



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

November 7, 2023

Ms. Jamie M. Coleman, Director
Fleet Regulatory Affairs
Southern Nuclear Operating Company, Inc.
3535 Colonnade Parkway, Bin N-226-EC
Birmingham, AL 35243

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4 — ISSUANCE OF AMENDMENTS RE: RELOCATION OF TECHNICAL SPECIFICATION 3.7.9, "SPENT FUEL POOL MAKEUP WATER SOURCES" (LAR-23-003) (EPID L-2023-LLA-0043)

Dear Ms. Coleman:

In response to your letter dated March 24, 2023, the U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment Nos. 194 and 191 to Combined License (COL) Nos. NPF-91 and NPF-92 for the Vogtle Electric Generating Plant (Vogtle) Units 3 and 4, respectively. The amendment relocates technical specification 3.7.9, "Spent Fuel Pool Makeup Water Sources," to the Vogtle Technical Requirements Manual as "UFSAR [Updated Final Safety Analysis Report] Standard Content." The proposed change also involves changes to plant-specific design control document Tier 2 information affected by the relocation.

A copy of the related Safety Evaluation, which includes the NRC staff's evaluation of the amendment, is enclosed. The notice of issuance of the amendment documents included in this letter will be published in the *Federal Register*.

Sincerely,

/RA/

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

Docket Nos.: 52-025, 52-026

Enclosures:

1. Amendment No. 194 to Vogtle, Unit 3, COL
2. Amendment No. 191 to Vogtle, Unit 4, COL
3. Safety Evaluation

cc: ListServ



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SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MEAG POWER SPVM, LLC

MEAG POWER SPVJ, LLC

MEAG POWER SPVP, LLC

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNIT 3

DOCKET NO. 52-025

AMENDMENT TO FACILITY COMBINED LICENSE

Amendment No. 194
License No. NPF-91

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company (SNC), dated March 24, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will be constructed and 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;
 - D. The issuance of this amendment will not be inimical to the common defense and security or 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.
2. Accordingly, the license is amended to authorize changes to the Updated Final Safety Analysis Report (UFSAR) as described in the licensee's application dated March 24, 2023. The license is also amended by changes to Appendix A, Technical Specifications, of the facility Combined License as indicated in the attachment to this license amendment. Paragraph 2.D(8) of facility Combined License No. NPF-91 is hereby amended to read as follows:
- (8) Incorporation
- The Technical Specifications and Environmental Protection Plan in Appendices A and B, respectively, of this license, as revised through Amendment No. 194, are hereby incorporated into this license.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance, including relocating the content of Technical Specification 3.7.9 prior to this amendment to the Vogtle Electric Generating Plant Technical Requirements Manual as described in the licensee's application dated March 24, 2023. SNC shall submit the changes to the UFSAR authorized by this amendment with the next update of the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION:

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

Date of Issuance: November 7, 2023

Attachment:
Page 7 of the facility Combined License
and affected pages of Appendix A
of the facility Combined License



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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MEAG POWER SPVM, LLC

MEAG POWER SPVJ, LLC

MEAG POWER SPVP, LLC

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNIT 4

DOCKET NO. 52-026

AMENDMENT TO FACILITY COMBINED LICENSE

Amendment No. 191
License No. NPF-92

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company (SNC), dated March 24, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will be constructed and 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;
 - D. The issuance of this amendment will not be inimical to the common defense and security or 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.
2. Accordingly, the license is amended to authorize changes to the Updated Final Safety Analysis Report (UFSAR) as described in the licensee's application dated March 24, 2023. The license is also amended by changes to Appendix A, Technical Specifications, of the facility Combined License as indicated in the attachment to this license amendment. Paragraph 2.D(8) of facility Combined License No. NPF-92 is hereby amended to read as follows:
- (8) Incorporation
- The Technical Specifications, Environmental Protection Plan, and ITAAC in Appendices A, B, and C, respectively of this license, as revised through Amendment No. 191, are hereby incorporated into this license.
3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of the date of issuance, including relocating the content of Technical Specification 3.7.9 prior to this amendment to the Vogtle Electric Generating Plant Technical Requirements Manual as described in the licensee's application dated March 24, 2023. SNC shall submit the changes to the UFSAR authorized by this amendment with the next update of the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION:

