

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 16, 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 ADOPT TSTF-283-A, REVISION 3, "MODIFY SECTION 3.8 MODE

RESTRICTION NOTES" (EPID L-2021-LLA-0236)

Dear Ms. Gayheart:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 217 to Renewed Facility Operating License NPF-68 and Amendment No. 200 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.

The amendments would revise TSs to adopt Technical Specification Task Force (TSTF)-283-A, Revision 3, "Modify Section 3.8 Mode Restriction Notes."

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. 217 to NPF-68
- 2. Amendment No. 200 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. 217 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, 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.

2. 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. 217, 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 16, 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. 200 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, 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.

2. 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:

<u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 200, 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 16, 2022

<u>ATTACHMENT</u>

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

TO LICENSE AMENDMENT NO. 217

RENEWED FACILITY OPERATING LICENSE NO. NPF-68

DOCKET NO. 50-424

AND

TO LICENSE AMENDMENT NO. 200

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.

Insert Pages
<u>License</u> License No. NPF-68, page 4 License No. NPF-81, page 3
<u>TSs</u>
3.8.1-11 3.8.1-12 3.8.1-13 3.8.1-14 3.8.1-15 3.8.1-16 3.8.4-4

(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. 217, 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) <u>Mitigation Strategy License Condition</u>

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

The Technical Specifications contained in Appendix A, as revised through Amendment No. 200 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

SURVEILLANCE			FREQUENCY	
SR 3.8.1.10	1.	All D engii	G starts may be preceded by an ne prelube period.	
	2.	performance perfor	Surveillance shall not normally be ormed in MODE 1, 2, 3, or 4. However, ons of the Surveillance may be ormed to reestablish OPERABILITY ided an assessment determines the try of the plant is maintained or anced. Credit may be taken for anned events that satisfy this SR.	
		y on an actual or simulated loss of offsite er signal:		In accordance with the Surveillance Frequency Control
	a.	De-e	energization of emergency buses;	Program
	b.	Load	I shedding from emergency buses;	
	C.	DG a	auto-starts from standby condition and:	
		1.	energizes permanently connected loads in \leq 11.5 seconds,	
		2.	energizes auto-connected shutdown loads through automatic load sequencer,	
		3.	maintains steady state voltage $\geq 3750~V$ and $\leq 4330~V,$	
		4.	maintains steady state frequency \geq 58.8 Hz and \leq 61.2 Hz, and	
		5.	supplies permanently connected and auto-connected shutdown loads for ≥ 5 minutes.	

(continued)

	FREQUENCY	
SR 3.8.1.11	SURVEILLANCE NOTES 1. All DG starts may be preceded by an engine prelube period. 2. This Surveillance shall not normally be performed in MODE 1 or 2. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR. Verify on an actual or simulated Engineered Safety Feature (ESF) actuation signal each DG auto-starts from standby condition and:	In accordance with the Surveillance Frequency Control
	 a. In ≤ 11.4 seconds after auto-start and during tests, achieves voltage ≥ 3750 V and ≤ 4330 V; 	Program
	 In ≤ 11.4 seconds after auto-start and during tests, achieves frequency ≥ 58.8 Hz and ≤ 61.2 Hz; 	
	c. Operates for ≥ 5 minutes;	
	 d. Permanently connected loads remain energized from the offsite power system; and 	
	e. Emergency loads are energized or auto- connected through the automatic load sequencer from the offsite power system.	
-		

(continued)

	FREQUENCY	
SR 3.8.1.12	This Surveillance shall not normally be performed in MODE 1 or 2. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR. Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except: a. Engine overspeed; b. Generator differential current; and c. Low lube oil pressure;	In accordance with the Surveillance Frequency Control Program
SR 3.8.1.13	 Momentary transients outside the kW and kVAR load ranges do not invalidate this test. Credit may be taken for unplanned events that satisfy this SR. Verify each DG operates for ≥ 24 hours while maintaining voltage ≤ 4330 V: For ≥ 2 hours loaded ≥ 6900 kW and ≤ 7700 kW and operating as close as practicable to 3390 kVAR; and For the remaining hours of the test loaded ≥ 6500 kW and ≤ 7000 kW and operating as close as practicable to 3390 kVAR. 	In accordance with the Surveillance Frequency Control Program

