December 17, 2002

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 VARIOUS TECHNICAL SPECIFICATIONS (TSs) TO THE TECHNICAL SPECIFICATION REQUIREMENTS MANUAL (TRM) (TAC NOS. MB3588 AND MB3592)

Dear Mr. Cottle:

The Commission has issued the enclosed Amendment No. 145 to Facility Operating License No. NPF-76 and Amendment No. 133 to Facility Operating License No. NPF-80 for the South Texas Project, Units 1 and 2, respectively. The amendments consist of relocating various Technical Specifications (TSs) to the TRM in response to your application dated October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002, and September 24, 2002.

The amendments relocate TSs 3/4.1.3.3, 3/4.3.3.2, 3/4.3.3.11, 3/4.4.7, 3/4.4.9.2, 3/4.4.11, 3/4.7.2, 3/4.7.10, 3/4.9.3, 3/4.9.5, 3/4.9.7, 3/4.10.5, and 3/4.11.2.5 to the TRM. The associated bases of these TSs will also be relocated to the TRM to be consistent with relocation of the various TSs. In addition, the proposed amendments correct various typographical and page numbering errors, deletes an outdated one-time exception, and makes minor formal changes to improve consistency.

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**/

John L. Minns, 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.145 to NPF-76
 - 2. Amendment No.133 to NPF-80
 - 3. Safety Evaluation

cc w/encls: See next page

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The amendments relocate TSs 3/4.1.3.3, 3/4.3.3.2, 3/4.3.3.11, 3/4.4.7, 3/4.4.9.2, 3/4.4.11, 3/4.7.2, 3/4.7.10, 3/4.9.3, 3/4.9.5, 3/4.9.7, 3/4.10.5, and 3/4.11.2.5 to the TRM. The associated bases of these TSs will also be relocated to the TRM to be consistent with relocation of the various TSs. In addition, the proposed amendments correct various typographical and page numbering errors, deletes an outdated one-time exception, and makes minor formal changes to improve consistency.

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Docket Nos. 50-498 and 50-499

Enclosures: 1. Amendment No.145

- 2. Amendment No. 133
- 3. Safety Evaluation

cc w/encls: See next page

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South Texas, Units 1 & 2

CC:

Mr. Cornelius F. O'Keefe Senior Resident Inspector U.S. Nuclear Regulatory Commission P. O. Box 910 Bay City, TX 77414

A. Ramirez/C. M. Canady City of Austin Electric Utility Department 721 Barton Springs Road Austin, TX 78704

Mr. M. T. Hardt Mr. W. C. Gunst City Public Service Board P. O. Box 1771 San Antonio, TX 78296

Mr. C. A. Johnson/R. P. Powers AEP - Central Power and Light Company P. O. Box 289 Mail Code: N5022 Wadsworth, TX 77483

INPO Records Center 700 Galleria Parkway Atlanta, GA 30339-3064

Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011

D. G. Tees/R. L. Balcom Texas Genco, LP P. O. Box 1700 Houston, TX 77251

Judge, Matagorda County Matagorda County Courthouse 1700 Seventh Street Bay City, TX 77414 A. H. Gutterman, Esq. Morgan, Lewis & Bockius 1111 Pennsylvania Avenue, NW Washington, DC 20004

Mr. T. J. Jordan, Vice President Engineering & Technical Services STP Nuclear Operating Company P. O. Box 289 Wadsworth, TX 77483

S. M. Head, Manager, Licensing Nuclear Quality & Licensing Department STP Nuclear Operating Company P. O. Box 289, Mail Code: N5014 Wadsworth, TX 77483

Environmental and Natural Resources Policy Director P. O. Box 12428 Austin, TX 78711-3189

Jon C. Wood Matthews & Branscomb 112 East Pecan, Suite 1100 San Antonio, TX 78205

Arthur C. Tate, Director Division of Compliance & Inspection Bureau of Radiation Control Texas Department of Health 1100 West 49th Street Austin, TX 78756

Brian Almon Public Utility Commission William B. Travis Building P. O. Box 13326 1701 North Congress Avenue Austin, TX 78701-3326 Susan M. Jablonski Office of Permitting, Remediation and Registration Texas Commission on Environmental Quality MC-122 P.O. Box 13087 Austin, TX 78711-3087

G. R. Bynog, Program Manager/ Chief Inspector Texas Department of Licensing and Regulation Boiler Division P. O. Box 12157, Capitol Station Austin, TX 78711

Mr. Ted Enos 4200 South Hulen Suite 630 Ft. Worth, Texas 76109

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-498

SOUTH TEXAS PROJECT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 145 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 October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002 and September 24, 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-76 is hereby amended to read as follows:
 - (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 145, 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 6 months from the date of issuance. Implementation shall include the relocation of certain Technical Specification requirements to the Technical Specification Requirements Manual (TRM), which is incorporated in the Updated Safety Analysis Report (USAR), as described in the licensee's application dated October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002 and September 24, 2002, evaluated in the staff's Safety Evaluation attached to this amendment. This relocation shall be reflected in the next update of the USAR submitted to the NRC pursuant to 10 CFR 50.71(e).

