

February 4, 2003

Mr. William T. Cottle  
President and Chief Executive Officer  
STP Nuclear Operating Company  
South Texas Project Electric  
Generating Station  
P. O. Box 289  
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS  
ON RELOCATION OF SHUTDOWN MARGIN LIMITS TO CORE OPERATING  
LIMITS REPORT (TAC NOS. MB5155 and MB5156)

Dear Mr. Cottle:

The Commission has issued the enclosed Amendment No. 150 to Facility Operating License No. NPF-76 and Amendment No. 138 to 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 May 23, 2002.

The amendments relocate the shutdown margin limits from the TSs to the Core Operating Limits Report and modify certain boration requirements consistent with NUREG-1431.

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

Sincerely,

*/RA/*

Mohan Thadani, Senior Project Manager, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures: 1. Amendment No. 150 to NPF-76  
2. Amendment No. 138 to NPF-80  
3. Safety Evaluation

cc w/encls: See next page

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ACCESSION NO: ML030360230

\*No substantive change since SE input

OFFICE	PDIV-1/PM	PDIV-1/PM	PDIV-1/PM	PDIV-1/LA	TSS/SC	OGC: nlo	PDIV-1/SC
NAME	MHoncharik	TAlexion	MThadani	MMcAllister	RDennig*	R.Hoefling	RGramm
DATE	1/17/03	01/22/03	01/17/03	1/17/03	12/10/02	2/3/03	2/4/03

OFFICIAL RECORD COPY

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-498

SOUTH TEXAS PROJECT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 150  
License No. NPF-76

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by STP Nuclear Operating Company\* acting on behalf of itself and for Texas Genco, LP, the City Public Service Board of San Antonio (CPS), Central Power and Light Company (CPL), and the City of Austin, Texas (COA) (the licensees), dated May 23, 2002, 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.

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\*STP Nuclear Operating Company is authorized to act for Texas Genco, LP, the City Public Service Board of San Antonio, Central Power and Light Company, 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 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. 150, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The STP Nuclear Operating Company 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 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Robert A. Gramm, Chief, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: February 4, 2003

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-499

SOUTH TEXAS PROJECT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 138  
License No. NPF-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by STP Nuclear Operating Company\* acting on behalf of itself and for Texas Genco, LP, the City Public Service Board of San Antonio (CPS), Central Power and Light Company (CPL), and the City of Austin, Texas (COA) (the licensees), dated May 23, 2002, 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.

---

\*STP Nuclear Operating Company is authorized to act for Texas Genco, LP, the City Public Service Board of San Antonio, Central Power and Light Company, 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 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. 138, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The STP Nuclear Operating Company 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 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Robert A. Gramm, Chief, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: February 4, 2003

ATTACHMENT TO LICENSE AMENDMENT NOS. 150 AND 138

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

DOCKET NOS. 50-498 AND 50-499

Replace the following pages of the 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.

REMOVE

iv  
xi  
3/4 1-1  
3/4 1-2  
3/4 1-3  
3/4 1-4  
3/4 1-5  
3/4 9-1  
3/4 10-1  
3/4 10-6  
3/4 10-7  
6-21

INSERT

iv  
xi  
3/4 1-1  
3/4 1-2  
3/4 1-3  
3/4 1-4  
3/4 1-5  
3/4 9-1  
3/4 10-1  
3/4 10-6  
3/4 10-7  
6-21

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 150 AND 138 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 May 23, 2002, STP Nuclear Operating Company (the licensee), requested changes to the Technical Specifications (TSs) for South Texas Project (STP), Units 1 and 2.

The proposed changes would relocate the shutdown margin (SDM) limits to the Core Operating Limits Report (COLR) and consolidate TS 3/4.1.1.1 and TS 3/4.1.1.2. In addition, the changes would revise certain boration requirements of the TSs to be consistent with Westinghouse Improved Standard Technical Specifications (STS), NUREG-1431. The requested changes also include administrative changes to remove two TSs which are historical and no longer needed.

2.0 REGULATORY EVALUATION

Relocation of SDM limits from the TS to a COLR was authorized originally by Generic Letter (GL) 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications." Such relocations have subsequently been approved by Technical Specifications Task Force (TSTF) change TSTF-9 and incorporated into the STS NUREGs. To relocate a cycle-specific parameter or TS limit to a COLR the following must be satisfied, as set forth in GL 88-16 and the STS: the COLR must be defined in TSs, an administrative controls COLR reporting requirement must be established in TSs, and a U.S. Nuclear Regulatory Commission (NRC) approved methodology for determining the parameter limit must be listed in the administrative controls TSs along with the applicable specifications.

Prescriptive boration flow and concentration addition requirements were removed from the STS NUREGs, since they were found to be unnecessary to meet the requirements of 10 CFR 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR). In the determination of the required combination of boration flow rate and boron concentration, there is no unique requirement that must be satisfied. Since, when required by TSs, it is imperative to raise the boron concentration of the Reactor Coolant System (RCS) as soon as possible, the boron concentration should be a highly concentrated solution, such as that normally found in the boric acid makeup tanks or the refueling water storage tank. The operator should borate with the best source available for the plant conditions.

