEORGIA

DOCKET NO. 50-425

VOGTLE ELECTRIC GENERATING PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 199 Renewed License No. NPF-81

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Vogtle Electric Generating Plant, Unit 2 (the facility) Renewed Facility Operating License No. NPF-81 filed by the Southern Nuclear Operating Company, Inc. (the licensee), acting for itself, Georgia Power Company Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia (the owners), dated December 22, 2021, as supplemented by a letter dated May 10, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

 Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-81 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Michael T. Markley, Chief Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to License No. NPF-81 and the Technical Specifications

Date of Issuance: November 8, 2022

ATTACHMENT

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

TO LICENSE AMENDMENT NO. 216

RENEWED FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

<u>AND</u>

TO LICENSE AMENDMENT NO. 199

RENEWED FACILITY OPERATING LICENSE NO. NPF-81

DOCKET NO. 50-425

Replace the following pages of the Licenses and the Appendix A Technical Specifications (TSs) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages	Insert Pages		
<u>License</u> License No. NPF-68, page 4 License No. NPF-81, page 3	<u>License</u> License No. NPF-68, page 4 License No. NPF-81, page 3		
<u>TSs</u>	<u>TSs</u>		
5.5-16	5.5-16		

(1) <u>Maximum Power Level</u>

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 3625.6 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 216, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) Southern Nuclear Operating Company shall be capable of establishing containment hydrogen monitoring within 90 minutes of initiating safety injection following a loss of coolant accident.
- (4) Deleted
- (5) Deleted
- (6) Deleted
- (7) Deleted
- (8) Deleted
- (9) Deleted
- (10) Mitigation Strategy License Condition

The licensee shall develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training and response personnel
- (b) Operations to mitigate fuel damage considering the following:
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for Implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy

- (2) Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and City of Dalton, Georgia, pursuant to the Act and 10 CFR Part 50, to possess but not operate the facility at the designated location in Burke County, Georgia, in accordance with the procedures and limitations set forth in this license;
- (3) Southern Nuclear, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) Southern Nuclear, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as my be produced by the operation of the facility authorized herein.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter 1 and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below.
 - (1) Maximum Power Level

Southern Nuclear is authorized to operate the facility at reactor core power levels not in excess of 3625.6 megawatts thermal (100 percent power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license Southern Nuclear shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

The Surveillance requirements (SRs) contained in the Appendix A Technical Specifications and listed below are not required to be performed immediately upon implementation of Amendment No. 74. The SRs listed below shall be

5.5 Programs and Manuals (continued)

5.5.16 MS and FW Piping Inspection Program

In accordance with the augmented inservice inspection program for high energy lines outside of containment, examinations of welds in the main steam and main feedwater lines of each unit shall be performed to provide assurance of the continued integrity of the piping systems over their service lifetime. These requirements apply to welds in piping systems or portions of systems located outside of containment where protection from the consequences of postulated ruptures is not provided by a system of pipe whip restraints, jet impingement barriers, protective enclosures and/or other measures sesigned specifically to cope with such ruptures.

5.5.17 <u>Containment Leakage Rate Testing Program</u>

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Nuclear Energy Institute (NEI) Topical Report (TR) NEI 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50, Appendix J," Revision 3-A, dated July 2012, and the conditions and limitations specified in NEI 94-01, Revision 2-A, dated October 2008, as modified by the following exceptions:

- 1. Leakage rate testing for containment purge valves with resilient seals is performed once per 18 months in accordance with LCO 3.6.3, SR 3.6.3.6 and SR 3.0.2.
- 2. Containment personnel air lock door seals will be tested prior to reestablishing containment integrity when the air lock has been used for containment entry. When containment integrity is required and the air lock has been used for containment entry, door seals will be tested at least once per 30 days during the period that containment entry(ies) is (are) being made.
- 3. The visual examination of containment concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by ASME Section XI Code, Subsection IWL, except where relief or alternative has been authorized by the NRC. At the discretion of the licensee, the containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance/refueling outage.