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: December 17, 2002

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-499

SOUTH TEXAS PROJECT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 133 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 October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002, and September 24, 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) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 133, 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 6 months from the date of issuance. Implementation shall include the relocation of certain Technical Specification requirements to the Technical Specification Requirements Manual (TRM), which is incorporated in the Updated Safety Analysis Report (USAR), as described in the licensee's application dated October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002 and September 24, 2002, evaluated in the staff's Safety Evaluation attached to this amendment. This relocation shall be reflected in the next update of the USAR submitted to the NRC pursuant to 10 CFR 50.71(e).

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: December 17, 2002

ATTACHMENT TO LICENSE AMENDMENT NOS. 145 AND 133

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. The revised pages will relocate to the Technical Requirements Manual.

REMOVE	INSERT
iv	iv
V	v
vi	vi
vii	vii
viii	viii
ix	ix
x	х
xi	xi
xiii	xiii
xiv	xiv
XV	XV
3/4 0-3	3/4 0-3
3/4 1-9	3/4 1-9
3/4 1-20	3/4 1-20
3/4 2-10	3/4 2-10
3/4 3-17	3/4 3-17
3/4 3-48	3/4 3-48
3/4 3-54	3/4 3-54
3/4 3-55	
3/4 3-56	
3/4 3-57	
3/4 3-58	
3/4 3-59	
3/4 3-60	
3/4 3-79	3/4 3-75
3/4 3-76	
3/4 3-77	
3/4 3-78	
3/4 3-78a	
3/4 3-79	
3/4 3-80	
3/4 3-81	
3/4 3-82	
3/4 3-83	
3/4 3-84	

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. The revised pages will relocate to the Technical Requirements Manual.

REMOVE	INSERT
3/4 4-13	3/4 4-13
3/4 4-13a	3/4 4-13a
3/4 4-16	3/4 4-16
3/4 4-16a	3/4 4-16a
3/4 4-16b	3/4 4-16b
3/4 4-18	3/4/4-18
3/4 4-18a	3/4 4-18a
3/4 4-23	3/4 4-23
3/4 4-24	
3/4 4-25	
3/4 4-35	3/4 4-35
3/4 4-40	3/4 4-40
3/4 7-11	3/4 7-11
3/4 7-21	3/4 7-21
3/4 7-22	
3/4 7-22a	
3/4 7-22b	
3/4 7-23	
3/4 7-24	
3/4 7-25	
3/4 7-26	
3/4 7-27	
3/4 7-28	
3/4 7-29	
3/4 7-30	
3/4 7-31	
3/4 7-32	
3/4 9-3	3/4 9-3
3/4 9-5	3/4 9-5
3/4 9-7	3/4 9-7
3/4 10-5	3/4 10-5
3/4 11-2	3/4 11-2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 145 AND 133 TO

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 October 24, 2001, as supplemented by correspondent e-mails dated August 27, 2002, and September 24, 2002, STP Nuclear Operating Company (the licensee) requested changes to the South Texas Project (STP), Units 1 and 2, Technical Specifications (TSs). The proposed changes would relocate the following STP, Units 1 and 2 TSs to the STP, Units 1 and 2 Technical Requirements Manual (TRMs).

- 3/4.1.3.3 Position Indication System Shutdown
- 3/4.3.3.2 Movable Incore Detectors
- 3/4.3.3.11 Explosive Gas Monitoring Instrumentation
- 3/4.4.7 Chemistry
- 3/4.4.9.2 Pressure/ Temperature Limits Pressurizer
- 3/4.4.11 Reactor Vessel Head Vents
- 3/4.7.2 Steam Generator Pressure/Temperature Limitation
- 3/4.7.10 Sealed Source Contamination
- 3/4.9.3 Decay Time
- 3/4.9.5 Communications
- 3/4.9.7 Crane Travel-Fuel Handling Building
- 3/4.10.5 Special Test Exception, Position Indication System-Shutdown
- 3/4.11.2.5 Explosive Gas Mixture