	FREQUENCY	
SR 3.8.1.14	 This Surveillance shall be performed within 5 minutes of shutting down the DG after the DG has operated ≥ 2 hours loaded ≥ 6500 kW and ≤ 7000 kW. Momentary transients outside of load range do not invalidate this test. All DG starts may be preceded by an 	
	engine prelube period	In accordance with the Surveillance Frequency Control Program
SR 3.8.1.15	This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.	
	Verify each DG: a. Synchronizes with offsite power source while loaded with emergency loads upon a simulated restoration of offsite power;	In accordance with the Surveillance Frequency Control Program
	b. Transfers loads to offsite power source; andc. Returns to ready-to-load operation.	

(continued)

	FREQUENCY	
SR 3.8.1.16	This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR. Verify, with a DG operating in test mode and connected to its bus, an actual or simulated ESF actuation signal overrides the test mode by: a. Returning DG to ready-to-load operation; and b. Automatically energizing the emergency load from offsite power.	In accordance with the Surveillance Frequency Control Program
SR 3.8.1.17	This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR. Verify interval between each sequenced load block is within \pm 10% of design interval for each load sequencer.	In accordance with the Surveillance Frequency Control Program

(continued)

3.8.1-15

SURVEILLANCE			FREQUENCY	
SR 3.8.1.18	1. 2Ver	All E preli This perfi porti perfi prov safe enha unpl 	OG starts may be preceded by an engine labe period. Surveillance shall not normally be formed in MODE 1, 2, 3, or 4. However, ions of this Surveillance may be formed to reestablish OPERABILITY rided an assessment determines the try of the plant is maintained or anned. Credit may be taken for anned events that satisfy this SR. In actual or simulated loss of offsite hal in conjunction with an actual or ESF actuation signal: In energization of emergency buses; and auto-starts from standby condition and: energizes permanently connected loads in ≤ 11.5 seconds, energizes auto-connected emergency loads through load sequencer, achieves steady state voltage: ≥ 3750 V and ≤ 4330 V, achieves steady state frequency: ≥ 58.8 Hz and ≤ 61.2 Hz, and supplies permanently connected and auto-connected emergency loads for ≥ 5 minutes.	In accordance with the Surveillance Frequency Control Program

(continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.4.2	Verify the battery charger supplies: ≥ 400 amps for System A and B ≥ 300 amps for System C, and ≥ 200 amps for System D at greater than or equal to the minimum established float voltage for ≥ 8 hours for Systems A and B and ≥ 3 hours for Systems C and D. OR Verify each battery charger can recharge the battery to the fully charged state within 12 hours while supplying the largest combined demands of the various continuous steady state loads, after a	In accordance with the Surveillance Frequency Control Program
	battery discharge to the bounding design basis event discharge state.	
SR 3.8.4.3	The modified performance discharge test in SR 3.8.6.6 may be performed in lieu of the service test in SR 3.8.4.3.	
	2. This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.	
	Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.	In accordance with the Surveillance Frequency Control Program

3.8.4-4 Amendment No.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO

VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2

AMENDMENT NO. 217 TO RENEWED FACILITY OPERATING LICENSE NPF-68

AMENDMENT NO. 200 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. ML21356B485), Southern Nuclear Operating Company (SNC, the licensee) submitted a license amendment request (LAR) for the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2. The proposed LAR is to adopt Technical Specification Task Force (TSTF) Traveler 283-A, Revision 3, "Modify Section 3.8 Mode Restriction Notes" (ML003678477) (TSTF-283-A). TSTF Travelers are generic changes to the Improved Standard Technical Specifications (STSs). This safety evaluation input specifically evaluates the adoption of TSTF 283-A, for Vogtle, Units 1 and 2.

The proposed LAR would modify TS 3.8.1, "AC Sources - Operating," and TS 3.8.4, "DC Sources – Operating." Consistent with TSTF-283-A, Notes would be added to allow flexibility in performing Surveillance Requirements (SRs) in Modes 1 or 2, or in Modes 1, 2, 3, or 4, as applicable. The SR Notes will allow full or partial performance of the SRs to re-establish Operability provided an assessment determines the safety of the plant is maintained or enhanced. Current TS SRs have Notes prohibiting SR performance in Modes 1 or 2, or in Modes 1, 2, 3, or 4.