(continued)



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

AMENDMENT NO. 216 TO RENEWED FACILITY OPERATING LICENSE NPF-68

AMENDMENT NO. 199 TO RENEWED FACILITY OPERATING LICENSE NPF-81

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

DOCKET NOS. 50-424, AND 50-425

1.0 INTRODUCTION

By letter dated December 22, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21356B484), Southern Nuclear Operating Company (SNC, the licensee) submitted a license amendment request (LAR) to the U.S. Nuclear Regulatory Commission (NRC or the Commission), which requested changes to the Technical Specifications (TSs) for the Vogtle Electric Generating Plan (Vogtle), Units 1 and 2. The LAR proposed to relocate augmented piping inspection program detailed information from TS 5.5.16, "MS [main steam] and FW [feedwater] Piping Inspection Program," (referred to herein as the augmented inspection program) to the Vogtle, Units 1 and 2, Updated Final Safety Analysis Report (UFSAR) (ML21102A218). A program description will remain in TS 5.5.16. The UFSAR will be updated in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.71(e).

The supplement dated May 10, 2022 (ML22131A331), provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published the *Federal Register* on February 22, 2022 (87 FR 9652).

2.0 REGULATORY EVALUATION

2.1 Description of Change

The licensee proposed removing the existing detailed description of the MS and FW Piping Inspection Program from Vogtle, Units 1 and 2, TS Section 5.5.16 and relocating it into the UFSAR. The licensee also proposes to replace the description in TS Section 5.5.16 with a general program description.

The current TS 5.5.16, "MS and FW Piping Inspection Program," provides details of the licensee's augmented inservice inspection (ISI) program for high energy lines outside of containment, including which welds are examined and the extent they are to be examined each ISI cycle. The TS further states that the augmented ISI program "is consistent with NRC Branch Technical Position MEB 3-1, "Postulated Break and Leakage Locations in Fluid System Piping Outside Containment," November 1975 and Section 6.6 of the FSAR." These augmented inspection requirements are applied to welds in piping located outside of containment where protection from the consequences of postulated ruptures is not provided (e.g., by pipe whip restraints, jet impingement barriers, etc.). The purpose of these augmented inservice life. The requirements for the augmented inspection program are contained in Section 6.6.8 of the Vogtle, Units 1 and 2, UFSAR. The scope of high energy fluid systems subject to the augmented inspection program is discussed Sections 3.6.1 and 3.6.2 of the Vogtle, Units 1 and 2, UFSAR.

The licensee evaluated the requirements in 10 CFR 50.36(c) and determined that the regulations do not require augmented piping inspection detailed information to be included in the TS and can be relocated into a licensee-controlled program document.

Section 5.5.16 of the Vogtle, Units 1 and 2, TS currently states:

This program shall provide for the inspection of the four Main Steam and Feedwater lines from the containment penetration flued head outboard welds, up to the first five-way restraint. The extent of the inservice examinations completed during each inspection interval (ASME [American Society of Mechanical Engineers] Code Section XI) shall provide 100% volumetric examination of circumferential and longitudinal welds to the extent practical. This augmented inservice inspection is consistent with the requirements of NRC Branch Technical Position MEB 3-1, "Postulated Break and Leakage Locations in Fluid System Piping Outside Containment," November 1975 and Section 6.6 of the FSAR.

The licensee proposes to relocate this to Section 6.6.8 of the UFSAR and replace it with a general description, as follows:

In accordance with the augmented inservice inspection program for high energy lines outside of containment, examinations of welds in the main steam and main feedwater lines of each unit shall be performed to provide assurance of the continued integrity of the piping systems over their service lifetime. These requirements apply to welds in piping systems or portions of systems located outside of containment where protection from the consequences of postulated ruptures is not provided by a system of pipe whip restraints, jet impingement barriers, protective enclosures and/or other measures designed specifically to cope with such ruptures. This augmented inservice inspection is consistent with Section 6.6 of the UFSAR.

The licensee (SNC) stated that any of the relocated information that is already contained in the UFSAR may be edited for clarity. The licensee also stated that the UFSAR will be updated in accordance with 10CFR50.71(e).

2.2 Regulatory Requirements and Guidance

The Commission's regulatory requirements related to the content of the TSs are set forth in 10 CFR 50.36, "Technical specifications." This regulation requires that the TSs include items in the following five specific categories related to station operation: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) Surveillance Requirements (SRs); (4) design features; and (5) administrative controls. 10 CFR 50.36(c)(3) states that surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

The NRC staff's guidance for the review of TSs is in Chapter 16.0, "Technical Specifications," of NUREG 0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light Water Reactor] Edition" (SRP), March 2010 (ML100351425). The NRC staff has prepared Standard Technical Specifications (STSs) for each of the light-water reactor (LWR) nuclear designs. The NRC staff's review includes consideration of whether the proposed changes are consistent with the applicable STSs (i.e., the current STS), as modified by NRC-approved Technical Specification Task Force (TSTF) travelers. The guidance states that comparing the change to previous STS can help clarify the TS intent, but conformance with the STS in NUREG-1431 is insufficient alone to support NRC approval. The current STSs that are applicable to the facilities are:

 NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Volume 1, "Specifications," and Volume 2, "Bases," Revision 5.0, dated September 2021 (ML21259A155 and ML21259A159, respectively).