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

Date of Issuance: November 7, 2023

Attachment:
Page 7 of the facility Combined License
and affected pages of Appendix A
of the facility Combined License

ATTACHMENT TO LICENSE AMENDMENT NO. 194

TO FACILITY COMBINED LICENSE NO. NPF-91

VOGTLE ELECTRIC GENERATING PLANT, UNIT 3

DOCKET NO. 52-025

AND

ATTACHMENT TO LICENSE AMENDMENT NO. 191

TO FACILITY COMBINED LICENSE NO. NPF-92

VOGTLE ELECTRIC GENERATING PLANT, UNIT 4

DOCKET NO. 52-026

Replace the following pages of the Facility Combined License No. NPF-91 and NPF-92 with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

License
NPF-91, page 7
NPF-92, page 7

TS

iii
3.7.9-1
3.7.9-2
3.7.9-3

INSERT

License
NPF-91, Page 7
NPF 92, page 7

TS

iii
3.7.9-1

(7) Reporting Requirements

- (a) Within 30 days of a change to the initial test program described in UFSAR Section 14, Initial Test Program, made in accordance with 10 CFR 50.59 or in accordance with 10 CFR Part 52, Appendix D, Section VIII, "Processes for Changes and Departures," SNC shall report the change to the Director of NRO, or the Director's designee, in accordance with 10 CFR 50.59(d).
- (b) SNC shall report any violation of a requirement in Section 2.D.(3), Section 2.D.(4), Section 2.D.(5), and Section 2.D.(6) of this license within 24 hours. Initial notification shall be made to the NRC Operations Center in accordance with 10 CFR 50.72, with written follow up in accordance with 10 CFR 50.73.

(8) Incorporation

The Technical Specifications and Environmental Protection Plan in Appendices A and B, respectively, of this license, as revised through Amendment No. 194, are hereby incorporated into this license.

(9) Technical Specifications

The technical specifications in Appendix A to this license become effective upon a Commission finding that the acceptance criteria in this license (ITAAC) are met in accordance with 10 CFR 52.103(g).

(10) Operational Program Implementation

SNC shall implement the programs or portions of programs identified below, on or before the date SNC achieves the following milestones:

- (a) Environmental Qualification Program implemented before initial fuel load;
- (b) Reactor Vessel Material Surveillance Program implemented before initial criticality;
- (c) Preservice Testing Program implemented before initial fuel load;
- (d) Containment Leakage Rate Testing Program implemented before initial fuel load;
- (e) Fire Protection Program
 - 1. The fire protection measures in accordance with Regulatory Guide (RG) 1.189 for designated storage building areas (including adjacent fire areas that could affect the storage area) implemented before initial receipt

(7) Reporting Requirements

- (a) Within 30 days of a change to the initial test program described in UFSAR Section 14, Initial Test Program, made in accordance with 10 CFR 50.59 or in accordance with 10 CFR Part 52, Appendix D, Section VIII, "Processes for Changes and Departures," SNC shall report the change to the Director of NRO, or the Director's designee, in accordance with 10 CFR 50.59(d).
- (b) SNC shall report any violation of a requirement in Section 2.D.(3), Section 2.D.(4), Section 2.D.(5), and Section 2.D.(6) of this license within 24 hours. Initial notification shall be made to the NRC Operations Center in accordance with 10 CFR 50.72, with written follow up in accordance with 10 CFR 50.73.

(8) Incorporation

The Technical Specifications, Environmental Protection Plan, and ITAAC in Appendices A, B, and C, respectively of this license, as revised through Amendment No. 191, are hereby incorporated into this license.

