



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

June 7, 2018

Mr. G. T. Powell
Interim President and CEO/CNO
STP Nuclear Operating Company
South Texas Project
P.O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS TO REVISE TECHNICAL SPECIFICATIONS FOR ADMINISTRATIVE CHANGES AND TO RELOCATE F_{xy} EXCLUSION ZONES TO THE CORE OPERATING LIMITS REPORT (CAC NOS. MG0253 AND MG0254; EPID L-2017-LLA-0300)

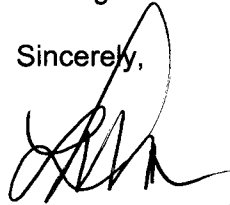
Dear Mr. Powell:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 213 to Renewed Facility Operating License No. NPF-76 and Amendment No. 199 to Renewed Facility Operating License No. NPF-80 for the South Texas Project, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated September 18, 2017.

The amendments revise TS 4.2.2.2.f to relocate the details of the core plane regions where the radial peaking factor limits are not applicable (F_{xy} exclusion zones) to the Core Operating Limits Report. The amendments also include administrative changes to TS 6.9.1.6, "Core Operating Limits Report (COLR)," from the Administrative Controls section of the TSs and typographical errors corrections for TS 4.2.2.2.f and TS 4.8.1.1.2.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Regner', written over the word 'Sincerely,'.

Lisa M. Regner, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures:

1. Amendment No. 213 to NPF-76
2. Amendment No. 199 to NPF-80
3. Safety Evaluation

cc: Listserv



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

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-498

SOUTH TEXAS PROJECT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 213
Renewed License No. NPF-76

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by STP Nuclear Operating Company (STPNOC)*, acting on behalf of itself and for NRG South Texas LP, the City Public Service Board of San Antonio (CPS), and the City of Austin, Texas (COA) (the licensees), dated September 18, 2017, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, 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 license 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.

*STPNOC is authorized to act for NRG South Texas LP, the City Public Service Board of San Antonio, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended by 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-76 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 213, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility
Operating License No. NPF-76 and
Technical Specifications

Date of Issuance: June 7, 2018



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

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-499

SOUTH TEXAS PROJECT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 199
Renewed License No. NPF-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by STP Nuclear Operating Company (STPNOC)*, acting on behalf of itself and for NRG South Texas LP, the City Public Service Board of San Antonio (CPS), and the City of Austin, Texas (COA) (the licensees), dated September 18, 2017, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, 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 license 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.

*STPNOC is authorized to act for NRG South Texas LP, the City Public Service Board of San Antonio, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended by 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-80 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility
Operating License No. NPF-80 and
Technical Specifications

Date of Issuance: June 7, 2018

ATTACHMENT TO LICENSE AMENDMENT NOS. 213 AND 199 TO
RENEWED FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80
SOUTH TEXAS PROJECT, UNITS 1 AND 2
DOCKET NOS. 50-498 AND 50-499

Replace the following pages of the Renewed Facility Operating License Nos. NPF-76 and NPF-80, and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Renewed Facility Operating License No. NPF-76

REMOVE
~~-4-~~

INSERT
~~-4-~~

Renewed Facility Operating License No. NPF-80

REMOVE
~~-4-~~

INSERT
~~-4-~~

Technical Specifications

REMOVE
3/4 2-8
3/4 8-6
6-15
6-16
6-17

INSERT
3/4 2-8
3/4 8-6
6-15
6-16
6-17

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 213, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Not Used

(4) Initial Startup Test Program (Section 14, SER)*

Any changes to the Initial Test Program described in Section 14 of the Final Safety Analysis Report made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(5) Safety Parameter Display System (Section 18, SSER No. 4)*

Before startup after the first refueling outage, HL&P[**] shall perform the necessary activities, provide acceptable responses, and implement all proposed corrective actions related to issues as described in Section 18.2 of SER Supplement 4.