The regulation 10 CFR 50.55a(g)(6)(ii) states that, "The Commission may require the licensee to follow an augmented inservice inspection program for systems and components for which the Commission deems that added assurance of structural reliability is necessary."

The regulation 10 CFR 50, Appendix A, "Criterion 4—Environmental and dynamic effects design bases." states

Structures, systems, and components [SSCs] important to safety shall be designed to accommodate the effects of and to be compatible with the environmental conditions associated with normal operation, maintenance, testing, and postulated accidents, including loss-of-coolant accidents. These structures, systems, and components shall be appropriately protected against dynamic effects, including the effects of missiles, pipe whipping, and discharging fluids, that may result from equipment failures and from events and conditions outside the nuclear power unit. However, dynamic effects associated with postulated pipe ruptures in nuclear power units may be excluded from the design basis when analyses reviewed and approved by the Commission demonstrate that the probability of fluid system piping rupture is extremely low under conditions consistent with the design basis for the piping.

The FSAR is required to be maintained and updated in accordance with 10 CFR 50.71(e). The Vogtle, Units 1 and 2, UFSAR is a licensee-controlled document. Any changes to the UFSAR are subject to the regulations in 10 CFR 50.59. The regulation 10 CFR 50.59 is the process that

identifies when a license amendment is required prior to implementing changes to the facility or procedures described in the UFSAR or tests and experiments not described in the UFSAR.

The NRC staff used Branch Technical Position (BTP) MEB 3-1, "Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment" of Standard Review Plan (SRP) Section 3.6.2, "Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping," November 1975 included in NUREG-75/087, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," (ML042080427).

3.0 TECHNICAL EVALUATION

3.1 Evaluation of Vogtle Augmented ISI Requirements

GDC 4 allows the exclusion of certain pipe ruptures when the probability of fluid system piping rupture is extremely low. BTP MEB 3-1 outlined the requirements for pipe break exclusion. The requirements include meeting ASME Section III, NE-1120 and the additional requirements including augmented inservice inspection (ISI) of 100 percent volumetric examination of circumferential and longitudinal pipe welds in those portions of piping (i.e., the no break region) during each inspection interval is required and is conducted in accordance with ASME Code, Section XI. SNC requested in this proposed LAR to relocate the augmented inspection program from TS to FSAR. BTP MEB 3-1 of SRP 3.6.2 provides guidelines acceptable to meet the GDC 4 requirements to ensure that SSCs important to safety be designed to against the effects of postulated pipe ruptures. For high energy piping within the containment penetration area, breaks need not be postulated in those portions of piping that meet the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME BPV Code) Section III, Subarticle NE-1120 and the additional requirements outlined in BTP MEB 3-1 of SRP Section 3.6.2. Augmented inservice inspection of 100 percent volumetric examination of circumferential and longitudinal pipe welds in those portions of piping (i.e., the no break region) during each inspection interval is required and is conducted in accordance with ASME Code, Section XI.

SNC's design provisions and the augmented inspection requirements for the no break region are contained in the current UFSARs for Vogtle, Units 1 and 2. The current TS 5.5.16 for the plant provides details of an augmented ISI program for the no break region. These design provisions and the augmented inspection requirements were addressed during licensing of the plant as described below.

For Vogtle, Units 1 and 2, the selection of pipe failure locations and evaluation of the consequences on nearby essential systems, components, and structures are described in the current UFSAR Section 3.6.1, "Postulated Piping Failures in Fluid Systems Inside and Outside Containment." Breaks are not postulated for four main steam and feedwater lines from the containment penetration flued head outboard welds, up to the first five-way restraint.