2.0 REGULATORY REQUIREMENTS

Section 182a of the Atomic Energy Act of 1954, as amended (the Act) requires applicants for nuclear power plant operating licenses to include the TSs as part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR). The regulation requires that the TSs include items in specific categories, 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; and (5) administrative controls. The regulation does not specify the particular requirements to be included in the TSs. The four criteria defined by 10 CFR 50.36(c)(2)(ii) for determining whether particular items are required to be included in the TS LCOs, are as follows:

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

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

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

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

Existing TS LCOs which fall within or satisfy any of the above criteria must be retained in the TSs; those which do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

3.0 TECHNICAL EVALUATION

The following evaluation of the proposed relocation of the above listed TS LCOs (and associated action and SRs) considers (a) the proposed level of control of the relocated requirements, (b) Criterion 4, (c) Criteria 1, 2, and 3, and associated administrative changes, and (d) additional proposed changes. A change is "administrative" if it affects the format and the style of the TSs, and does not, of itself, alter existing TS restrictions on plant operation. As used in this SE, an "administrative change" does not involve any change to the TSs for administrative controls required by 10 CFR 50.36(c)(5).

3.1 Proposed Control of Relocated Requirements

The licensee proposed to relocate the above listed TS LCOs to the respective unit's TRM. The STP Updated Final Safety Analysis Report (UFSAR), a licensee-controlled document, incorporates the TRM by reference; therefore, 10 CFR 50.59 will govern any changes to these relocated requirements. The licensee indicated in its submittal that the proposed TS relocations will require administrative changes to the UFSAR to reference the TRM instead of the TSs for the affected systems and equipment, but the design, operation, and control of the affected systems and equipment will remain as described in the UFSAR. The NRC staff considers the TRM to have an appropriate level of control under 10 CFR 50.59 for the requirements proposed for relocation.

3.2 Criterion 4

In its submittal, the licensee pointed out that the systems, equipment, and limits contained in the above listed TS LCOs were found to be insignificant risk contributors to core damage frequency and offsite releases as summarized in Westinghouse Commercial Atomic Power (WCAP)-11618, "Westinghouse Owners Group MERITS Program - Phase II Task 5 Criteria Application," dated November 1987. From this the licensee has concluded that none of the

requirements proposed for relocation satisfy 10 CFR 50.36(c)(2)(ii)(D); that is, they are not a structure, system, or component which operating experience or probabilistic risk assessment (PRA) has shown to be significant to public health and safety. In addition, none of specified systems are modeled in the STP PRA. Therefore, the NRC staff concurs with the licensee's conclusion.

3.3 Criteria 1, 2, and 3

3.3.1 <u>3/4.1.3.3, "Position Indication System - Shutdown" and 3/4.10.5, "Special Test</u> Exception, Position Indication System-Shutdown"

The control rod position indication (RPI) system is used by the operator to verify that the rods are correctly positioned. During shutdown in MODES 3, 4, and 5, with the reactor trip breakers in the closed position, current TS 3/4.3.1.3.3 requires a single digital rod position indicator to be OPERABLE to provide information only. However, during shutdown with the reactor trip breakers in the closed position, the operators do not rely on the RPI system to assist in the mitigation of a design-basis accident (DBA) or transient. The special test exception specification for the RPI system allows performance of individual rod drop time measurements without the single required digital RPI per rod cluster control assembly (RCCA) being operable as long as it is operable during withdrawal of the one allowed bank of control or shutdown RCCAs. In the event the required RPI system is inoperable, both specifications require the operator to immediately open the reactor trip breakers. This action precludes an uncontrolled RCCA bank withdrawal from a subcritical or low power startup condition, with RPI unavailable.

With the reactor sub-critical and no significant fission power being produced, however, RPI is unnecessary to ensure plant safety. The safety function of the shutdown and control RCCAs is the ability of withdrawn RCCAs to be tripped and insert negative reactivity. With respect to RPI, the relevant postulated transient during shutdown conditions is an uncontrolled RCCA bank withdrawal from a subcritical or low power startup condition. Protection for this transient is provided by automatic insertion of withdrawn RCCAs and compliance with the required SHUTDOWN MARGIN. The STP UFSAR Section 15.4.1 states that this transient is terminated at 35 percent of nominal power by a reactor trip system actuation on the power range high neutron flux, low setting, trip function. The UFSAR also states that "in all cases, power level, reactor coolant system (RCS) pressure, linear heat rate, and the departure from nucleate boiling ratio do not exceed allowable limits." Finally, the analysis of this transient of moderate frequency does not assume operator action to manually trip the withdrawn RCCAs based on observation of RPI. Thus relocating TS 3/4.1.3.3 and TS 3/4.10.5 to the TRM has no impact on plant safety.