(6) Supplementary Containment Purge Isolation (Section 11.5, SSER No. 4)*

HL&P shall provide, prior to startup from the first refueling outage, control room indication of the normal and supplemental containment purge sample line isolation valve position.

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

**The original licensee authorized to possess, use and operate the facility was HL&P. Consequently, historical references to certain obligations of HL&P remain in the license conditions.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 199 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the renewed license. STPNOC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Not Used

(4) Initial Startup Test Program (Section 14. SR)*

Any changes to the Initial Test Program described in Section 14 of the Final Safety Analysis Report made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

(5) License Transfer

Texas Genco, LP shall provide decommissioning funding assurance, to be held in decommissioning trusts for South Texas Project, Unit 2 (Unit 2) upon the direct transfer of the Unit 2 license to Texas Genco, LP, in an amount equal to or greater than the balance in the Unit 2 decommissioning trust immediately prior to the transfer. In addition, Texas Genco, LP shall ensure that all contractual arrangements referred to in the application for approval of the transfer of the Unit 2 license to Texas Genco, LP to obtain necessary decommissioning funds for Unit 2 through a non-bypassable charge are executed and will be maintained until the decommissioning trusts are fully funded, or shall ensure that other mechanisms that provide equivalent assurance of decommissioning funding in accordance with the Commission's regulations are maintained.

(6) License Transfer

The master decommissioning trust agreement for Unit 2, at the time the direct transfer of Unit 2 to Texas Genco, LP is effected and thereafter, is subject to the following:

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

POWER DISTRIBUTION LIMITS

SURVEILLANCE REQUIREMENTS (Continued)

- 2) When F_{xy}^C is less than or equal to the F_{xy}^{RTP} limit for the appropriate measured core plane, additional core power distribution measurements shall be taken and F_{xy}^C compared to F_{xy}^{RTP} and F_{xy}^L at least once per 31 EFPD.
- e. The F_{xy} limits used in the Constant Axial Offset Control analysis for RATED THERMAL POWER (F_{xy}^{RTP}) shall be provided for all core planes containing bank "D" control rods and all unrodded core planes as specified in the COLR per Specification 6.9.1.6;
- f. The F_{xy} limits of Specification 4.2.2.2e, above, are not applicable in the core plane regions specified in the COLR.
- g. With F_{xy}^C exceeding F_{xy}^L , the effects of F_{xy} on $F_Q(Z)$ shall be evaluated to determine if $F_Q(Z)$ is within its limits.
- 4.2.2.3 When $F_Q(Z)$ is measured for other than F_{xy} determinations, an overall measured $F_Q(Z)$ shall be obtained from a core power distribution measurement and increased by the applicable manufacturing and measurement uncertainties as specified in the COLR.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 13) Demonstrating the OPERABILITY of the automatic load shed bypass and the manual load shed reinstatement features of the load sequencer.
 - f. At a frequency in accordance with the Surveillance Frequency Control Program or after any modifications which could affect standby diesel generator interdependence by starting all standby diesel generators simultaneously, during shutdown, and verifying that all standby diesel generators accelerate to at least 600 rpm in less than or equal to 10 seconds; and
 - g. At a frequency in accordance with the Surveillance Frequency Control Program by draining each fuel tank, removing the accumulated sediment and cleaning the tank.

4.8.1.1.3. (Not Used)

6.0 ADMINISTRATIVE CONTROLS
6.9 Reporting Requirements

6.9.1.6a (Continued)

8. Heat Flux Hot Channel Factor, $K(Z)$, F_{xy} Exclusion Zones, Power Factor Multiplier, F_{xy}^{RTP} , and $F_{\alpha}(Z)$ manufacturing and measurement uncertainties for Specification 3/4.2.2,
9. Nuclear Enthalpy Rise Hot Channel Factor, Power Factor Multiplier, and $F_{\Delta H}^N$ measurement uncertainties for Specification 3/4.2.3, and
10. DNB related parameters for Reactor Coolant System T_{avg} Pressurizer Pressure, and the Minimum Measured Reactor Coolant System Flow for Specification 3/4.2.5.

