March 26, 2002

Mr. C. Lance Terry Senior Vice President & Principal Nuclear Officer TXU Generation Company LP Attn: Regulatory Affairs Department

P. O. Box 1002 Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES), UNITS 1 AND 2 -

ISSUANCE OF AMENDMENTS RE: USE OF ZIRLO™ LEAD TEST

ASSEMBLIES (TAC NOS. MB3446 AND MB3447)

Dear Mr. Terry:

The Commission has issued the enclosed Amendment No. 95 to Facility Operating License No. NPF-87 and Amendment No. 95 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 25, 2001, as supplemented by letter dated February 18, 2002.

The amendments revise TS 4.2.1, "Fuel Assemblies," for CPSES, Units 1 and 2, to allow the use of ZIRLO™ test assemblies and to further allow, "...A limited number of lead test assemblies...be placed in non-limiting core regions."

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/

David H. Jaffe, 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. 95 to NPF-87

2. Amendment No. 95 to NPF-89

3. Safety Evaluation

cc w/encls: See next page

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& Principal Nuclear Officer TXU Generation Company LP

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David H. Jaffe, Senior Project Manager, Section 1

Project Directorate IV

Division of Licensing Project Management Office of Nuclear Reactor Regulation

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DATE	3/15/02	3/14/02	2/27/02	3/22/02	3/26/02

<sup>\*</sup>Input by memo dated February 27, 2002

## TXU GENERATION COMPANY LP

## COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1

# **DOCKET NO. 50-445**

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95 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 October 25, 2001, as supplemented by letter dated February 18, 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.
- 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) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 95, 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/

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: March 26, 2002

## TXU GENERATION COMPANY LP

## COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2

# DOCKET NO. 50-446

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95 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 October 25, 2001, as supplemented by letter dated February 18, 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.
- 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) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 95, 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/

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: March 26, 2002

# ATTACHMENT TO LICENSE AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. NPF-87

# AND AMENDMENT NO. 95

# 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.

Remove	<u>Insert</u>		
4.0-1	4.0-1		

## SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO AMENDMENT NO. 95 TO

## FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 95 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 dated October 25, 2001, as supplemented by letter dated February 18, 2002, TXU Generation Company LP (the licensee)\* requested changes to the Technical Specifications (TSs) for the Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. The proposed changes would revise TS 4.2.1, "Fuel Assemblies," for CPSES, Units 1 and 2, to allow the use of ZIRLO™ test assemblies and to further allow, "...A limited number of lead test assemblies...be placed in non-limiting core regions." The supplemental letter dated February 18, 2002, provided clarifying information that did not change the U.S. Nuclear Regulatory Commission (NRC) staff's proposed no significant hazards consideration determination or expand the scope of the original *Federal Register* notice (66 FR 64306, December 12, 2001).

#### 2.0 BACKGROUND

In its October 25, 2001, application, as supplemented, the licensee informed the NRC staff of its intention to transition from the use of Framatome ANP-supplied fuel assemblies to Westinghouse Electric Company LLC (Westinghouse)-supplied ZIRLO<sup>TM</sup>-clad Optimized Fuel Assemblies (OFAs) in CPSES, Units 1 and 2, beginning with the Unit 2 Cycle 7 core reload. As an initial step, the licensee proposes to insert eight ZIRLO<sup>TM</sup> lead assemblies in the non-limiting core regions for CPSES, Unit 2. To that end, the licensee requests approval to amend CPSES, Units 1 and 2, TS 4.2.1 to permit placement of a limited number of ZIRLO<sup>TM</sup> assemblies in non-limiting core regions of the plants.

<sup>\*</sup>The application was submitted by TXU Electric which transferred ownership and operating authority to TXU Generation Company LP on January 1, 2002, pursuant to an Order issued by the NRC dated December 21, 2001. By letter dated January 2, 2002, TXU Generation Company LP adopted all applications previously submitted to the NRC by TXU Electric.

## 3.0 EVALUATION

The NRC staff reviewed information presented in the licensee's October 25, 2001, submittal and clarifications provided by a supplemental letter dated February 18, 2002. The following is a summary of the information provided in the two submittals.

The licensee intends to place eight ZIRLO<sup>™</sup>-clad OFAs in non-limiting core regions of the CPSES, Unit 2, Cycle 7 reload core in spring 2002, followed by a full-core CPSES, Unit 1, reload with ZIRLO<sup>™</sup> in fall 2002, and a CPSES, Unit 2, Cycle 8 full-core reload with ZIRLO<sup>™</sup> in fall 2003. The licensee clarified that the lead test assemblies (LTAs) would be placed in typical duty locations, including some high (but not necessarily loss-of-coolant accident (LOCA) limiting) locations. The licensee anticipates the maximum burnup of the LTAs to be less than 60 GWD/MTU. The proposed number and location of the LTAs is consistent with the guidance in WCAP-15604-NP, Revision 1, "Limited Scope High Burnup Lead Test Assemblies." Though WCAP-15604-NP, Revision 1, is not strictly addressed to non-high burnup LTAs, such as the licensee intends for these LTAs, the NRC staff finds much of its guidance applicable, including the number and location of the LTAs. Therefore, the licensee's proposed number and location of the LTAs is acceptable.

The licensee stated that the purpose of the LTAs is to gain experience with the use of "current generation Westinghouse fuel assemblies" (i.e. ZIRLO™ clad fuel assemblies). ZIRLO™ clad assemblies are commonly used in Westinghouse facilities, similar to CPSES. The licensee clarified that the LTAs would provide the licensee with the opportunity to familiarize, itself with the operational performance of the ZIRLO™ fuel and the Westinghouse Quality Assurance and Maintenance Program. The licensee also will want to obtain clad corrosion information for ZIRLO™, as well as Zircaloy-clad fuel, if it decides to participate in an elevated pH program. The licensee will provide this data to the NRC staff. The commitment by the licensee assures that the NRC staff's need to obtain the data will be met, and is acceptable.

The licensee has performed preliminary calculations of LOCA events for the CPSES units with ZIRLO™ assemblies, and also considered the impact of ZIRLO™ on non-LOCA events. The licensee expects the LTAs to meet the same requirements as for Zircaloy-clad fuel, and concludes that operation with the ZIRLO™ LTAs is safe. These preliminary assessments are not licensing basis calculations, but do provide assurance that the licensing basis calculations remain valid and in conformance with 10 CFR 50.44, 10 CFR 50.46, and to Appendix A 10 CFR Part 50; and that the limited number of LTAs will not compromise the safe operation of the plant.

The licensee has proposed a change to CPSES TS 4.2.1 in order to reflect the use of the  $ZIRLO^{TM}$ , consistent with the above evaluation. The final sentence in TS 4.2.1 would be amended to state:

A limited number of lead test assemblies that have not completed representative testing or that contain Westinghouse ZIRLO<sup>TM</sup> fuel rod cladding may be placed in non-limiting core regions.

The NRC staff concludes that this proposed change to TS 4.2.1 is appropriate, because it correctly provides a condition of operation for the plant that is supported by the licensee assessments. In addition, the NRC staff concludes that it is acceptable to operate CPSES,

Unit 2, as described in the licensee's October 25, 2001, letter because it is technically justified and consistent with applicable guidance, because compliance with 10 CFR 50.44, 10 CFR 50.46, and Appendix A to 10 CFR Part 50 are assured, as discussed herein, and because proposed TS 4.2.1 provides appropriate operational control.

# 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. 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 (66 FR 64306, published December 12, 2001). 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: F. Orr

Date: March 26, 2002

# Comanche Peak Steam Electric Station

CC:

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