The RPI system is not used to detect degradation of the RCS pressure boundary. Neither is the RPI system a design feature or its indication a process variable that is an initial condition of a DBA or transient. The RPI system is not part of the primary success path which functions to mitigate a DBA or transient. Thus, the current TS requirements for rod-position-indicating systems in MODES 3, 4, and 5, with the reactor trip breakers in the closed position, and during rod drop time measurements, do not satisfy any of the criteria of 10 CFR 50.36(c)(2)(ii). Therefore, the requirements of current TSs 3/4.3.1.3.3 and 3/4.10.5 may be relocated to the TRM.

In conjunction with relocating these requirements, the licensee proposed to delete references to the "Position Indication System - Shutdown" found in the TS index. This change is acceptable because it is administrative.

3.3.2 3/4.3.3.2, "Movable Incore Detectors"

TS 3/4.3.3.2 ensures the operability of movable incore detector instrumentation during conditions when the instrumentation is required to monitor the flux distribution within the core. The licensee stated in its submittal that these detectors are used for:

(a) periodic surveillance of the power distribution:

TS 4.2.2.2.a	Heat Flux Hot Channel Factor - $F_{Q}(Z)$,
TS 4.2.3.2	Nuclear Enthalpy Rise N Hot Channel Factor - $F^{N}_{\Delta H}$, and
TS 4.2.4.2	Quadrant Power Tilt Ratio (QPTR);

(b) calibration of the excore detectors:

TS Table 4.3-1, Table Notations, Notes 3 and 6; and

(c) performance of TS action requirements:

TS 3.1.3.1	Action b.3.c	for an inoperable control rod,
TS 3.1.3.2	Action a.1	for an inoperable rod position indicator bank,
TS 3.2.2	Action b	for an $F_{Q}(Z)$ limit exceeded, and
TS 3.2.3	Action b	for an $F^{N}_{\Delta H}$ limit exceeded.

The movable incore detector instrumentation provides information only. If the movable incore detection system is inoperable, TS 3.3.3.2 Action prohibits using the system for the above applicable monitoring and calibration functions. Other TSs address the required power distribution limits, peaking factors, and excore detector calibrations, as well as its required surveillances. The action requirements of these TSs contain the appropriate remedial measures if the associated surveillances cannot be met for lack of the movable incore detector system. Thus, this system is not installed instrumentation that is used to detect degradation of the reactor coolant pressure boundary. In addition, it is not a design feature or an initial condition assumed in any DBA analysis and does not function as a primary success path to mitigate any DBA. Therefore, TS 3/4.3.3.2 does not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Associated with relocating TS 3/4.3.3.2 are administrative changes. One change removes references to TS 3.3.3.2 from a quadrant power tilt ratio (QPTR) surveillance, SR 4.2.4.2, which is applicable above 75 percent power with one inoperable power range channel. The phrase, "(Specification 3.3.3.2.a does not apply)" is deleted from SR 4.2.4.2.a, and the phrase, "subject to the requirements of Specification 3.3.3.2," is replaced with the phrase, "with a full incore map," in SR 4.2.4.2.b. Referencing TS 3.3.3.2 is a detail that is no longer applicable with the relocation of TS 3/4.3.3.2 to the TRM. However, details concerning use of incore detectors to verify QPTR within limits are being added to the Bases for TS 3/4.2.4 for clarification. This change is purely administrative because it does not of itself change existing requirements for verifying QPTR within limits. Therefore, it is acceptable. In addition, the licensee proposed to

delete references to the "Movable Incore Detectors" found in the TS index. This change is acceptable because it is administrative.

3.3.3 <u>3/4.3.3.11, "Explosive Gas Monitoring Instrumentation" and 3/4.11.2.5, "Explosive Gas Mixture"</u>

The STP UFSAR Section 11.3 states that the gaseous waste processing system (a) processes and controls the release of gaseous radioactive effluents to the site environs and (b) removes fission product gases from the reactor coolant and processes these gases before they are released. Potentially explosive gas mixtures, which can develop in this system, could lead to system damage and release of radioactive gases. The STP UFSAR Section 15.7.1 describes the safety analysis of a waste gas system failure, which is classified as an infrequent fault. The analysis assumes a storage tank rupture with no mitigation. Radiological consequences are well below the limits of 10 CFR Part 100.