The COLR shall be maintained available in the Control Room.

- 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:

1. WCAP 9272-P-A, "Westinghouse reload safety evaluation methodology," July 1985 (W Proprietary).

(Methodology for Specification 3.1.1.1 - Shutdown Margin, Methodology for Specification 3.1.1.3 - Moderator Temperature Coefficient, 3.1.3.5 - Shutdown Rod Insertion Limit, 3.1.3.6 - Control Bank Insertion Limits, 3.2.1 - Axial Flux Difference, 3.2.2 - Heat Flux Hot Channel Factor, 3.2.3 - Nuclear Enthalpy Rise Hot Channel Factor, and 3.2.5 - DNB Parameters.)

2. WCAP 12942-P-A, "safety evaluation supporting a more negative eol Moderator temperature coefficient technical specification for the south texas project electric generating station units 1 and 2."

(Methodology for Specification 3.1.1.3 - Moderator Temperature Coefficient)

3. WCAP 8745-P-A, "Design Basis for the Thermal Overpower ΔT and Thermal Overtemperature ΔT Trip Functions," September 1986 (Westinghouse Proprietary Class 2).

(Methodology for Specification 2.1 - Safety Limits and 2.2 - Limiting Safety System Settings)

4. WCAP 8385, "power distribution and load following procedures topical report," September, 1974 (W Proprietary)

(Methodology for Specification 3.2.1 - Axial Flux Difference (Constant Axial Offset Control) and 3.2.2 - Heat Flux Hot Channel Factor (F_{xy} Exclusion Zones))

(continued)

6.0 ADMINISTRATIVE CONTROLS
6.9 Reporting Requirements

6.9.1.6b (Continued)

5. Westinghouse Letter NS-TMA-2198, T.M. Anderson (Westinghouse) to K. Kniel (Chief of Core Performance Branch, NRC) January 31, 1980 – Attachment: Operation and Safety Analysis Aspects of an Improved Load Follow Package.

(Methodology for Specification 3.2.1 - Axial Flux Difference (Constant Axial Offset Control). Approved by NRC Supplement No. 4 to NUREG-0422, January 1981, Docket Nos. 50-369 and 50-370.)

6. NUREG-0800, Standard Review Plan, U. S. Nuclear Regulatory Commission, Section 4.3, Nuclear Design, July 1981. Branch Technical Position CPB 4.3-1, Westinghouse Constant Axial Offset Control (CAOC), Rev. 2, July 1981.

(Methodology for Specification 3.2.1 - Axial Flux Difference (Constant Axial Offset Control).)

7. WCAP-10266-P-A, Rev. 2, WCAP-11524-NP-A Rev. 2, "The 1981 Version of the Westinghouse ECCS Evaluation Model Using the BASH Code," Kabadi, J.N., et al., March 1987; including Addendum 1-A, "Power Shape Sensitivity Studies," December, 1987 and Addendum 2-A, "BASH methodology Improvements and Reliability Enhancements," May 1988.

(Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor)

- 8.1 WCAP-12610-P-A, "Vantage+ Fuel Assembly Reference Core Report," April 1995 (W Proprietary)
- 8.2 WCAP-12610-P-A & CENPD-404-P-A, Addendum 1-A, "Optimized ZIRLO™, July 2006 (W Proprietary)

(Methodology for Specification 3.2.2 - Heat Flux Hot Channel Factor)

9. Cameron Measurement Systems/Caldon Ultrasonics Engineering Report: ER-157(P-A) Rev. 8 and Rev. 8 Errata, "Supplement to Caldon Topical Report ER-80P: Basis for Power Upgrades with an LEFM Check or an LEFM CheckPlus System," May 2008.