The TSTF-283-A introduced a modification of the mode restriction note at the top of fourteen different SRs in the NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," which is currently at Revision 5.0, dated September 2021 (ML21259A155). The revised surveillance notes will allow full or partial performance of SRs for the purposes of re-establishing operability provided an assessment determines that the safety of the plant is maintained or enhanced. SNC has chosen to adopt for Vogtle, Units 1 and 2, eight of the modifications. Specifically, Vogtle, Units 1 and 2, SRs 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.4.3 are modified by changing the mode restriction note to allow the SR or parts of it to be performed to re-establish operability.

2.0 REGULATORY EVALUATION

2.1 <u>Background</u>

Certain current Vogtle, Units 1 and 2, TS 3.8 SRs limit performance of the SR to plant operating modes other than Modes 1, 2, 3 or 4, or in some cases, Modes 1 or 2, by a Note on each SR. TSTF Traveler 283-A revised SR notes in an earlier version of STS 3.8.1, "AC Sources Operating," and 3.8.4, "DC Sources Operating," to allow full or partial performance of the SRs in the prohibited Modes to re-establish operability provided an assessment determines the safety of the plant is maintained or enhanced. The Vogtle LAR proposes to incorporate eight of these modifications into the Vogtle TSs.

2.2 <u>Description of Proposed Changes</u>

In its letter dated December 22, 2021, the licensee proposed the following specific changes to the TS SRs for Vogtle, Units 1 and 2. The Vogtle, Units 1 and 2, SR numbers differ from the numbers in the approved TSTF-283-A, but are equivalent:

NOTE 2 for SR 3.8.10

Current NOTE 2 for SR 3.8.10 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE 2 for SR 3.8.10 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE 2 for SR 3.8.11

Current NOTE 2 for SR 3.8.11 states:

This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE 2 for SR 3.8.11 would state:

This Surveillance shall not normally be performed in MODE 1 or 2. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE for SR 3.8.12

Current NOTE for SR 3.8.12 states:

This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE for SR 3.8.12 would state:

This Surveillance shall not normally be performed in MODE 1 or 2. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE for SR 3.8.15

Current NOTE for SR 3.8.15 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE for SR 3.8.15 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE for SR 3.8.16

Current NOTE for SR 3.8.16 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE for SR 3.8.16 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE for SR 3.8.17

Current NOTE for SR 3.8.17 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE for SR 3.8.17 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, this Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE 2 for SR 3.8.18

Current NOTE 2 for SR 3.8.18 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE 2 for SR 3.8.18 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

NOTE 2 for SR 3.8.4.3

Current NOTE 2 for SR 3.8.4.3 states:

This Surveillance shall not be performed in MODE 1, 2, 3, or 4. However, credit may be taken for unplanned events that satisfy this SR.

Revised NOTE 2 for SR 3.8.4.3 would state:

This Surveillance shall not normally be performed in MODE 1, 2, 3, or 4. However, portions of the Surveillance may be performed to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced. Credit may be taken for unplanned events that satisfy this SR.

2.3 Variations from TSTF-283-A

In addition to the numbering differences discussed above, SNC noted the following differences between SNC's application and the approved TSTF-283-A and NUREG-1431, Revision 5:

- The Vogtle, Units 1 and 2, TS contain a Surveillance Frequency Control Program.
 Therefore, the Surveillance Requirement Frequencies for TS 3.8 are "In accordance with the Surveillance Frequency Control Program."
- The Vogtle, Units 1 and 2, TS do not contain several of the TS 3.8.1 SRs found in NUREG-1431, Revision 5. Specifically, the following SRs from NUREG-1431, Revision 5 are not in the Vogtle TS: SR 3.8.1.8, SR 3.8.1.9, SR 3.8.1.10, and SR 3.8.1.14. As such, SNC stated that the addition of the TSTF-283-A changes that provide exceptions to the Mode restrictions in these SRs are not necessary and are not adopted.

