



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

September 10, 2024

Jamie M. Coleman
Regulatory Affairs Director
Southern Nuclear Operating Co., Inc.
3535 Colonnade Parkway
Birmingham, AL 35243

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT, UNITS 1 AND 2 – CORRECTION OF AMENDMENT NOS. 223 AND 206 REGARDING REVISION TO TECHNICAL SPECIFICATIONS TO ADOPT TSTF-339-A, “RELOCATE TECHNICAL SPECIFICATION PARAMETERS TO THE COLR [CORE OPERATING LIMITS REPORT] CONSISTENT WITH WCAP-14483”

Dear Jamie Coleman:

On December 22, 2023 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML23317A207), the U.S. Nuclear Regulatory Commission (NRC) issued Amendment No. 223 to Renewed Facility Operating License NPF-68 and Amendment No. 206 to Renewed Facility Operating License NPF-81 for the Vogtle Electric Generating Plant (Vogtle), Units 1 and 2, respectively.

The amendments revised Technical Specification (TS) 2.1.1, “Reactor Coolant Safety Limits,” (TS) 3.3.1, “Reactor Trip System (RTS) Instrumentation,” TS 3.4.1, “Reactor Coolant System (RCS) Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits,” and TS 5.6.5, “Core Operating Limits Report (COLR),” to adopt most of the TS and COLR changes described in Appendix A and Appendix B of Westinghouse topical report WCAP-14483-A, to relocate several cycle-specific parameter limits from the TS to the COLR.

On October 23, 2023 (ML23187A148), the NRC issued Amendment No. 222 to Renewed Facility Operating License NPF-68 and Amendment No. 205 to Renewed Facility Operating License NPF-81 for the Vogtle, Units 1 and 2, respectively. Amendment Nos. 222 and 205 revised TS 3.2.1, “Heat Flux Hot Channel Factor ($F_Q(Z)$),” and TS 5.6.5, “CORE OPERATING LIMITS REPORT (COLR),” to implement the methodology from licensing Topical Report WCAP-17661, Revision 1, “Improved RAOC [Relaxed Axial Offset Control] and CAOC [Constant Axial Offset Control] F_Q Surveillance Technical Specifications.”

On January 5, 2022 (ML21316A055), the NRC issued Amendment No. 211 to Renewed Facility Operating License NPF-68 and Amendment No. 194 to Renewed Facility Operating License NPF-81 for the Vogtle, Units 1 and 2, respectively. The amendments revised the TSs to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, “Revised Frequencies for Steam Generator Tube Inspections.”

Several administrative errors were made in the issuance of TS pages 5.6-3, 5.6-4, and 5.6-7 for Amendment Nos. 223 and 206 that did not account for previous amendments issued.

ERROR NO. 1 ON TS PAGE 5.6-3

Amendment Nos. 222 and 205 changed the following on TS page 5.6-3:

WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL FQ SURVEILLANCE TECHNICAL SPECIFICATION," February, 1994 (W Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

Amendment Nos. 223 and 206 inadvertently made the following change (see underline – underlined just for reader clarity) on TS page 5.6-3 that did not account for the issuance of Amendments 222 and 205:

WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL FQ SURVEILLANCE TECHNICAL SPECIFICATION," February, 1994 (W Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor (W(Z) surveillance requirements for FQ Methodology).)

Amendment Nos. 222 and 205 deleted the text that is underlined. Therefore, Amendment Nos. 223 and 206 should have retained that deleted text.

ERROR NO. 2 ON TS PAGE 5.6-3

Amendment Nos. 222 and 205 changed the following on TS page 5.6-3:

WCAP-10266-P-A, Revision 2, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," March 1987. (W Proprietary) (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

Amendment Nos. 223 and 206 inadvertently made the following change ((see underline – underlined just for reader clarity) on TS page 5.6-3 that did not account for the issuance of Amendments 222 and 205:

WCAP-10266-P-A, Revision 2, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," March 1987. (W Proprietary) (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor (W(Z) surveillance requirements for FQ Methodology).)

Amendment Nos. 222 and 205 deleted the text that is underlined. Therefore, Amendment Nos. 223 and 206 should have retained that deleted text.