(9) Technical Specifications

The technical specifications in Appendix A to this license become effective upon a Commission finding that the acceptance criteria in this license (ITAAC) are met in accordance with 10 CFR 52.103(g) with the following exceptions:

- (a) Prior to initial criticality of the reactor core while operating in plant operational Mode 5 (Cold Shutdown) or Mode 6 (Refueling) the following TS are temporarily excluded from becoming effective:
 - TS 3.3.8, "Engineered Safety Feature Actuation System (ESFAS) Instrumentation," Table 3.3.8-1
 - Function 14, RCS Wide Range Pressure – Low
 - Function 15, Core Makeup Tank (CMT) Level – Low 3
 - Function 16, CMT Level – Low 6
 - Function 18, IRWST Lower Narrow Range Level – Low 3
 - TS 3.3.9, "Engineered Safety Feature Actuation System (ESFAS) Manual Initiation," Table 3.3.9-1
 - Function 1, Safeguards Actuation - Manual Initiation
 - Function 6, ADS Stages 1, 2 & 3 Actuation – Manual Initiation
 - Function 7, ADS Stage 4 Actuation – Manual Initiation
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UNITED STATES
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WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 194 AND 191

TO THE COMBINED LICENSE NOS. NPF-91 AND NPF-92, RESPECTIVELY

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

GEORGIA POWER COMPANY

OGLETHORPE POWER CORPORATION

MEAG POWER SPVM, LLC

MEAG POWER SPVJ, LLC

MEAG POWER SPVP, LLC

CITY OF DALTON, GEORGIA

VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4

DOCKET NOS. 52-025 AND 52-026

1.0 INTRODUCTION

By letter dated March 24, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23083B967), Southern Nuclear Operating Company (SNC, the licensee) requested that the U.S. Nuclear Regulatory Commission (NRC) amend Vogtle Electric Generating Plant (Vogtle) Units 3 and 4, Combined License (COL) Numbers NPF-91 and NPF-92, respectively. Specifically, SNC requested to relocate technical specification 3.7.9, "Spent Fuel Pool Makeup Water Sources," to the Vogtle Technical Requirements Manual (TRM) as "UFSAR [Updated Final Safety Analysis Report] Standard Content," which is controlled in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.59, "Changes, tests and experiments." The requested amendments also involve changes to plant-specific design control document Tier 2 information affected by the relocation.

1.1 System Description and Operation

Section 9.1.3.2, "System Description," in Section 9.1.3.1.3, "Spent Fuel Pool Cooling," in the VEGP [Vogtle Electric Generating Plant] 3&4 UFSAR [Updated Final Safety Analysis Report], Revision 12 (ML23165A215), updated through April 21, 2023, in part, states:

The spent fuel pool cooling system is a non-safety-related system. The safety-related function of cooling and shielding the fuel in the spent fuel pool is performed by the water in the pool. A simplified sketch of the spent fuel pool cooling system is included as Figure 9.1-5. The piping and instrumentation diagram for the spent fuel pool cooling system is Figure 9.1-6.

The spent fuel pool cooling system consists of two mechanical trains of equipment. Each train includes one spent fuel pool pump, one spent fuel pool heat exchanger, one spent fuel pool demineralizer and one spent fuel pool filter. The two trains of equipment share common suction and discharge headers. In addition, the spent fuel pool cooling system includes the piping, valves, and instrumentation necessary for system operation.

The spent fuel pool cooling system is designed such that either train of equipment can be operated to perform any of the functions required of the spent fuel pool cooling system independently of the other train. One train is continuously cooling and purifying the spent fuel pool while the other train is available for water transfers, in-containment refueling water storage tank purification, or aligned as a backup to the operating train of equipment.