- After NRC approved TSTF-283-A, NUREG-1431 was updated with extensive changes in the TS 3.8.4 SRs. As a result, NUREG-1431, Revision 5, no longer contains two of the SRs that were revised in TSTF-283-A. By comparing the content of the SR and the existing Notes in the Vogtle, Units 1 and 2, TS with NUREG-1431, Revision 5, the licensee identified one Vogtle, Units 1 and 2, 3.8.4 SR that is both equivalent to the 3.8.4 SR described in NUREG-1431, Revision 5, and is within the scope of the SRs revised by TSTF-283-A. This SR is described in Item 8 above in Section 2.2, above.
- The TSTF-283-A Bases changes associated with Vogtle, Units 1 and 2, 3.8.1.10, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.18 and 3.8.4.3 incorrectly state that the associated Notes restrict performance of the Surveillances in Mode 1 and 2. These Surveillances actually restrict performance of the Surveillances in Mode 1, 2, 3, or 4. This error is corrected in the Vogtle, Units 1 and 2, TS Bases markups included in Attachment 3.

2.4 Regulatory Requirements and Guidance

2.4.1 Regulatory Requirements

In Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36, "Technical specifications," the U.S. Nuclear Regulatory Commission (NRC) establishes its regulatory requirements related to the content of TSs. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five specific categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) SRs; (4) design features; and (5) administrative controls. The regulation does not specify the particular requirements to be included in plant's TSs.

As discussed in 10 CFR 50.36(c)(3), 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 LCOs will be met.

The regulations in 10 CFR 50.65(a)(4) states that before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The scope of the assessment may be limited to structures, systems, and components that a risk-informed evaluation process has shown to be significant to public health and safety.

2.4.2 Regulatory Guidance

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 [SRP] for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light Water Reactor] Edition", March 2010 (ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STSs for each of the LWR nuclear designs. Accordingly, 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 travelers. In addition, the guidance states that comparing the change to previous STS can help clarify the TS intent. The current STSs that are applicable to the Vogtle, Units 1 and 2, are:

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

The NRC staff also considered the guidance in NRC approved TSTF-283-A, Revision 3, "Modify Section 3.8 Mode restriction Notes," dated January 14, 2000 (ML003678477).

3.0 <u>TECHNICAL EVALUATION</u>

3.1 <u>Technical Evaluation Proposed Changes</u>

The TSTF-283-A was approved by letter dated July 6, 2000 (ML003730788). This change was subsequently incorporated by the NRC into Revision 2 of the STS in NUREG-1431 for Westinghouse plants, issued on June 30, 2001, and is retained in the current version (Revision 5) of the STS. The intent of the TSTF is to allow testing of the emergency diesel generators (EDGs) and Class 1E batteries in modes not currently allowed for the purpose of maintaining or reestablishing system or component operability (e.g., post-corrective maintenance testing), provided the licensee performs a safety assessment, as described in the application, that determines the safety of the plant would be maintained or enhanced by conducting the operability testing before the testing begins. This reduces the potential for a plant shutdown should corrective maintenance (planned or unplanned) performed during power operation result in the need to perform any of the revised SRs to demonstrate operability.

In the LAR Enclosure, page E-3, SNC stated that the justification for the change presented in the approved Traveler is applicable to Vogtle, Units 1 and 2. The NRC staff reviewed the technical basis of TSTF-283-A and concluded that it is applicable to Vogtle, Units 1 and 2, as TSTF-283-A was approved for Westinghouse designed plants.

The licensee proposed revisions to the following Vogtle, Units 1 and 2 SRs: 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.13, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.4.3. These SRs currently have Notes prohibiting their performance in Modes 1 or 2, or Modes 1, 2, 3, and 4, as applicable. The Notes are modified to state that while normally prohibited "in Modes 1 or 2," or "in Modes 1, 2, 3 and 4," the surveillance, or portions of it, may be performed to re-establish Operability provided an assessment determines the safety of the plant is maintained or enhanced. The NRC staff reviewed the proposed revisions and determined that the changes are identical to those made to the corresponding SRs for Westinghouse plants contained in the approved traveler and are currently reflected in Revision 5 of the STS.

Performance of the affected SRs for Vogtle, Units 1 and 2, are also covered under the Maintenance Rule provision contained in 10 CFR 50.65(a)(4) that requires the licensee to assess and manage the increase in risk that may result from the proposed maintenance activities before performing maintenance activities. This includes the performance of SRs to reestablish operability. Therefore, in addition to the assessment required by the SR Notes, an assessment of plant risk will also be performed.