In addition, the current Vogtle UFSAR Section 6.6.8 describes the augmented ISI program for high-energy fluid systems piping between containment isolation valves or where no isolation valve is used inside containment, between the first rigid pipe connection to the containment penetration or the first pipe whip restraint inside containment and the outside isolation valve. This program includes 100 percent volumetric examination of circumferential and longitudinal

pipe welds in the affected piping during each inspection interval and is conducted in accordance with ASME Code, Section XI, and is conformed to BTP MEB 3-1 of SRP 3.6.2.

In its letter dated December 22, 2021, SNC proposed to revise the Vogtle, Units 1 and 2, TS by relocating some detailed information from TS 5.5.16 to the Vogtle UFSAR Section 6.6.8. A program description will remain in TS 5.5.16 for Vogtle, Units 1 and 2. TS 5.5.16 will refer to the appropriate UFSAR section. The information proposed for relocation from the TS to the plant's UFSAR is the detailed description of the augmented inspection requirements. The licensee stated that the specific augmented ISI program details of current TS 5.5.16 will be included in the plant's UFSAR as a concise description of the augmented inspection program.

In its letter dated May 10, 2022, the licensee provided the proposed updates associated with the above-mentioned LAR to reflect changes in the proposed TS to point to Section 6.6 of the UFSAR for Vogtle. SNC also provided the proposed UFSAR update for Vogtle, Units 1 and 2.

The proposed Vogtle UFSAR Section 6.6.8 states that the augmented ISI program shall provide for the inspection of the four main steam and feedwater lines from the containment penetration flued head outboard welds, up to the first five-way restraint. It also states that the extent of the inservice examinations completed during each ISI interval (ASME Code Section XI) shall provide 100 percent volumetric examination of circumferential and longitudinal welds to the extent practical. It further states that this augmented ISI is consistent with the requirements of NRC Branch Technical Position MEB 3-1, "Postulated Break and Leakage Locations in Fluid System Piping Outside Containment," November 1975 and Section 6.6 of the FSAR.

Based on its review of the licensee's proposed UFSAR update as described above, the NRC staff finds that the specific augmented inspection program details of current TS 5.5.16 will be included in the proposed UFSAR updates for Vogtle, Units 1 and 2, will continue to provide assurance of the continued integrity of the piping systems as required by the current TSs. SNC stated that the UFSAR for Vogtle, Units 1 and 2, will be updated in accordance with 10 CFR 50.71(e).

Based on the review of the information provided by the licensee in its letter dated December 22, 2021, and supplemented by letter dated May 10, 2022, the NRC staff finds that the licensee's proposed LAR acceptable because (1) a program description will remain in TS 5.5.16 for each plant, (2) the specific augmented inspection program details of current TS 5.5.16 will be included in the proposed UFSAR update for the plant, (3) the augmented ISI program will continue to be performed per the proposed TS 5.5.16 and the proposed UFSAR update, and (4) the UFSAR for the plant will be updated in accordance with 10 CFR 50.71(e).

3.2 Evaluation of Proposed Change

The proposed Vogtle UFSAR Section 6.6.8 states that the augmented ISI inspection program shall provide for the inspection of the four MS and FW lines from the containment penetration flued head outboard welds, up to the first five-way restraint. It also states that the extent of the inservice examinations completed during each inspection interval (ASME Code Section XI) shall provide 100 percent volumetric examination of circumferential and longitudinal welds to the extent practical. It further states that this augmented ISI is consistent with the requirements of NRC Branch Technical Position MEB 3-1, "Postulated Break and Leakage Locations in Fluid System Piping Outside Containment," November 1975 and Section 6.6 of the FSAR.

The NRC staff evaluated the SNC's proposal to relocate the specific details related to the Augmented Inservice Inspections from the Vogtle, Units 1 and 2, TSs to the Vogtle, Units 1 and 2, UFSAR and replace it in TS with a general program description against the regulatory requirements cited in Section 3.1. The NRC staff determined the licensee's proposal to be acceptable based on the following evaluation.

In its submittal dated December 22, 2021, the licensee stated:

The proposed changes are requested to relocate detail from the TS to the plant's UFSARs and to provide a consistent program description for this augmented inspection program. The TS details proposed for relocation from the TS are descriptions of inspections to be performed on plant equipment. These details are design basis information and are more appropriately contained in the respective plant's UFSARs. Therefore, SNC requests relocation of these TS details to the respective plant's UFSARs as described below.