Each train is designed to process spent fuel pool water. Each pump takes suction from the common suction header and discharges directly to its respective heat exchanger. The outlet piping branches into parallel lines. The purification branch is designed to process approximately 20% of the cooling flow while the bypass branch passes the remaining.

1.2 Proposed Changes

In the SNC letter dated March 24, 2023, the licensee proposed to relocate the limiting condition for operation (LCO), actions, notes, and surveillance requirements of TS Subsection 3.7.9 to the licensee controlled TRM.

SNC further stated in its license amendment request (LAR) dated March 24, 2023, that the TRM is part of the "UFSAR Standard Content," and that any changes to the TRM are subject to the criteria of 10 CFR 50.59.

SNC states, in part, in its letter dated March 24, 2023, by choosing to relocate this information as UFSAR Standard Content, 10 CFR 52.98(c)(2) applies to future changes, and conforming changes are proposed to Tier 2 information which references that the availability of the spent fuel pool makeup sources is controlled by the TS. In addition, SNC states, in part, in its letter dated March 24, 2023, that instead, the Tier 2 information is proposed to reference the location of the availability controls in the TRM.

The specific changes proposed by SNC to the Technical Specifications, Appendix A of the licenses are described below:

- Replace the title for TS 3.7.9 in the Table of Contents to “Not Used”
- In TS 3.7.9, replace the title with “Not Used” and remove all text including LCO, Applicability, Actions, Notes, and Surveillance Requirements.

2.0 REGULATORY EVALUATION

2.1 Regulations and Guidance

Regulations

The regulations in 10 CFR 50.36, “Technical specifications,” establish the regulatory requirements for items that must be in the TSs, which include LCOs. The regulations in 10 CFR 50.36(a)(1) state that an application for a production or utilization facility shall include in his application proposed TSs, and 10 CFR 50.36(b) states that each license authorizing operation of a utilization facility of a type described in § 50.21 or § 50.22 will include technical specifications.

As required by 10 CFR 50.36(c)(2)(i), TSs will include LCOs, which are “the lowest functional capability or performance levels of equipment required for safe operation of the facility.” The regulations in 10 CFR 50.36(c)(2)(ii) state that:

A technical specification limiting condition for operation of a nuclear reactor must be established for each item meeting one or more of the following criteria:

(A) Criterion 1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

(B) Criterion 2. A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(C) Criterion 3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(D) Criterion 4. A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

In the *Federal Register* notice that announced the final rulemaking that added these four criteria “to 10 CFR 50.36 (60 FR 36953; July 19, 1995), the NRC staff stated that the rule codifies criteria for determining the content of TSs, and that each licensee covered by these regulations

may voluntarily use the criteria as a basis to propose the relocation of existing TSs that do not meet any of the criteria from the facility license to licensee-controlled documents.

As required by 10 CFR 50.36(c)(3), TSs will include surveillance requirements, which “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.”

Pursuant to 10 CFR 50.90, “Application for amendment of license, construction permit, or early site permit,” states, in part, that whenever a holder of a license desires to amend a license or permit, “application for an amendment must be filed with the Commission.”

The regulations in 10 CFR 52.79(a), states, in part, that the application “must contain a final safety analysis report that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole.”

The regulation in 10 CFR 52.79(a)(2) states that the safety analysis report shall include a “description and analysis of the structures, systems, and components of the facility with emphasis upon performance requirements, the bases, with technical justification therefor, upon which these requirements have been established, and the evaluations required to show that safety functions will be accomplished. ... Items such as the ... fuel handling systems shall be discussed insofar as they are pertinent.”

The regulation 10 CFR 52.79(a)(29)(i) states that the safety analysis report shall include “[p]lans for conduct of normal operations, including maintenance, surveillance, and periodic testing of structures, systems, and components[.]”