(Methodology for operating at a RATED THERMAL POWER of 3,853 Mwt with LEFM CheckPlus System)

(continued)

6.0 ADMINISTRATIVE CONTROLS
6.9 Reporting Requirements

6.9.1.6 (continued)

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

(Methodology for Specification 3.1.1.3 - Moderator Temperature Coefficient)

11. WCAP 12472-P-A, "BEACON Core Monitoring and Operations Support System," August 1994 (W Proprietary), including Addenda 1-A (January 2000) and 4 (September 2012)

(Methodology for uncertainties in Specification 3.2.2 – Heat Flux Hot Channel Factor and 3.2.3 – Nuclear Enthalpy Rise Hot Channel Factor)

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

6.9.1.7 Steam Generator Tube Inspection Report

A report shall be submitted within 180 days after the initial entry into MODE 4 following completion of an inspection performed in accordance with Specification 6.8.3.o. The report shall include:

- a. The scope of inspections performed on each SG,
- b. Degradation mechanisms found,
- c. Nondestructive examination techniques utilized for each degradation mechanism,
- d. Location, orientation (if linear), and measured sizes (if available) of service induced indications,
- e. Number of tubes plugged during the inspection outage for each degradation mechanism,
- f. The number and percentage of tubes plugged to date, and the effective plugging percentage in each steam generator.
- g. The results of condition monitoring, including the results of tube pulls and in-situ testing,

6.9.2 Not Used



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 213 AND 199 TO

RENEWED FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80

STP NUCLEAR OPERATING COMPANY, ET AL.

SOUTH TEXAS PROJECT, UNITS 1 AND 2

DOCKET NOS. 50-498 AND 50-499

1.0 INTRODUCTION

By application dated September 18, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17261B272), STP Nuclear Operating Company (STPNOC, the licensee) requested changes to the Technical Specifications (TSs) for South Texas Project (STP), Units 1 and 2.

The proposed changes would revise TS 4.2.2.2.f to relocate the details of the core plane regions where the radial peaking factor limits are not applicable (F_{xy} exclusion zones) to the Core Operating Limits Report. The amendments also include administrative changes to TS 6.9.1.6, "Core Operating Limits Report (COLR)," from the Administrative Controls section of the TSs and typographical error corrections for TS 4.2.2.2.f and TS 4.8.1.1.2.

2.0 REGULATORY EVALUATION

2.1 System Description

In the STP, Units 1 and 2 license, TS 6.9.1.6 describes the required content of the COLRs and references the applicable U.S. Nuclear Regulatory Commission (NRC)-approved analytical methods used to determine the core operating limits. The report provides the values of cycle-specific parameter limits that are applicable for the current fuel cycle. This specification requires that the values of these limits be established using NRC-approved methodology, consistent with all applicable limits of the safety analysis. This TS also requires that all changes in cycle-specific parameter limits be documented in the COLR before each reload cycle or remaining part of a reload cycle and submitted upon issuance to the NRC, prior to operation with the new parameter limits.

The Radial Peaking Factor, $F_{xy}(Z)$, is one of the limits specified in TS 6.9.1.6 as provided in the COLR. $F_{xy}(Z)$ is the ratio of the peak power density compared to the average power density in the horizontal plane at core elevation Z . The licensee's monitoring of $F_{xy}(Z)$ ensures that the Hot Channel Factor remains within limits such that fuel power peaking during design-basis

accidents is restricted to minimize fuel cladding damage. The values of the F_{xy} limits are determined by the NRC-approved methodology described in Westinghouse Topical Report WCAP-8385 "Topical Report Power Distribution Control and Load Following Procedures," September 1974 (Not publicly available; Proprietary information).

The F_{xy} exclusion zones refer to the regions where TS surveillance testing is not required to be performed because the measurement and calculation methods are not as effective in these regions due to top and bottom edge effects and grid strap perturbations.

The licensee states that the requested changes do not modify the system design or operation. The requested changes relocate the F_{xy} exclusion zones from TS 4.2.2.2.f to the COLR and incorporate several administrative changes.