### 3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendments which are described in Sections 4 and 5 of the licensee's submittal. The detailed evaluation below will support the conclusion 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) 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.

- (1) TS 3/4.1.1.1, "Shutdown Margin- $T_{avg}$  Greater Than 200° F," and TS 3/4.1.1.2, "Shutdown Margin- $T_{avg}$  Less Than Or Equal To 200° F," are combined into one TS.

For TS 3/4.1.1.1 and TS 3/4.1.1.2, portions of the Limiting Condition for Operations, Actions, and Surveillances for the two TSs are the same. Relocating the SDM limits to the COLR allows the two TSs and the Applicability sections to be combined. The act of combining the two TSs is an administrative change that reduces duplication and potential confusion. This change is also in accordance with TSTF-136 and NUREG-1431.

- (2) The SDM Limits of TS 3/4.1.1.1, "Shutdown Margin- $T_{avg}$  Greater Than 200° F," and TS 3/4.1.1.2, "Shutdown Margin- $T_{avg}$  Less Than Or Equal To 200° F," are relocated to the COLR.

SDM is a cycle specific variable, similar to other variables, such as Moderator Temperature Coefficient, Rod Insertion Limits, Axial Flux Difference, Heat Flux Hot Channel factor, and Nuclear Rise Hot Channel Factor, all of which are currently in the STP COLRs. The NRC approved methodology in WCAP 9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," for the calculation of required SDM, is listed in the COLR section of the TS Administrative Controls. Relocating SDM to the COLR provides core design and operational flexibility that can be used for improved fuel management. This change also reduces the need, and the associated effort and expense, for future license amendment requests related to SDM changes without a reduction in safety. This change is also consistent with TSTF-9 and NUREG-1431.

- (3) Action statements are revised in: TS 3/4.1.1.1, "Shutdown Margin- $T_{avg}$  Greater Than 200° F;" TS 3/4.1.1.2, "Shutdown Margin- $T_{avg}$  Less Than Or Equal To 200° F;" TS 3/4.9.1, "Boron Concentration;" and TS 3/4.10, "Shutdown Margin."

In TS 3/4.1.1.1, TS 3/4.1.1.2, TS 3/4.9.1, and TS 3/4.10, the Action statements are revised by removing unnecessary detail related to emergency boration and by providing 15 minutes to initiate action (with the exception that the change to 15 minutes does not apply to TS 3/4.9.1). The requirement and purpose of the specifications are to maintain specific SDM/reactivity conditions in the core. The details on specific boron flow rates and concentrations are included in plant procedures and are not necessary in the TSs. The change in completion time from "immediately" to "15 minutes" to initiate boration is consistent with the boron dilution accident analyses. These changes are also consistent with NUREG-1431.

- (4) TS 3/4.10.6, "CET and RCS RTD Calibration Exemptions for 2RE03," and TS 3/4.10.7, "DNB Parameters Surveillance Exemption for 2RE03," are removed.

TS 3/4.10.6 and TS 3/4.10.7 were applicable to the specific refueling outage 2RE03 and hence are no longer required. Since they provide only historical information and are no longer applicable, the text can be deleted.

- (5) TS 6.9.1.6, "Core Operating Limits Report," is revised to include reference to the information that has been relocated to the COLR.

In TS 6.9.1.6.a the reference to the relocated SDM limits in TS 3/4.1.1.1 is added. In TS 6.9.1.6.b the application of the methodology, WCAP 9272-P-A, "Westinghouse Reload Safety Evaluation Methodology," to TS 3/4.1.1.1 is added. These are administrative changes to implement the relocation of SDM to the COLR. These changes are also consistent with NUREG-1431.

- (6) Typographical Errors

On TS pages 3/4 1-1, 3/4 1-2, 3/4 1-4, 3/4 10-1, and 6-21, the licensee inadvertently made typographical errors on portions of the pages that were not proposed to be changed with these amendments. A period was removed from the end of 4.1.1.1d and amendment was misspelled in the footer on page 3/4 1-1, a comma was removed after 4.1.1.1d. on page 3/4 1-2, amendment was misspelled in the footer of page 3/4 1-4, "3/4.10.1 Shutdown Margin" was removed from the title and amendment was misspelled in the footer on page 3/4 10-1, and some marginal lines indicating the areas of change were inadvertently missing on page 6-21. NRC staff has discussed these typographical errors with the licensee and the licensee agrees with the NRC staff's desire to fix these errors.

In addition, on TS page 6-21, the NRC staff inadvertently inserted an extraneous header when this page was included as an overleaf page in Amendment Nos. 138 and 127 (i.e., no changes were intended on this page in Amendment Nos. 138 and 127). This will be corrected when the new TS page 6-21 is issued with these amendments.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments. 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 changes 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, and there has been no public comment on such finding (67 FR 42830, published June 25, 2002). The amendments also relate to changes in administrative procedures or requirements. Accordingly, the

amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (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) 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: T.R.Tjader

Date: February 4, 2003