Guidance

NRC’s “Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors” (NRC Policy Statement) issued in July 1993 (58 FR 39132), established that licensees may propose the removal of TS LCOs which do not meet any of the four criteria specified in the Policy Statement, and relocate these LCOs to a licensee-controlled document, such as the FSAR. The NRC codified the four criteria in 10 CFR 50.36(c)(2)(ii) in July 1995 (60 FR 36953). This final rule also stated that the NRC Policy Statement “contains detailed discussions of the four criteria and guidance on how the NRC staff and licensees should apply the criteria.”

NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition,” Section 16.0, Revision 3, “Technical Specifications,” dated March 2010 (ML100351425), contains review guidance for NRC staff review of TSs.

The UFSAR (ML23165A215) for Vogtle, Units 3 and 4, incorporate the Design Control Document for a simplified passive advanced LWR plant provided by Westinghouse Electric Company, the entity originally sponsoring and obtaining the AP1000 design certification documented in 10 CFR Part 52, Appendix D, “Design Certification Rule for the AP1000 Design.”

3.0 TECHNICAL EVALUATION

NUREG-1793, "Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design," Volume 2, September 2004 (ML043450284), Section 16.2.10, "AP1000 TS Section 3.7, Plant Systems," states, in part:

AP1000 TS 3.7.9 was added to require the availability of a spent fuel pool makeup water source under certain spent fuel pool decay heat loads. The STS do not contain a corresponding specification. The makeup water replaces the water lost through pool water boiling in the event of a loss of normal cooling by the non-safety spent fuel pool cooling system for an extended period. The PCS [passive containment cooling system] water storage tank and the cask wash down pit serve as the required water sources. The spent fuel pool makeup function is not an initial condition of any DBA [design basis accident] and does not mitigate any DBA that assumes the failure of or presents a challenge to the integrity of a fission product barrier. Accordingly, this function does not satisfy any of the criteria in 10 CFR 50.36(c)(2)(ii), but is included in the TS for defense in depth. This specification is consistent with the format and usage rules of the STS and will ensure the availability of a makeup water source in the event that normal pool cooling is lost and boiling occurs in the pool. Therefore, TS 3.7.9 is acceptable.

The NRC staff evaluated SNC's letter dated March 24, 2023, to determine if the proposed changes are consistent with the regulations and licensing and design basis information in Section 2.0 of this safety evaluation. The NRC staff reviewed the acceptability of the proposed changes for compliance with 10 CFR 50.36. To determine whether the proposed relocation of TS Subsection 3.7.9 complies with 10 CFR 50.36, the NRC staff reviewed the purpose, design, and operation of the spent fuel pool makeup sources to determine whether they meet any of the four criteria in 10 CFR 50.36(c)(2)(ii) for having to establish an LCO in the TSs. If none of the four criteria are met, then an LCO may be relocated from the TSs into the UFSAR.

3.1 Relocation of TS 3.7.9

TS 3.7.9 addresses the spent fuel pool makeup sources. This TS consists of requirements for maintaining adequate water volume in the spent fuel pool when irradiated fuel assemblies are stored in the spent fuel pool to ensure passive cooling will be provided if the normal cooling system is lost. The NRC staff reviewed the SNC's evaluation of LCO 3.7.9 against the four LCO selection criteria set forth in 10 CFR 50.36(c)(2)(ii).

Criterion 1 of 10 CFR 50.36(c)(2)(ii)

In its letter dated March 24, 2023, SNC stated.

The availability of spent fuel pool makeup water sources when irradiated fuel assemblies are stored in the spent fuel pool is not installed instrumentation that is used to detect, and indicated in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. The Spent Fuel Pool Makeup Water Sources Specification does not satisfy criterion 1.

The NRC staff reviewed the licensee's evaluation of LCO 3.7.9 against Criterion 1 of 10 CFR 50.36(c)(2)(ii), which states, "Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary." The NRC staff reviewed the application, and Section 9.3.4 of the Vogtle, Units 3 and 4, UFSAR and has confirmed that the spent fuel pool makeup sources listed in LCO 3.7.9 are not installed instrumentation that is used to detect, and indicate in the control room, a significant degradation of the reactor coolant pressure boundary and, therefore, do not meet Criterion 1 of 10 CFR 50.36(c)(2)(ii).