2.2 Technical Specifications Changes

The licensee described the following proposed changes:

- TS 4.2.2.2.f is modified to relocate the specific location details of the F_{xy} exclusion zones to the COLR;
- TS 6.9.1.6 is modified to update the list of COLR contents, update the methodology description for the WCAP-8385 (Proprietary), remove outdated information, incorporate NRC-approved topical report addenda, and clarify the applicability of the BEACON code; and
- TS 4.2.2.2.f and TS 4.8.1.1.2 are modified to correct typographical errors.

2.3 Regulatory Requirements

The NRC staff based its evaluation on the following criteria:

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications," establishes the requirements related to the content of the TSs for operating power plants including: (1) safety limits, limiting safety system settings, and limiting control settings, (2) limiting conditions for operation (LCOs), (3) surveillance requirements (SRs), (4) design features, (5) administrative controls, (6) decommissioning, (7) initial notification, and (8) written reports.

The regulation, 10 CFR Part 50.36(c)(3), "Surveillance requirements," states that:

Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," dated October 4, 1988 (ADAMS Accession No. ML031130447), provides guidance to licensees for the removal of cycle-dependent variables from the TSs provided that these values are included in a COLR and are determined with NRC-approved methodologies referenced in the plant-specific TSs.

3.0 TECHNICAL EVALUATION

3.1 Administrative Changes

The licensee proposed to remove the reference in TS 6.9.1.6.b.9 to the Crossflow Ultrasonic Flow Measurement System. The licensee justified this administrative change because the system is no longer used at STP. The NRC staff determines that this is an appropriate administrative change and concludes it is acceptable since the licensee has discontinued use of the Crossflow Ultrasonic Flow Measurement System.

The licensee proposed to clarify TS 6.9.1.6.b.11 by identifying the specific addenda to WCAP-12472-P-A "BEACON Core Monitoring and Operation Support System" that are applicable to STP. The licensee plans to update this TS by adding the NRC-approved addenda for the BEACON topical report that are also applicable to STP. The licensee stated that Addendum 1-A approves the ANC Nodal Expansion Method used in BEACON, and Addendum 4 approves a power-dependent peaking factor uncertainty method added to BEACON. The licensee will also modify TS 3.2.2 and TS 3.2.3 to specify that both NRC-approved addenda to the WCAP-12472-P-A methodology will be used for uncertainties. The NRC staff determines that this is an administrative change that adds clarity to the TS by identifying the specific methodology used, and the NRC staff concludes that it is acceptable.

Additionally, for TS 6.9.1.6.b.11, the licensee proposed to remove the reference to the axial flux difference methodology for BEACON. The licensee clarified that this methodology does not apply to STP since STP is not licensed to the Direct Margin Monitor level of BEACON (the axial flux difference method applies only to the Direct Margin Monitor level of BEACON). The NRC staff determines that this is an administrative change since the removal of the axial flux difference method does not impact the licensee's use of the BEACON methodology. The NRC staff concludes that the change is acceptable because the approved BEACON methodology for STP is not impacted.

The licensee proposed to correct two typographical errors. The first would correct a spelling error in TS 4.2.2.2.f, from "planes" to "plane." The second would correct the indentation for subsections f and g of TS 4.8.1.1.2. The NRC staff determines these changes are acceptable since they have no impact on the content of the license.

3.2 Technical Changes

The licensee proposed to relocate the F_{xy} exclusions zones currently specified in TS 4.2.2.2.f to the COLR. Specifically, the licensee proposed to relocate the following F_{xy} exclusion zones:

- 1) Lower core region from 0 to 15%, inclusive,
- 2) Upper core region from 85 to 100%, inclusive,
- 3) Grid plane regions at $22.4 \pm 2\%$, $34.2 \pm 2\%$, $46.0 \pm 2\%$, $57.8 \pm 2\%$, $69.5 \pm 2\%$ and $81.3 \pm 2\%$, inclusive, and
- 4) Core plane regions within $\pm 2\%$ of core height (± 3.36 inches) about the bank demand position of the bank "D" control rods.