The licensee stated in its submittal that the explosive gas monitoring instrumentation helps to ensure that the concentration of potentially explosive waste gas mixtures contained in the gaseous waste processing system are adequately monitored in order to maintain it below the explosive gas mixture TS limit. This limit is provided to ensure that the concentration of potentially explosive gas mixtures is maintained below the flammability limit of oxygen. The gaseous waste processing system automatically shuts down on high oxygen concentration, preventing entry of potentially explosive gas mixtures into the system. However, the concentration of oxygen in the gaseous waste processing system is not an initial assumption of any DBA or transient analysis. Also, the monitoring instrumentation is not used to detect a degradation of the reactor coolant pressure boundary, and is not used to mitigate an accident that assumes the failure of the integrity of a fission product barrier. Therefore, TSs 3/4.3.3.11 and 3/4.11.2.5, and associated TS Tables 3.3-13 and 4.3-9, do not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Along with TSs 3/4.3.3.11 and 3/4.11.2.5, the associated Bases are also being relocated to the TRM without change, with one exception. TS 3/4.3.3.11 Action b requires submission of a Special Report to the Commission, pursuant to TS 6.9.2, in the event an inoperable instrument channel is not restored to Operable status within 30 days under the conditions described in the specification will be retained. Reference to TS 6.9.2 will be removed when this requirement is relocated to the TRM because the licensee has proposed to remove TS 6.9.2 in a separate submittal, which is currently under NRC staff review. This is acceptable because the actual conditions of the report are given in Action b, not TS 6.9.2.

In addition, the licensee proposed to delete references to the TSs for the Explosive Gas Monitoring Instrumentation and Explosive Gas Mixture, including Tables 3.3-13 and 4.3-9, found in the TS Index. This change is acceptable because it is administrative.

3.3.4 3/4.4.7, "Chemistry"

This specification requires routine monitoring of RCS chemistry to ensure the dissolved oxygen, chloride, and fluoride concentrations are below the specified limits to minimize corrosion. Minimizing corrosion of the RCS reduces the potential for RCS leakage or failure due to stress corrosion and helps maintain the structural integrity of the RCS. The chemistry monitoring

activity has a long term preventive purpose rather than an accident mitigative purpose. The SRs provide assurance that concentrations in excess of the limits will be detected in sufficient time to take corrective action before significant degradation can occur. However, degradation of the RCS boundary is a long-term process for which other more direct methods of monitoring are available. The inservice inspections required by 10 CFR 50.55a and the RCS leakage limits in TS 3/4.4.6, "RCS LEAKAGE," are examples of requirements provided to monitor and prevent long-term degradation of the RCS boundary materials. In addition, these requirements provide for long-term maintenance of acceptable RCS conditions. The limits on the dissolved oxygen, chloride, and fluoride concentrations in the reactor coolant are not an operating restriction that is an initial condition of a DBA or transient analysis. Therefore, TS 3/4.4.7 and associated Tables 3.4-2, "RCS Chemistry Limits," and 4.4-3, "RCS Chemistry Limits SRs," do not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Along with TS 3/4.4.7, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to the TSs for reactor coolant chemistry limits found in the TS Index. These changes are acceptable because they are administrative.

3.3.5 3/4.4.9.2, "Pressure/Temperature Limits - Pressurizer"

This TS places restrictions on pressurizer heat-up and cool-down rates and the maximum spray water temperature differential during auxiliary spray operations. These limits define allowable operating regions and permit a large number of operating cycles while providing a wide margin to cyclic induced failure in the pressure boundary of the pressurizer. These restrictions limit the cyclic, thermal loading on critical areas in the pressure boundary. In its submittal, the licensee stated that the limits on the rate of change of temperature were established using an NRCapproved methodology. These limits preclude operation in an unanalyzed condition. Although the pressurizer operates in temperature ranges above those for which there is reason for concern about non-ductile failure, operation within these limits assures compatibility of operation with the fatigue analysis performed in accordance with the American Society of Mechanical Engineers (ASME) Code requirements. Furthermore, the licensee stated that temperature and pressure changes during heatup and cooldown are limited to be consistent with the requirements given in the ASME Boiler and Pressure Vessel Code, Section III, Appendix G, "Protection Against Non-Ductile Failure." However, a failure of pressurizer integrity would result in an analyzed accident (loss-of-coolant accident) for which adequate mitigation systems and components are provided. These mitigation systems will continue to be required by TSs. Thus the pressurizer pressure/temperature limits are not relied on to mitigate a DBA or transient. Nor are these limits an operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, TS 3/4.4.9.2 does not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Along with TS 3/4.4.9.2, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to the TSs for the pressurizer pressure/temperature limits found in the TS Index. These changes are acceptable because they are administrative.

