

February 26, 2007

Mr. M. R. Blevins  
Senior Vice President  
& Chief Nuclear Officer  
TXU Power  
ATTN: Regulatory Affairs  
P. O. Box 1002  
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 -  
ISSUANCE OF AMENDMENTS RE: REVISION TO TECHNICAL  
SPECIFICATION SURVEILLANCE REQUIREMENTS 3.3.1.2 AND 3.3.1.3,  
"REACTOR TRIP SYSTEM (RTS) INSTRUMENTATION" (TAC NOS. MC9492  
AND MC9493)

Dear Mr. Blevins:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 133 to Facility Operating License No. NPF-87 and Amendment No. 133 to Facility Operating License No. NPF-89 for Comanche Peak Steam Electric Station, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated December 12, 2005.

The amendments revise the TS Surveillance Requirements (SRs) 3.3.1.2 and 3.3.1.3, "Reactor Trip System (RTS) Instrumentation." The license amendment request is based on Technical Specification Task Force (TSTF) Traveler, TSTF-371-A, Revision 1, "NIS [Nuclear Instrumentation System] Power Range Channel Daily SR TS Change to Address Low Power Decalibration." TSTF-371-A, Revision 1, revised the requirements for performing a daily surveillance adjustment of the power range channel(s) to address industry concern that compliance with SR 3.3.1.2 and SR 3.3.1.3 may result in a non-conservative channel calibration during reduced-power operations. The proposed changes resolve this issue.

M. R. Blevins

-2-

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

Sincerely,

***/RA/***

Mohan C. Thadani, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 133 to NPF-87  
2. Amendment No. 133 to NPF-89  
3. Safety Evaluation

cc w/encls: See next page

M. R. Blevins

-2-

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

Sincerely,

**/RA/**

Mohan C. Thadani, Senior Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

- Enclosures:
1. Amendment No. 133 to NPF-87
  2. Amendment No. 133 to NPF-89
  3. Safety Evaluation

cc w/encls: See next page

**DISTRIBUTION:**

PUBLIC

LPLIV Reading

RidsAcrsAcnwMailCenter

RidsNrrDorIDpr

RidsNrrDorLpl4

RidsNrrLAJBurkhardt

RidsNrrPMMThadani

RidsOgcRp

RidsRgn4MailCenter

RidsNrrDirsltsb (TKobetz)

TWertz, ITSB/DIRS

GHill

**ADAMS Accession Nos.: Pkg ML070440342** (Amdt./License ML070440346, TS Pgs ML070440371)

\* See SE input.

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/ITSB/BC	NRR/EICB/BC	OG - NLOC	NRR/LPL4/BC
NAME	MThadani	LFeizollahi	TKobetz*	AHowe*	TCampbell	DTerao
DATE	2/26/07	2/15/07	10/3/06	10/13/06	2/22/07	2/26/07

**OFFICIAL RECORD COPY**

Comanche Peak Steam Electric Station

cc:

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P.O. Box 2159  
Glen Rose, TX 76403-2159

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

Mr. Fred W. Madden, Director  
Regulatory Affairs  
TXU Generation Company LP  
P.O. Box 1002  
Glen Rose, TX 76043

George L. Edgar, Esq.  
Morgan Lewis  
1111 Pennsylvania Avenue, NW  
Washington, DC 20004

County Judge  
P.O. Box 851  
Glen Rose, TX 76043

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

Mr. Richard A. Ratliff, Chief  
Bureau of Radiation Control  
Texas Department of Health  
1100 West 49th Street  
Austin, TX 78756-3189

Mr. Brian Almon  
Public Utility Commission  
William B. Travis Building  
P.O. Box 13326  
1701 North Congress Avenue  
Austin, TX 78701-3326

Ms. Susan M. Jablonski  
Office of Permitting, Remediation  
and Registration  
Texas Commission on Environmental  
Quality  
MC-122  
P.O. Box 13087  
Austin, TX 78711-3087

Terry Parks, Chief Inspector  
Texas Department of Licensing  
and Regulation  
Boiler Program  
P.O. Box 12157  
Austin, TX 78711

December 2004

TXU GENERATION COMPANY LP  
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1  
DOCKET NO. 50-445  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 133  
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by TXU Generation Company LP dated December 12, 2005, 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.
2. Accordingly, the license is amended by changes to the Technical Specifications and paragraph 2.C.(2) of Facility Operating License No. NPF-87 as indicated in the attachment to this license amendment.