ERROR NO. 3 ON TS PAGE 5.6-4

Amendment Nos. 222 and 205 changed the following on TS page 5.6-4:

WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Reference Core Report," April 1995 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

Amendment Nos. 223 and 206 inadvertently made the following change (see underline – underlined just for reader clarity) on TS page 5.6-4 that did not account for the issuance of Amendments 222 and 205:

WCAP-12610-P-A, “VANTAGE+ Fuel Assembly Reference Core Report,” April 1995 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor (W(Z) surveillance requirements for F_Q Methodology).)

Amendment Nos. 222 and 205 deleted the text that is underlined. Therefore, Amendment Nos. 223 and 206 should have reflected that deleted text.

ERROR NO. 4 ON TS PAGE 5.6-4

Amendment Nos. 222 and 205 changed the following on TS page 5.6-4:

WCAP-12610-P-A & CENPD-404-P-A, Addendum 1-A, “Optimized ZIRLO™,” July 2006 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

Amendment Nos. 223 and 206 inadvertently made the following change (see underline – underlined just for reader clarity) on TS page 5.6-4 that did not account for the issuance of Amendments 222 and 205:

WCAP-12610-P-A & CENPD-404-P-A, Addendum 1-A, “Optimized ZIRLO™,” July 2006 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor (W(Z) surveillance requirements for F_Q Methodology).)

Amendment Nos. 222 and 205 deleted the text that is underlined. Therefore, Amendment Nos. 223 and 206 should have reflected that deleted text.

ERROR NO. 5 ON TS PAGE 5.6-4

Amendment Nos. 222 and 205 added the following on TS page 5.6-4:

WCAP-17661-P-A, Revision 1, “Improved RAOC and CAOC F_Q Surveillance Technical Specifications,” February 2019 (W Proprietary). (Methodology for Control Bank Insertion Limits, Heat Flux Hot Channel Factor (W(Z) surveillance requirements for F_Q Methodology), and Axial Flux Difference (Relaxed Axial Offset Control).)

Amendment Nos. 223 and 206 inadvertently omitted WCAP-17661-P-A on TS page 5.6-4 that did not account for the issuance of Amendments 222 and 205.

ERROR NO. 6 ON TS PAGE 5.6-7

On January 5, 2022 (ML21316A055), the NRC issued Amendment No. 211 to Renewed Facility Operating License NPF-68 and Amendment No. 194 to Renewed Facility Operating License NPF-81 for the Vogtle, Units 1 and 2, respectively. The amendments revised the TSs to adopt

Technical Specifications Task Force (TSTF) Traveler TSTF-577, Revision 1, "Revised Frequencies for Steam Generator Tube Inspections."

Amendment Nos. 211 and 194 removed the line above the footer on TS page 5.6-7.

Amendment Nos. 223 and 206 inadvertently added the line above the footer.

ERROR NO. 7 ON TS PAGE 5.6-7

Amendment Nos. 211 and 194 had TS 5.6.10 "Steam Generator Tube Inspection Report," paragraph i state: "The results of monitoring...." The bold is for emphasis.

Amendment Nos. 223 and 206 inadvertently changed the TS 5.6.10 paragraph i to: "the results of monitoring...." The bold is for emphasis. The lower case "t" of the word "The" is an error. The correct is a capital "T."

RESULT

Consistent with NRC staff guidance dated January 16, 1997 (ML103260096) and based on the NRC's policy established by SECY-96-238 (ML20134M324), these six administrative errors can be corrected by a letter to the licensee from the NRC staff. These changes do not affect the NRC decision approving Amendment Nos. 211/194, 222/205, and 223/206 and do not affect the No Significant Hazards Consideration as published in the *Federal Register*.

Enclosed please find corrected Vogtle, Units 1 and 2, TS pages 5.6-3, 5.6-4, and 5.6-7.