Criterion 2 of 10 CFR 50.36(c)(2)(ii)

In its letter dated March 24, 2023, the licensee stated,

The availability of spent fuel pool makeup water sources when irradiated fuel assemblies are stored in the spent fuel pool is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The Spent Fuel Pool Makeup Water Sources Specification does not satisfy criterion 2.

The NRC staff evaluated LCO 3.7.9 against Criterion 2 of 10 CFR 50.36(c)(2)(ii), which states, "A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier."

The NRC Policy Statement provides additional details on Criterion 2. It states in part:

Another basic concept in the adequate protection of the public health and safety is that the plant shall be operated within the bounds of the initial conditions assumed in the existing Design Basis Accident and Transient analyses and that the plant will be operated to preclude unanalyzed transients and accidents. These analyses consist of postulated events, analyzed in the FSAR, for which a structure, system, or component must meet specified functional goals.

These analyses are contained in Chapters 6 and 15 of the FSAR (or equivalent chapters) and are identified as Condition II, III, or IV events (ANSI N 18.2) [Nuclear Safety Criteria Water Reactor Plants] (or equivalent) that either assume the failure of or present a challenge to the integrity of a fission product barrier.

The NRC staff reviewed the application, and Chapter 6 and Chapter 15 of the Vogtle, Units 3 and 4, UFSAR and has confirmed that the spent fuel pool makeup sources listed in LCO 3.7.9 do not establish a variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier and, therefore, does not meet Criterion 2 of 10 CFR 50.36(c)(2)(ii).

Criterion 3 of 10 CFR 50.36(c)(2)(ii)

In its letter dated March 24, 2023, SNC stated,

The availability of spent fuel pool makeup water sources when irradiated fuel assemblies are stored in the spent fuel pool is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product boundary. The Spent Fuel Pool Makeup Water Sources Specification does not satisfy criterion 3.

The NRC staff reviewed the licensee's evaluation of LCO 3.7.9 against Criterion 3 of 10 CFR 50.36(c)(2)(ii), which states, "A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The NRC Policy Statement provides additional details on Criterion 3. It states, in part:

A third concept in the adequate protection of the public health and safety is that in the event that a postulated Design Basis Accident or Transient should occur, structures, systems, and components are available to function or to actuate in order to mitigate the consequence of the Design Basis Accident or Transient. Safety sequence analyses or their equivalent have been performed in recent years and provide a method of presenting the plant response to an accident. These can be used to define the primary success paths.

A safety sequence analysis is a systematic examination of the actions required to mitigate the consequences of events considered in the plant's Design Basis Accident and Transient analyses, as presented in Chapters 6 and 15 of the plant's FSAR (or equivalent chapters). Such a safety sequence analysis considers all applicable events, whether explicitly or implicitly presented. The primary success path of a safety sequence analysis consists of the combination and sequences of equipment needed to operate (including consideration of the single failure criteria), so that the plant response to Design Basis Accidents and Transients limits the consequences of these events to within the appropriate acceptance criteria.

The NRC staff reviewed the application, and Chapter 6 and Chapter 15 of the Vogtle, Units 3 and 4, UFSAR and has confirmed that the spent fuel pool makeup sources listed in LCO 3.7.9 are not required to mitigate any design-basis accidents or transients. The listed passive makeup sources are not part of an SSC that is part of the primary success path, which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier and, therefore, does not meet Criterion 3 of 10 CFR 50.36(c)(2)(ii).