3. The license amendment is effective as of its date of issuance and shall be implemented within 120 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

David Terao, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility  
Operating License and  
Technical Specifications

Date of Issuance: February 26, 2007

TXU GENERATION COMPANY LP  
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2  
DOCKET NO. 50-446  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 133  
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by TXU Generation Company LP dated December 12, 2005, 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.
2. Accordingly, the license is amended by changes to the Technical Specifications and paragraph 2.C.(2) of Facility Operating License No. NPF-89 as indicated in the attachment to this license amendment.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

David Terao, Chief  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility  
Operating License and  
Technical Specifications

Date of Issuance: February 26, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 133

TO FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 133

TO FACILITY OPERATING LICENSE NO. NPF-89

DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the Facility Operating Licenses, Nos. NPF-87 and NPF-89, 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.

Facility Operating License No. NPF-87

REMOVE

INSERT

-3-

-3-

Facility Operating License No. NPF-89

REMOVE

INSERT

-3-

-3-

Technical Specifications

REMOVE

INSERT

3.3-10

3.3-10

- (3) TXU Generation Company LP, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

TXU Generation Company LP is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A as revised through Amendment No. 133 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Generation Company LP shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) TXU Generation Company LP, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) TXU Generation Company LP, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

TXU Generation Company LP is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A as revised through Amendment No. 133 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Generation Company LP shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

DELETED

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 133 TO

FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 133 TO

FACILITY OPERATING LICENSE NO. NPF-89

TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By letter dated December 12, 2005 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML053570277), TXU Generation Company LP (the licensee) submitted a license amendment request for Comanche Peak Steam Electric Station, Units 1 and 2, based on Technical Specification Task Force (TSTF) Traveler, TSTF-371-A, Revision 1, "NIS [Nuclear Instrumentation System] Power Range Channel Daily SR [Surveillance Requirement] TS [Technical Specification] Change to Address Low Power Decalibration." TSTF-371-A, Revision 1, revised the requirements for performing a daily surveillance adjustment of the power range channel(s) to address industry concern that compliance with SR 3.3.1.2 and SR 3.3.1.3 may result in a non-conservative channel calibration during reduced-power operations. The proposed changes resolve the this issue.

The licensee has proposed changes to the TS bases in support of the proposed changes to TS SR 3.3.1.2 and SR 3.3.1.3. The proposed changes are similar to the standard technical specifications (STS), and account for plant-specific differences.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The TSs ensure the operational capability of structures, systems, and components that are required to protect the health and safety of the public. The Commission's regulatory requirements related to the content of the TSs are contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36. That regulation requires that the TSs include items in the following specific categories: (1) safety limits, limiting safety systems settings, and limiting control settings (10 CFR 50.36(c)(1)); (2) limiting conditions for operation (10 CFR 50.36(c)(2)); (3) SRs (10 CFR 50.36(c)(3)); (4) design features (10 CFR 50.34(c)(4)); and (5) administrative controls (10 CFR 50.36(c)(5)).

In general, there are two classes of changes to TSs: (1) changes needed to reflect modifications to the design basis (TSs are derived from the design basis), and (2) voluntary changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TS over time. This amendment deals with the second class of changes. In determining the acceptability of revising STSs 3.7.2 and 3.7.3, the Nuclear Regulatory Commission (NRC) staff used the accumulation of generically-approved guidance in NUREG-1430, "Standard Technical Specifications Babcock and Wilcox Plants," Revision 3, dated June 2004; NUREG-1431, Revision 3, "Standard Technical Specifications Westinghouse Plants," dated June 2004; and NUREG-1432, "Standard Technical Specifications Combustion Engineering Plants," Revision 3, dated June 2004.

Licensees may revise the TSs to adopt current improved STS format and content provided that plant-specific review supports a finding of continued adequate safety. Such a finding will be made if: (1) the change is editorial, administrative, or provides clarification (i.e., no requirements are materially altered), (2) the change is more restrictive than the licensee's current requirement, or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards. The detailed application of this general framework, and additional specialized guidance for the specified plants, are discussed in Section 3.0 of this SE, in the context of specific proposed changes.

### 3.0 TECHNICAL EVALUATION

The proposed changes adopt NRC-approved generic changes in the industry TSTF-371-A, Revision 1, which was approved by the NRC staff in a letter dated April 2, 2002. As stated by the NRC staff in its discussion of TSTF-371-A, the TSTF revises SR 3.3.1.2 to resolve the undesirable condition that compliance with the current SR 3.3.1.2 may result in a non-conservative channel calibration during reduced-power operations. The proposed SR 3.3.1.2 would only require adjustment of the NIS power range channels and the N-16 Power Monitor channels when the calorimetric heat-balance calculated power is greater than the power range indicated power by 2 percent. Additionally, conforming editorial changes would be made to SR 3.3.1.3 because of the changes to SR 3.3.1.2.