3.3.6 3/4.4.11, "Reactor Vessel Head Vents"

TS 3/4.4.11 assures that the reactor vessel head vent paths are OPERABLE and closed in MODES 1, 2, 3, 4. The licensee stated in its submittal that the reactor vessel head vents are provided to exhaust non-condensable gases and steam from the RCS. Non-condensable gases and steam could inhibit natural circulation core cooling following any event that requires long-term core cooling concurrent with a loss of offsite power, such as a loss of coolant accident (LOCA). The SRs assure that each reactor vessel head vent path is demonstrated to be OPERABLE at least once every 18 months. The licensee also stated in its submittal that the "function, capabilities and testing requirements are consistent with the requirements of NUREG-0737, 'Clarification of TMI Action Plan Requirement,' action plan item II.B.1." As described in UFSAR Section 5.4.15.3, a break in the reactor vessel head vent piping (at most a 1-inch diameter break) is bounded by the small break LOCA analysis, described in UFSAR Section 15.6.5. The operation of these vents is not part of a primary success path which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Rather, it is an operator action after the event has occurred, and is only indicated when there is indication that natural circulation is not occurring. Nor do they function as a design feature that is an initial condition of a DBA or that detects degradation of the reactor coolant pressure boundary. Therefore, the reactor vessel head vents do not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and TS 3/4.4.11 may be relocated to the TRM.

Along with TS 3/4.4.11, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to the TSs for the reactor vessel head vents found in the TS Index. These changes are acceptable because they are administrative.

3.3.7 <u>3/4.7.2, "Steam Generator Pressure/Temperature Limitation"</u>

TS 3/4.7.2 specifies limits on steam generator (SG) pressures and temperatures to ensure that pressure induced stresses on the SGs do not exceed the maximum allowable fracture toughness limits. These pressure and temperature limits are used as a SG reference transition nil ductility temperature sufficient to prevent brittle fracture, for meeting design requirements of 10 CFR Part 50, Appendix A, General Design Criteria 30, "Quality of Reactor Coolant Pressure Boundary," and 31, "Fracture Prevention of Reactor Coolant Pressure Boundary." As such, the TS is currently referencing limits on variables consistent with structural analysis results; none of these limits, however, is an operating restriction that is an initial condition of a DBA or transient analysis that assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, TS 3/4.7.2 does not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Along with TS 3/4.7.2, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references in the TSs for the SG pressure/temperature limits found in the TS Index. These changes are acceptable because they are administrative.

3.3.8 3/4.7.10, "Sealed Source Contamination"

Specification 3/4.7.10 provides limitations on sealed source contamination to ensure total body and individual organ radiation doses do not exceed allowable intake limits in the event of

ingestion or inhalation. The licensee stated in the submittal that the maximum limitation of 0.005 micro curies of removable contamination on each sealed source is based on the 10 CFR 70.39(a)(3) limits for plutonium. This requirement and the associated surveillance requirements bear no relation to any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM. However, the administrative control requirements of TS 6.10.2.(f) and (g), regarding retention of records of leak tests and annual physical inventories of sealed sources, are retained in the TSs.

Along with TS 3/4.7.10, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references in the TSs for the surveillance and control of the sealed source contamination found in the TS Index. These changes are acceptable because they are administrative.

3.3.9 3/4.9.3, "Decay Time"

As described in UFSAR Section 15.7.4, the Fuel Handling Accident (FHA) analysis assumes that the reactor has been sub-critical for at least 42 hours when the FHA occurs. TS 3/4.9.3, "Decay Time," is based on this analysis assumption by specifying the reactor be sub-critical at least 42 hours prior to the movement of irradiated fuel assemblies in the reactor vessel. The 42-hour limit ensures that the assumed time will elapse to allow the radioactive decay of the short-lived fission products. TS 3/4.9.3 satisfies Criterion 2 of 10 CFR 50.36(c)(2)(ii) because the decay time limit is an initial condition of a design basis accident (DBA) that presents a challenge to the integrity of a fission product barrier. However, the staff has previously found that this specification does not need to be in the TSs because it is not needed to ensure the decay time limit is met. This is because certain operational steps, such as containment entry, pressure vessel head removal, and cavity floodup, must be completed before fuel movement in the vessel is possible following critical operation. In the case of STP, the licensee indicated in its submittal that the time to complete these preliminary activities has always and will always require more than 42 hours to complete. Based on the licensee's statement, the NRC staff finds these physical limitations are adequate to ensure compliance with the 42-hour limit. Thus including the decay time limit in TSs is not needed to ensure this limit is met. Although TS 3/4.9.3 does not satisfy Criteria 1, 3, and 4, it does satisfy Criterion 2. However, the decay time limit does not need to be in the TSs to ensure public health and safety because the physical limitations noted are sufficient to protect the 42-hour assumption. Therefore, TS 3/4.9.3 may be relocated to the TRM.

Along with TS 3/4.9.3, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to Decay Time found in the TS Index. These changes are acceptable because they are administrative.