If you have any questions, please 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 425

Enclosure:
As stated

cc: Listserv

5.6 Reporting Requirements

5.6.5 Core Operating Limits Report (COLR)

- a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:
- SL 2.1.1 "Reactor Core Safety Limits"
 - LCO 3.1.1 "SHUTDOWN MARGIN"
 - LCO 3.1.3 "Moderator Temperature Coefficient"
 - LCO 3.1.5 "Shutdown Bank Insertion Limits"
 - LCO 3.1.6 "Control Bank Insertion Limits"
 - LCO 3.2.1 "Heat Flux Hot Channel Factor"
 - LCO 3.2.2 "Nuclear Enthalpy Rise Hot Channel Factor"
 - LCO 3.2.3 "Axial Flux Difference"
 - LCO 3.3.1 "Reactor Trip System (RTS) Instrumentation"
 - LCO 3.4.1 "Reactor Coolant System (RCS) Pressure, Temperature, and Flow Departure from Nucleate Boiling (DNB) Limits"
 - LCO 3.9.1 "Boron Concentration"

- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

WCAP-9272-P-A, "WESTINGHOUSE RELOAD SAFETY EVALUATION METHODOLOGY," July 1985 (W Proprietary). (Methodology for Moderator Temperature Coefficient, Shutdown Bank Insertion Limit, Control Bank Insertion Limits, and Nuclear Enthalpy Rise Hot Channel Factor, Reactor Trip System Instrumentation, and Reactor Coolant System Pressure, Temperature, and Flow Departure from Nucleate Boiling Limits.)

WCAP-10216-P-A, Revision 1A, "RELAXATION OF CONSTANT AXIAL OFFSET CONTROL FQ SURVEILLANCE TECHNICAL SPECIFICATION," February, 1994 (W Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

WCAP-10266-P-A, Revision 2, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," March 1987. (W Proprietary) (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

WCAP-13749-P-A, "Safety Evaluation Supporting the Conditional Exemption of the Most Negative EOL Moderator Temperature Coefficient Measurement," March 1997.

(continued)

5.6 Reporting Requirements

5.6.5 Core Operating Limits Report (COLR) (continued)

WCAP-16045-P-A, "Qualification of the Two-Dimensional Transport Code PARAGON," August 2004 (Methodology for Moderator Temperature Coefficient.)

WCAP-16045-P-A, Addendum 1-A, "Qualification of the NEXUS Nuclear Data Methodology," August 2007 (Methodology for Moderator Temperature Coefficient.)

WCAP-12610-P-A, "VANTAGE+ Fuel Assembly Reference Core Report," April 1995 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

WCAP-12610-P-A & CENPD-404-P-A, Addendum 1-A, "Optimized ZIRLO™," July 2006 (Westinghouse Proprietary). (Methodology for Axial Flux Difference (Relaxed Axial Offset Control) and Heat Flux Hot Channel Factor.)

WCAP-17661-P-A Revision 1, "Improved RAOC and CAOC F_Q Surveillance Technical Specifications," February 2019 (W Proprietary). (Methodology for Control Bank Insertion Limits, Heat Flux Hot Channel Factor ($W(Z)$ surveillance requirements for F_Q Methodology), and Axial Flux Difference (Relaxed Axial Offset Control).)

WCAP-8745-P-A, "Design Bases for the Thermal Overpower ΔT and Thermal Overtemperature ΔT Trip Functions," September 1986 (W Proprietary). (Methodology for Reactor Trip System Instrumentation.)

WCAP-11397-P-A, "Revised Thermal Design Procedure," April 1989 (W Proprietary). (Methodology for Reactor Core Safety Limits and RCS Pressure, Temperature and Flow Departure from Nucleate Boiling Limits.)

- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

(continued)

5.6 Reporting Requirements

5.6.10 Steam Generator Tube Inspection Report (continued)

- e. The number and percentage of tubes plugged to date, and the effective plugging percentage in each SG;
 - f. The results of any SG secondary side inspections;
 - g. The primary to secondary LEAKAGE rate observed in each SG (if it is not practical to assign the LEAKAGE to an individual SG, the entire primary to secondary LEAKAGE should be conservatively assumed to be from one SG) during the cycle preceding the inspection which is the subject of the report;
 - h. The calculated accident induced leakage rate from the portion of the tubes below 15.2 inches from the top of the tubesheet for the most limiting SG. In addition, if the calculated accident induced leakage rate from the most limiting accident is less than 2.48 times the maximum operational primary to secondary leakage rate, the report should describe how it was determined; and
 - i. The results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discover and corrective action shall be provided.
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