The NIS power range channels and N-16 Power Monitor channels provide indications of reactor power. These are included in TS Table 3.3.1-1, for the Reactor Trip System (RTS) trip functions for power range neutron flux high (function 2.a), overtemperature N-16 (function 6), and overpower N-16 (function 7). SR 3.3.1.2 requires daily surveillance of the NIS power range channels and the N-16 Power Monitor channels to ensure the channels accurately reflect the reactor power based on the calorimetric heat-balance calculation. A low-power indication in the NIS power range channels and N-16 Power Monitor channels would non-conservatively affect the RTS, and thus, the protection of the reactor.

The proposed amendment removes the requirement to adjust the NIS power range channels and N-16 Power Monitor channels in the decreasing power direction when the indicated power is greater than the calorimetric heat-balance calculation by more than 2-percent rated thermal power (RTP). The licensee stated that compliance with existing SR 3.3.1.2 may result in a non-conservative channel calibration during reduced-power operation. The licensee's

presentation of the changes to TS Bases for SR 3.3.1.2 provides a description of the potential decalibration of the NIS power range channels at reduced-power operation.

The current SR 3.3.1.2 Note 1 requires the power range channel and N-16 Power Monitor channel outputs to be adjusted when the absolute difference between the channel output and the calorimetric heat-balance calculation is greater than 2-percent RTP. With the content of Note 1 moved into the SR and by removing the reference to the absolute difference, the revised SR 3.3.1.2 is unchanged except that the revised SR would require the power range channel and N-16 Power Monitor channel to be adjusted only when the calorimetric heat-balance calculation results exceed the power range channel output by 2-percent RTP. Therefore, if the power range channels and N-16 Power Monitor channels are underestimating reactor power by more than 2-percent RTP, the channels are required to be adjusted to indicate power more accurately. The 2-percent RTP limit and the daily surveillance frequency are sufficient to ensure that the power range high-neutron flux high, overtemperature N-16, and overpower N-16 setpoint reactor trip signals will be generated prior to the safety analysis limit. The calorimetric heat-balance calculation is considered the more accurate determination of reactor power. This change does not affect the design of any NIS channel or N-16 Power monitor channel.

For SR 3.3.1.3, the licensee has proposed to revise the format of Note 1 to be consistent with the format of SR 3.3.1.3. The proposed change moves the requirement in Note 1 of SR 3.3.1.3 into the body of the SR and the acronym NIS is spelled out because it no longer appears in SR 3.3.1.2. The requirements in SR 3.3.1.3 remain unchanged; excore NIS channels are adjusted every 31 effective full power days if the absolute difference between the incore and excore axial flux difference is greater than or equal to 3-percent RTP. This proposed change to SR 3.3.1.3 is editorial in nature because the requirements of SR 3.3.1.3 are not being changed.

Based on the above evaluation, the NRC staff concludes the proposed change to SR 3.3.1.2 accounts for potential effects of decalibrating the NIS power range channels and N-16 Power Monitor channels during reduced-power operation; will ensure that the power range high-neutron flux high, overtemperature N-16, and overpower N-16 setpoint reactor trip signals will be generated prior to the safety analysis limit; and does not change the design of any NIS channel or N-16 Power Monitor channel or alter conformance with the regulatory requirements stated in Section 2.0 of this Safety Evaluation. The NRC staff finds that the NIS power range channels and N-16 Power Monitor channels continue to meet General Design Criterion 13 because appropriate controls are provided to maintain reactor power within prescribed operating ranges for normal operation, anticipated operational occurrences, and accidents to ensure adequate safety. For the proposed change to SR 3.3.1.3, the NRC staff concludes that the change is editorial in nature and does not change the requirement of SR 3.3.1.3. Based on these conclusions, the NRC staff further concludes that the proposed amendments are acceptable.

In its application, the licensee presented the changes to be made to the TS Bases that address the potential decalibration of the NIS power range channels and N-16 Power Monitor channels at reduced-power operation. Since the Bases are not part of the TSs, the NRC staff reviewed the Bases only to assure consistency with the proposed changes. The NRC staff is not approving the Bases changes, but is including the revised bases pages for completeness.

The NRC staff finds the proposed change to revise SR 3.3.1.2 for performing a daily surveillance adjustment of the power range channel(s) and N-16 Power Monitor channel(s) above 15-percent RTP to include only changes in the increasing direction and the revised formats of SR 3.3.1.2 and SR 3.3.1.3 to establish a consistent presentation of notations for SRs will allow safe operation. The NRC staff, therefore, 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 amendment. 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 an SR. 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 March 28, 2006 (71 FR 15490). 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 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: Trent Wertz

Date: February 26, 2007