The revision to the Notes restricts the allowance to perform the SRs in currently prohibited Modes to only performing the SRs when they are needed to reestablish operability the following examples are given in the application and proposed TS Bases: (1) following corrective maintenance or corrective modification, or (2) to resolve deficient or incomplete surveillance testing, or other unanticipated operability concerns. In addition, the SR can only be performed provided an assessment determines plant safety is maintained or enhanced. SNC stated that:

This assessment shall, as a minimum, consider the potential outcomes and transients associated with a failed SR, a successful SR, and a perturbation of the offsite or onsite system when they are tied together or operated independently for the SR; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when the SR is performed. Risk insights or deterministic methods may be used for this assessment.

Allowing the licensee to perform any of these SRs in accordance with the proposed Notes in reactor modes not currently allowed will not detrimentally impact plant safety, because (1) the proposed Notes require a safety assessment to be performed by the licensee before conducting the surveillance to ensure that plant safety is maintained or enhanced, and (2) the full or partial performance of the SR is to demonstrate operability of the AC power sources, DGs, and DC batteries, ensuring that their specified safety function(s) can be performed.

Based on the above, the NRC staff finds that the proposed changes to SRs 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.4.3 will continue to meet 10 CFR 50.36(c)(3), because the revised SRs will continue to provide reasonable assurance that necessary quality of systems and components is maintained and that the LCOs will be met. In addition, the changes are consistent with the TSTF-283-A, Revision 3, and the STS Revision 5. Based on the evaluation above the staff has determined that the proposed changes to Vogtle, Units 1 and 2, TS are acceptable.

3.2 Technical Evaluation of Proposed Variations

The licensee (SNC) identified some variations in its LAR that were based on differences between the approved TSTF-283-A, Revision 5 of the STS and the licensee's TS. The NRC staff reviewed the licensee's stated variations to determine if they impacted the acceptability of the licensee's proposed revisions. The NRC staff found that the Vogtle, Units 1 and 2, TS containing a Surveillance Frequency Control Program in lieu of SR frequencies has no impact on the acceptability of the licensee's propose SR changes since the TSTF-283-A changes do not affect and are not related to the surveillance interval.

The licensee also noted that their SR numbers were different than the SR numbers in the STS. This variation is administrative in nature and has no effect on the acceptability of the LAR. In addition, the licensee identified several of the SRs in Sections 3.8.1 and 3.8.4 that are covered by TSTF-283-A but are not in the Vogtle, Units 1 and 2, TS, and as a result, the licensee did not request to change those SRs. This is acceptable because each of the proposed SR revisions are independent of the other SRs in the TSTF-283-A.

The licensee, (SNC) stated that "TSTF-283-A Bases changes associated with Vogtle, Units 1 and 2, SRs 3.8.1.10, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.18 and 3.8.4.3 incorrectly state that the associated Notes restrict performance of the Surveillances in Mode 1 and 2. These

Surveillances actually restrict performance of the Surveillances in Mode 1, 2, 3, or 4. This error is corrected in the Vogtle, Units 1 and 2, TS Bases markups included in Attachment 3." This change is corrective and has no impact on the acceptability of the proposed SR revisions. The NRC does not approve Bases changes.

3.3 <u>Technical Conclusion</u>

The NRC staff concludes that there is reasonable assurance that the requirements of 10 CFR 50.36(c)(3) will continue to be met, because the revised SRs provide the appropriate surveillances to ensure the necessary quality of components is maintained and the associated LCOs will be met.

4.0 <u>STATE CONSULTATION</u>

In accordance with the Commission's regulations, the Georgia State officials were notified on September 6, 2022, of the proposed issuance of the amendments. On September 7, 2022, the State officials informed the NRC that the State of Georgia has no comments.

5.0 <u>ENVIRONMENTAL CONSIDERATION</u>

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 (87 FR 9653 dated February 22, 2022), 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 Contributor: Rob Elliott, NRR/DSS/STSB

Date: November 16, 2022

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2, ISSUANCE OF

AMENDMENTS REGARDING REVISION TO TECHNICAL SPECIFICATIONS

TO ADOPT TSTF-283-A, REVISION 3, "MODIFY SECTION 3.8 MODE

RESTRICTION NOTES" (EPID L-2021-LLA-0236) DATED

NOVEMBER 16, 2022

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