Regarding the current TS 5.5.16 augmented inspection requirements, the NRC staff considered whether these requirements are required to be in the TSs by the requirements of 10 CFR 50.36. The NRC staff determined that the augmented inspection requirements currently included in Vogtle, Units 1 and 2, TS 5.5.16 do not meet any of the criteria in 10 CFR 50.36 that would require them to be included in the Vogtle, Units 1 and 2, TSs. Specifically, the NRC staff found that:

- Vogtle's augmented inspections are inspections or examinations to ensure the continued integrity of the piping systems over their service life. These inspections do not provide any limits on important process variables or settings for automatic protective devices. Therefore, they do not constitute safety limits or limiting safety system settings required to be included in TSs;
- Vogtle's augmented inspections do not define the lowest functional capability or performance levels of equipment required for safe operation of the facility, so they do not constitute LCOs required to be included in TSs;
- 3) Surveillance Requirements (SRs) are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met. Although not explicitly stated in 10 CFR 50.36, SRs relate specifically to TS SSCs (i.e., those that have LCOs). Licensees typically conduct numerous inspections and tests on various plant systems that are not TS SRs because they do not relate to ensuring facility operation will be within safety limits or that LCOs will be met. Accordingly, since Vogtle's augmented inspection program has no LCO associated with it and is not needed to assure that facility operation will be within safety limits. The augmented inspection program does not meet the criterion for a TS SR.
- 4) Vogtle's augmented inspection program is a piping examination program. Therefore, it does not constitute a design feature that if altered or modified, would have a significant effect on safety.
- 5) Vogtle's augmented inspection program does not constitute an administrative controls program as defined in 50.36(c)(4) because it does not relate to organization and management, procedures, recordkeeping, review and audit, or reporting necessary to assure operation of the facility in a safe manner. However, the program will still be maintained in the Administrative Controls section of the Vogtle TS. The licensee is only requesting to relocate the details of the program to the UFSAR.

As noted above, 10 CFR 50.55a(g)(6)(ii) states that, "The Commission may require the licensee to follow an augmented inservice inspection program for systems and components for which the Commission deems that added assurance of structural reliability is necessary." The licensee's application states that, "The augmented inspections are performed in addition to required ASME Code Section XI inspections or examinations and will continue to be performed as required by the UFSARs for each plant," and that the "plant systems and components to which the augmented inspections apply will not be operated in a different manner. The proposed relocation of the augmented inspection details does not involve a physical change to the plant or a change to the manner in which the plant is operated or controlled." In addition, the licensee proposed to add a new general description of the augmented inservice inspection program to the Vogtle TSs in the Administrative Controls Section 5.5.16, "MS and FW Programs." Based on this, the NRC staff concludes that the licensee's proposed relocation of the inspection details does not change the licensee's obligation to continue to conduct the augmented inspections and examinations of the program as described in the UFSAR and required by TS 5.5.16. Since there is no physical change to the plant, the NRC staff concludes there is no effect on the licensee's compliance with Criterion 4 of 10 CFR 50, Appendix A.

The NRC staff compared the licensee's proposed changes to the current STS and found them to be consistent with the format and content of the STS. In addition, since the Augmented Inservice Inspection Program will continue to be performed in accordance with TS 5.5.16 and UFSAR Section 6.6.8, ensuring that the program will continue to provide assurance of the continued integrity of the piping systems, the NRC staff finds the proposed relocation of the detailed program information to the UFSAR to be acceptable. Furthermore, the requirements to conduct the augmented inspections provided by TS 5.5.16 could not be eliminated without NRC approval. Based on the above, the NRC staff concludes that the licensee would continue to meet 10 CFR 50.36 with approval of the proposed changes to relocate the augmented piping inspection program details to the licensee-controlled UFSAR.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State and Alabama State officials were notified on August 30, 2022, of the proposed issuance of the amendments. The State of Georgia official had no comments on August 30, 2022. The State of Alabama official had no comments on August 30, 2022.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration on February 22, 2022 (87 FR 9652), and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 <u>CONCLUSION</u>

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Renee Li, NRR/DEX/EMIB Rob Elliott, NRR/DSS/STSB

Date: November 8, 2022

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS REGARDING REVISION TO TECHNICAL SPECIFICATIONS TO RELOCATE AUGMENTED PIPING INSPECTION PROGRAM DETAILS TO A LICENSEE-CONTROLLED DOCUMENT (EPID L-2021-LLA-0235) DATED NOVEMBER 8, 2022

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