July 13, 2005

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 (CPSES), UNITS 1 AND 2 -ISSUANCE OF AMENDMENTS RE: TECHNICAL SPECIFICATION 5.6.5, "CORE OPERATING LIMITS REPORT (COLR)" TAC NOS. MC4972 AND MC4973)

Dear Mr. Blevins:

The Commission has issued the enclosed Amendment No. 119 to Facility Operating License No. NPF-87 and Amendment No. 119 to Facility Operating License No. NPF-89 for CPSES, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated October 13, 2004.

The Amendments revise TS 5.6.5b by adding two topical reports (TRs) into the list of approved analytical methods used to determine the core operating limits, deleting four TRs for analytical methods no longer used to determine the core operating limits, and sequentially renumbering the remaining approved analytical methods in TS 5.6.5b.

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, Section 1 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 119 to NPF-87

- 2. Amendment No. 119 to NPF-89
- 3. Safety Evaluation

cc w/encls: See next page

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OFFICIAL RECORD COPY

TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1

DOCKET NO. 50-445

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119 License No. NPF-87

- 1. The Nuclear Regulatory Commission (Commission) has found that:
 - A. The application for amendment by TXU Generation Company LP dated October 13, 2004, 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 as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-87 is hereby amended to read as follows:

(2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 119, 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. The license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/ David Terao, 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: July 13, 2005

TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2

DOCKET NO. 50-446

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 119 License No. NPF-89

- 1. The Nuclear Regulatory Commission (Commission) has found that:
 - A. The application for amendment by TXU Generation Company LP dated October 13, 2004, 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 as indicated in the attachment to this license amendment; and paragraph 2.C.(2) of Facility Operating License No. NPF-89 is hereby amended to read as follows:

(2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 119, 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. This license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/ David Terao, 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: July 13, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 119

TO FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 119

TO FACILITY OPERATING LICENSE NO. NPF-89

DOCKET NOS. 50-445 AND 50-446

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.

<u>Remove</u>	<u>Insert</u>
5.0-33	5.0-33
5.0-34	5.0-34

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 119 TO

FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 119 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 application to the U.S. Nuclear Regulatory Commission (NRC or Commission) dated October 13, 2004 (Agencywide Documents and Access Management System (ADAMS) Accession No. ML042950512), TXU Generation Company LP (the licensee), requested changes to the Comanche Peak Steam Electric Station (CPSES), Unit 1, Facility Operating License NPF-87 and CPSES, Unit 2, Facility Operating License NPF-89. The requested administrative changes revise the Technical Specification (TS) 5.6.5, "Core Operating Limits Report (COLR)," for CPSES, Units 1 and 2.

The proposed changes will add two topical reports (TRs), WCAP-10444-P-A, "Reference Core Report VANTAGE 5 Fuel Assembly," September 1985, and WCAP-15025-P-A, "Modified WRB-2 Correlation, WRB-2M, for Predicting Critical Heat Flux in 17x17 Rod Bundles for Modified LPD Mixing Vane Grids," April 1999, into the TS 5.6.5b list of approved analytical methods used to determine the core operating limits. Additionally, the proposed changes will delete from the TS 5.6.5b list of approved analytical methods four TRs, WCAP-8385, WCAP-10079-P-A, WCAP-10054-P-A, and WCAP-11145-P-A, which are no longer used to support the core operating limits determinations. The licensee requests TS changes to sequentially renumber the remaining approved analytical methods reports in TS 5.6.5b. The licensee intends to use alternate Westinghouse fuel assembly designs, which include intermediate flow mixing grids (IFMGs), in order to achieve better fuel cost. The TRs, WCAP-10444-P-A and WCAP-15025-P-A provide the methodology for use with the fuel assembly designs with IFMGs.

2.0 REGULATORY EVALUATION

The Commission's regulatory requirements related to the contents of TSs are set forth in Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR) which ensures that the TSs specified limiting conditions for operations are consistent with assumed values of the initial conditions in the licensee's safety analyses.