3.3.10 3/4.9.5, "Communications"

TS 3/4.9.5 ensures that refueling station personnel can be promptly informed of significant changes in facility status or core reactivity conditions during CORE ALTERATIONS. The communications allow coordination of activities that require interaction between the control room and containment personnel. However, the design basis fuel handling accidents, as described in UFSAR Section 15.7.4, do not take credit for the direct personnel communications required by this specification. Therefore, TS 3/4.9.5 does not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii), and may be relocated to the TRM.

Along with TS 3/4.9.5, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to this communications requirement found in the TS Index. These changes are acceptable because they are administrative.

3.3.11 3/4.9.7, "Crane Travel - Fuel Handling Building"

The handling of fuel assemblies in the spent fuel pool is done with fuel handling tools suspended from the fuel-handling machine hoist. Specification 3/4.9.7 prohibits loads over the fuel assemblies in the fuel storage pool in excess of 2500 lbs, which is the nominal weight of a fuel assembly (including control rod assembly and handling tool), unless carried by the fuel handling building crane 15-ton hoist, which is single-failure proof. It also requires verifying the load is within limit "prior to movement over fuel assemblies in the spent fuel pool." This ensures that in the event the load is dropped, the activity release will be limited to that contained in a single fuel assembly and any possible distortion of the fuel in the storage racks will not result in a critical array. The licensee stated in its submittal that this assumption is consistent with the activity release assumed in the fuel handling accident (FHA) safety analyses. UFSAR Section 15.7.4.2 states that the FHA analysis assumes "All rods in one fuel assembly rupture, plus an additional 50 fuel rods assumed to be damaged by the dropped fuel assembly [314 rods total]."

According to UFSAR Section 9.1.4.3.1.3, the design load on the fuel-handling machine hoist is approximately 4000 lbs (1900 lbs for one fuel assembly and RCCA, 400 lbs for the spent fuel handling long-handled tool, and 1700 lbs for one failed fuel container). However, the design of the fuel-handling machine hoist and tool limits its use to moving just one spent fuel assembly at any one time. Thus, it is not reasonable to postulate using the fuel-handling machine to move more than one spent fuel assembly over stored spent fuel; hence it is also not reasonable to postulate exceeding the maximum potential activity release assumed in the FHA dose consequence analysis. Therefore, the hoist load limit is not needed in TSs to ensure the FHA analysis remains valid and bounding.

It can be postulated that there is some non-fuel weight that would produce the equivalent amount of fuel damage if dropped (release from all pins in an assembly plus 50). However, the licensee was not required to analyze this possibility as a DBA covered by 10 CFR 50.36. Prevention of this possibility is managed under the licensee's administrative controls for movement of heavy loads.

The fuel handling hoist load limit in TS 3/4.9.7 is not a process variable and does not function to mitigate a DBA. However, this restriction is consistent with the maximum refueling accident assumption in the design basis FHA and thus satisfies Criterion 2 (operating restriction that is an initial condition of a DBA that assumes the failure of a fission product barrier). However, the fuel-handling machine hoist design prevents movement of spent fuel assembly loads in excess of the hoist load limit over spent fuel stored in the spent fuel pit. Therefore, this constraint is not needed in TSs to ensure public health and safety because the physical limitation noted is sufficient to ensure the FHA analysis remains valid and bounding. Therefore, TS 3/4.9.7 may be relocated to the TRM.

Along with TS 3/4.9.7, the licensee also proposed to relocate the associated Bases to the TRM. In addition, the licensee proposed to delete references to this fuel handling building crane load limit requirement found in the TS Index. These changes are acceptable because they are administrative.

3.4 Other Administrative Changes

The licensee proposed the following administrative changes in addition to those described above. The index listings of the relocated Specifications and associated Bases were changed to give the relocated TS number, annotated by the phrase, "(Not used)." The additional changes are described below, by TS page number:

- Index page iv
 - The title for the listing of Figure 3.1-2a is changed to read "BOL MTC VERSUS POWER LEVEL;" which replaces MODERATOR TEMPERATURE COEFFICIENT with MTC, to match the title on the figure.
 - The title, "Boration Systems," of TS Section 3/4.1.2, is replaced with "(This specification number is not used.)" and the listed subsections, TSs 3/4.1.2.1 through 3/4.1.2.7 are deleted, including the TS numbers and associated page numbers.
 - The listing of Figure 3.1-3, which was previously deleted, is removed.
- Index page vi
 - The listing of requirements under Chemical Detection Systems is deleted. This includes previously deleted requirements in the no longer used listings of (a)Table 3.3-11, (b) Radioactive Liquid Effluent Monitor Instrumentation, (c) associated Tables 3.3-12 and 4.3-8, and (d) TS 3/4.3.4; all page numbers are also removed. The listing, Chemical Detection Systems, is also deleted because no requirements under this listing remain in TSs.
- Index page viii
 - Table 4.4-5 and the page number is deleted.
 - The page number for Figure 3.4-4 is changed to read "3/4 4-37."
 - The page number for TS 3/4.5.4 is deleted (page 3/4 5-9).
 - The page number for "Containment Cooling System" is changed to read "3/4 6-16."
- Index page ix
 - The page number for TS 3/4.6.3 is changed to read "3/4 6-17."
 - The page number for "Hydrogen Analyzers" is changed to read "3/4 6-18."
 - The page for "Electric Hydrogen Recombiners" is corrected to read "3/4 6-19."