Criterion 4 of 10 CFR 50.36(c)(2)(ii)

In its letter dated March 24, 2023, the licensee stated,

The availability of spent fuel pool makeup water sources when irradiated fuel assemblies are stored in the spent fuel pool is found to be a non-significant risk contributor core damage frequency and offsite releases. The availability of spent fuel pool makeup water sources when irradiated fuel assemblies are stored in the spent fuel pool does not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are found to be important to public health and safety. The Spent Fuel Pool Makeup Water Sources Specification does not satisfy criterion 4.

The NRC staff reviewed the SNC's evaluation of LCO 3.7.9 against Criterion 4 of 10 CFR 50.36(c)(2)(ii), which states "A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety." The NRC staff determined that because the spent fuel pool makeup sources listed in LCO 3.7.9 are not SSCs for which operating experience or probabilistic risk assessment has shown to be significant to public health and safety, LCO 3.7.9 does not meet Criterion 4 of 10 CFR 50.36(c)(2)(ii).

Conclusion

Because LCO 3.7.9 does not meet any of the criteria in 10 CFR 50.36(c)(2)(ii), the staff concludes that LCO 3.7.9 is not required to be included in the TSs for Vogtle Units 3 and 4. Accordingly, the staff also concludes that the associated applicability, action, and surveillance requirements in TS 3.7.9 are also not required to be included in the TSs for Vogtle Units 3 and 4.

3.2 Relocation of TS 3.7.9 to the TRM

SNC requested that the LCO, and associated applicability, action, and surveillance requirements of TS 3.7.9 be relocated to the TRM. The licensee stated that the TRM is part of the UFSAR and that any change to these requirements will be reviewed in accordance with 10 CFR 50.59 to determine if the change requires prior NRC review and approval.

The regulations in 10 CFR 50.59, "Changes, tests and experiments," allows for a licensee to make changes to the facility or procedures, as described in the UFSAR, without prior NRC approval pursuant to 10 CFR 50.90. Relocating TS 3.7.9 into the UFSAR provides reasonable assurance that information needed by the operators will not be inadvertently removed from the UFSAR and related procedures without required analyses, and if proposed changes do not meet the 10 CFR 50.59 screening criteria, an amendment would be required. The NRC staff has reasonable assurance that sufficient regulatory change controls are in place to support relocation of LCO 3.7.9 to the TRM. Based on the above, the NRC staff has reasonable assurance that the water sources will continue to be maintained consistent with provisions of LCO 3.7.9, which are also described in UFSAR Section 9.1.3. Therefore, the NRC staff concludes that the licensee has sufficient controls to prevent fission product releases from the fuel in the unlikely event the normal spent fuel pooling is lost, and the relocation to the TRM is acceptable.

3.3 Technical Evaluation Conclusion

Based on the above, the NRC staff concludes that LCO 3.7.9. does not satisfy the four criteria in 10 CFR 50.36(c)(2)(ii). Therefore, the proposed change to relocate the content of TS 3.7.9 to the TRM is acceptable. Additionally, all changes to the TRM are evaluated pursuant to 10 CFR 50.59 and, therefore, any changes to the relocated TSs would still be appropriately screened on the need for prior NRC approval pursuant to 10 CFR 50.90.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Georgia State official was notified of the proposed issuance of the amendment on September 19, 2023. On September 19, 2023, the State official replied that the State had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration on July 11, 2023 (88 FR 44167), and there has been no public comment on such finding. Accordingly, the amendment meets 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 amendment.

6.0 CONCLUSION

The NRC staff has concluded, based on the considerations discussed in Section 3 that there is reasonable assurance that: (1) 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 amendment will not be inimical to the common defense and security or to the health and safety of the public. Therefore, the NRC staff finds the changes proposed in this license amendment acceptable.

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Date: November 7, 2023

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 3 AND 4 — ISSUANCE OF AMENDMENTS RE: RELOCATION OF TECHNICAL SPECIFICATION 3.7.9, “SPENT FUEL POOL MAKEUP WATER SOURCES” (LAR-23-003) (EPID L-2023-LLA-0043) DATED NOVEMBER 7, 2023

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