TS 5.6.5b requires the licensee to list the reports which provide NRC-approved methodologies to determine core operating limits.

General Design Criterion (GDC) 10 of Appendix A to 10 CFR Part 50 requires that specified acceptable fuel design limits are not exceeded during any operation, including the effects of anticipated operational transients.

Generic Letter (GL) 88-16, "Guidance For Technical Specification Changes For Cycle-Specific Parameter Limits," provides guidance for reporting requirements.

3.0 TECHNICAL EVALUATION

The analytical methods used by the licensee to determine the core operating limits are listed in TS 5.6.5b. The methods relevant to the proposed change are the core subchannel analyses. The core subchannel analyses are performed to demonstrate that specified acceptable fuel design limits are met; specifically, that the departure from nuclear boiling (DNB) ratio (DNBR) shall be maintained greater than 95/95 DNB regulatory criterion.

For fuel assembly designs currently used by the licensee, the TUE-1 DNB correlation is used with the VIPRE-01 subchannel computer code, using modeling methods described in TS 5.6.5b (Item 6). The TUE-1 DNB correlation has been applied to Westinghouse Standard Fuel Assembly and Optimized Fuel Assembly (OFA) designs as well as to fuel assemblies provided by Framatome-ANP. However, studies have shown that the TUE-1 DNB correlation is not appropriate for use with fuel assembly designs which employ IFMGs. The licensee now intends to use alternate Westinghouse fuel assembly designs which include IFMGs, in order to achieve better fuel cost.

Westinghouse has developed two DNB correlations for use with their fuel assembly designs with IFMGs. The WRB-2 DNB correlation as described in WCAP-10444-P-A, "Reference Core Report VANTAGE 5 Fuel Assembly," was developed for application to Westinghouse's Vantage 5 and Vantage 5H fuel assembly designs. This DNB correlation was developed for fuel rod diameters of 0.360 inches and 0.374 inches with IFMGs. The WRB-2M DNB correlation as described in WCAP-15025-P-A, "Modified WRB-2 Correlation, WRB-2M, for Predicting Critical Heat Flux in 17x17 Rod Bundles for Modified LPD Mixing Vane Grids," was developed for application to Westinghouse fuel assembly designs with fuel rod outer diameters of 0.374 inches using Modified Low Pressure Drop structural mixing vane grids and with or without Modified Intermediate Flow Mixer Grids.

The numerical values of the DNBR corresponding to the 95/95 DNB correlation limits, as determined by Westinghouse, are 1.17 for the WRB-2 DNB correlation and 1.14 for the WRB-2M DNB correlation. The licensee has incorporated both DNB correlations into the CPSES version of VIPRE-01 and, using the CPSES approved methods, demonstrated that the values corresponding to the 95/95 DNB limits remain valid for continued operation of the plant. The licensee will consider the limitations on the application of the WRB-2 and WRB-2M DNB correlations, as described in these two TRs and in the NRC's safety evaluation reports for CPSES.

The licensee will add the two TRs (WCAP-10444-P-A and WCAP-15025-P-A)

to TS 5.6.5b, and delete four TRs (WCAP-8385, WCAP-10079-P-A, WCAP-10054-P-A, and WCAP-11145-P-A), which are no longer to be used to determine core operating limits.

The NRC staff has reviewed the proposed TS changes and finds these changes in compliance with the 10 CFR 50.36 criteria. These TS changes conform to GDC 10 and GL 88-16 guidelines. The licensee will use the NRC-approved methodologies to ensure that reload design, analysis, and plant operation will remain within the regulations established for fuel assembly and core designs.

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 relate to changes in recordkeeping, reporting, or administrative procedures or requirements. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published December 21, 2004 (69 FR 76495). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

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 Contributor: K. Desai

Date: July 13, 2005

Comanche Peak Steam Electric Station

CC:

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