- Index page x
 - The reference to Table 4.8-1 and the page number is deleted.
 - The listing for TS 3/4.8.4, "Electrical Equipment Protective Devices," is changed to read "(This specification number is not used.)" and the listed subsections are deleted along with their page numbers.
- Index page xi
 - The individual items under TS 3/4.11.1 (Concentration, Dose, and Liquid Waste Processing System) and TS 3/4.11.2 (Dose Rate, Dose - Noble Gases, Dose - Iodine-131, Iodine-133, Tritium, and Radioactive Material in Particulate Form, Gaseous Waste Processing System, and Explosive Gas Mixture), which were previously deleted, are removed.
 - The listings of previously deleted TSs 3/4.11.3 and 3/4.11.4 are changed to both read "(This specification number is not used.)"
- Index page xiii
 - The page number for the listing of the Bases for TS 3/4.4.2 is changed to "B 3/4 4-1a."
- Index page xiv
 - The page number for the listing of the Bases for TS 3/4.7.8 is changed to "B 3/4 7-5a."
- Index page xv
 - The page number for the listing of the Bases for TS 3/4.7.14 is changed to "B 3/4 7-7."
 - The listing of the Bases for TS 3/4.8.4 is changed to read "Not used" and the page number for that Bases is deleted.
 - The page number for the listing of the Bases for listed unused TS 3/4.9.6 is deleted.
 - The page number for the listing of the Bases for TS 3/4.9.4 is changed to "B 3/4 9-1a."
 - The page number for the listing of the Bases for TS 3/4.9.12 is changed to "B 3/4 9-3a."

- TS page 3/4 0-3
 - The asterisk at the end of paragraph 4.0.5 and the last paragraph on the page is deleted because this was a one-time exception for Unit 1 that ended in March 1999.
 - "AMENDMENT" in the footer is changed to read "Amendment" in two places.
- TS page 3/4 1-9 is changed to reflect that TS 3/4.1.2 is not used and correct reference to page numbers that were deleted.
- TS page 3/4 3-17 (TS 4.3.2.1)
 - "Table 4.3.2" in paragraph 4.3.2.1 is changed to read "Table 4.3-2."
- TS page 3/4 3-48
 - The heading for the fourth column in TABLE 4.3-2 is changed to read "DIGITAL "OR" ANALOG CHANNEL OPERATIONAL TEST."
 - The entry for item 10e is changed to read "See Item 8. above..."
- TS page 3/4 3-75 is changed to reflect that TSs 3/4.3.7 through 3/4.3.11 and 3/4.3.4 are not used. Also a note is added to show that blank pages 3/4 3-76 through 3/4 3-84 are deleted. Note: with the relocation of TS 3/4.3.3.11, pages 3/4 3-76 through 3/4 3-84 will be blank and are deleted.
- Blank pages 3/4 3-76 through 3/4 3-84 are deleted.
- The last Unit 1 Amendment No. is restored (not stricken through) on pages 3/4 4-13, 4-13a, 4-16a, 4-16b, 4-18, and 4-18a.
- On pages 3/4 4-18, 4-18a, "Table 4.4-3" is changed to read in all capital letters.
- Page 3/4 7-21 is corrected to reflect that TSs 3/4.7.9 through 3./4.7.13 are not used. Also, a note is added to show that blank pages 3/4 7-22 through 3/4 7-32 are deleted. Note: with the relocation of TS 3/4.7.10, pages 3/4 7-22 through 3/4 7-32 are blank and are being deleted.
- Deleted blank pages 3/4 7-22 through 3/4 7-32.

The licensee stated that the above proposed TS changes correct typographical and page-numbering errors, delete an outdated one-time exception, and make minor format changes to improve consistency. No plant equipment or accident analyses are affected by the proposed changes. These changes are completely administrative in nature. Therefore, they 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. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the 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 5334 dated February 5, 2002). 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) 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: N. Le C. Harbuck

Date: December 17, 2002