The revised TS 4.2.2.2.f would state:

The F_{xy} limits of Specification 4.2.2.2e, above, are not applicable in the core plane regions specified in the COLR.

The licensee proposed to revise TS 4.2.2.2.f to relocate the details regarding the defined core plane regions where the Radial Peaking Factor limits are not applicable (F_{xy} exclusion zones) from the TSs to the COLR for STP, Units 1 and 2. The proposed changes would also require the TS 6.9.1.6 list of COLR limits to be updated with " F_{xy} Exclusion Zones."

The NRC staff determines this relocation acceptable because the exclusion zones are a cycle-specific parameter that are calculated by an approved methodology. Further, the NRC staff determines that the proposed relocation of the affected TS parameters to the COLR is in accordance with the guidance of the GL 88-16. This change will not have an impact on plant operation or safety, and no safety-related equipment, safety function, or plant operations will be altered. This change will eliminate the licensee's need for a license amendment request for cycle-specific changes to the exclusion zones and thereby reduce unnecessary regulatory burden. Based on the considerations above, the NRC staff concludes that the proposed revisions to TS 4.2.2.2.f and TS 6.9.1.6 are acceptable, and the requirements of 10 CFR 50.36(c)(3) will continue to be met.

As part of this relocation, the licensee requested to reference the F_{xy} exclusion zone methodology, WCAP-8385, for TS 3/4 2.2 as part of the TS 6.9.1.6.b.4 COLR analytical methods references. The NRC staff finds this change acceptable because the methodology used to determine these exclusion zones will be listed with the other COLR references in TS 6.9.1.6. This maintains the convention for administrative controls, STP TS Section 6, such that the requirements of 10 CFR 50.36 will continue to be met.

3.3 Technical Conclusion

The NRC staff determines that the TS changes are consistent with the guidance in GL 88-16 and are in conformance with the requirements of 10 CFR 50.36 because the relocation does not change the safety determination of the plant. Further, the NRC staff finds that the licensee's proposed administrative changes above are editorial in nature and that the licensee's proposed TS changes do not change the intent of the referenced TS. Therefore, the NRC staff concludes that the proposed changes are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments on May 4, 2018. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change 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 change SRs. 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, and there has been no public comment on such

finding published in the *Federal Register* on December 5, 2017 (82 FR 57475). The amendments also relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). 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 CONCLUSION

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

Principal Contributors: D Woodyatt
T Sweat
L Regner

Date: June 7, 2018

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS TO REVISE TECHNICAL SPECIFICATIONS FOR ADMINISTRATIVE CHANGES AND TO RELOCATE F_{XY} EXCLUSION ZONES TO THE CORE OPERATING LIMITS REPORT (CAC NOS. MG0253 AND MG0254; EPID L-2017-LLA-0300) DATED JUNE 7, 2018

DISTRIBUTION:

PUBLIC	RidsNrrDssStsb Resource	RidsNrrDssSrxb Resource
PM File Copy	RidsNrrLAPBlechman Resource	DWoodyatt, NRR
RidsACRS_MailCTR Resource	RidsNrrPMSouthTexas Resource	TSweat, NRR
RidsNrrDorLpl4 Resource	RidsRgn4MailCenter Resource	

ADAMS Accession No. ML18128A342

*by memo

**by e-mail

OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA	NRR/DSS/STSB/BC**	NRR/DSS/SRXB/BC(A)*
NAME	LRegner	PBlechman	VCusumano	JWhitman
DATE	5/23/18	5/10/18	5/8/18	4/27/2018
OFFICE	OGC (NLO)**	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM	
NAME	S Spicer	RPascarelli	LRegner	
DATE	5/15/18	6/7/18	6/7/18	

OFFICIAL RECORD COPY