UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 25, 2000

Mr. C. Lance Terry
Senior Vice President
& Principal Nuclear Officer
TXU Electric
Attn: Regulatory Affairs Department
P. O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENT RE: CHANGE TO THE TECHNICAL SPECIFICATIONS FOR ALLOWED OUTAGE TIME FOR FEEDWATER ISOLATION VALVES (TAC NOS. MA8946 AND MA8947)

Dear Mr. Terry:

The Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 77 to Facility Operating License Nos. NPF-87 and NPF-89 for Comanche Peak Steam Electric Station (CPSES), Units 1 and 2, respectively. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 12, 2000, as supplemented by letter dated May 19, 2000.

The amendment revises TS 3.7.3, Condition A, to extend the Completion Times for one or more feedwater isolation valves (FIVs) inoperable from four hours to 24 hours if, within four hours, the respective feedwater control valves (FCVs) and the FCV bypass valves in the same flowpath are verified to be capable of performing the feedwater isolation function. A footnote is added that indicates that the extension of the Completion Time to 24 hours is only applicable for repair of the FIV hydraulic system through fuel cycle 8 for Unit 1 and fuel cycle 5 for Unit 2.

The license amendment was issued under exigent circumstances as defined in 10 CFR 50.91(a)(6). In this regard, a sudden failure of an FIV hydraulic pump seals could cause the affected FIV to close, which would likely result in a reactor trip. TXU Electric, the licensee, believes that it is prudent to repair the pump prior to the summer load demand when the potential adverse impact to the public from a plant shutdown is greater.

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 & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 77 to NPF-87 and NPF-89
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:
PUBLIC
PDIV-1 r/f
G. Hill (4)
RidsNrrDlpmLpdiv (S.Richards)
RidsNrrDlpmLpdiv1 (RGramm)
RidsNrrPMDJaffe
RidsNrrLADJohnson
RidsNrrDripRtsb (W.Beckner)
RidsAcrsAcnwMailCenter
RidsOgcRp
L. Hurley, RIV
D. Bujol, RIV
J. Tapia, RIV

Accession No.: ML

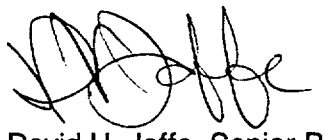
OFFICE	PDIV-1/PM	PDIV-1/LA	EMEB/DE	OGC (with changes herein)	DRIP/RTSB	PDIV-1/SC
NAME	DJaffe:am	DJohnson dlj	GImbro RLE	CMarco NLO	WBeckner WDB	RGramm RG
DATE	5/23/00	5/23/00	5/24/00	5/25/00	5/24/00	5/25/00

DOCUMENT NAME: G:\PDIV-1\ComanchePeak\amdma8946.wpd
OFFICIAL RECORD COPY

SPLB Concurrence not needed per 5/24/00 direction from J. Hannon

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,



David H. Jaffe, Senior Project Manager, Section 1
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 77 to NPF-87 and NPF-89
2. Safety Evaluation

cc w/encls: See next page

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

Mrs. Juanita Ellis, President
Citizens Association for Sound Energy
1426 South Polk
Dallas, TX 75224

Mr. Roger D. Walker
Regulatory Affairs Manager
TXU Electric
P. O. Box 1002
Glen Rose, TX 76043

George L. Edgar, Esq.
Morgan, Lewis & Bockius
1800 M Street, N.W.
Washington, DC 20036-5869

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

Office of the Governor
ATTN: John Howard, Director
Environmental and Natural
Resources Policy
P. O. Box 12428
Austin, TX 78711

Arthur C. Tate, Director
Division of Compliance & Inspection
Bureau of Radiation Control
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3189

Jim Calloway
Public Utility Commission of Texas
Electric Industry Analysis
P. O. Box 13326
Austin, TX 78711-3326

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TXU ELECTRIC

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1

DOCKET NO. 50-445

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 77
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by TXU Electric dated May 12, 2000, as supplemented by letter dated May 19, 2000, 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. 77 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Electric shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A Gramm

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

Attachment: Changes to the Technical Specifications

Date of Issuance: May 25, 2000

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TXU ELECTRIC

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2

DOCKET NO. 50-446

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 77
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by TXU Electric dated May 12, 2000, as supplemented by letter dated May 19, 2000, 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. 77 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Electric 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 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A Gramm

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

Attachment: Changes to the Technical Specifications

Date of Issuance: May 25, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 77

TO FACILITY OPERATING LICENSE NOS. NPF-87 AND 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	Insert
3.7-8	3.7-8
3.7.9	3.7.9

3.7 PLANT SYSTEMS

3.7.3 Feedwater Isolation Valves (FIVs) and Associated Bypass Valves

LCO 3.7.3 Four FIVs and associated bypass valves shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3 except when FIV or associated bypass valve is closed and de-activated or isolated by a closed manual valve.

ACTIONS

----------NOTE----------
Separate Condition entry is allowed for each valve.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more FIVs inoperable.	A.1.1 Close or isolate FIV.	4 hours
	OR *	
	A.1.2.1 Verify that the Feedwater Control Valve and associated bypass valve in the same flowpath are available to perform feedwater isolation.	4 hours
	AND	
	A.1.2.2 Close or isolate FIV	24 hours
	AND	
	A.2 Verify FIV is closed or isolated.	Once per 7 days

(continued)

* Actions A.1.2.1 and A.1.2.2 are only allowed for repair of the FIV hydraulic system through the end of fuel cycle 8 for Unit 1 and fuel cycle 5 for Unit 2.

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One or more FIV bypass valves inoperable.	B.1 Close or isolate bypass valve. AND B.2 Verify bypass valve is closed or isolated.	4 hours Once per 7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 4.	6 hours 12 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Verify the isolation time of each FIV and associated bypass valves is ≤ 5 seconds.	In accordance with the Inservice Testing Program
SR 3.7.3.2	Verify each FIV and associated bypass valves actuates to the isolation position on an actual or simulated actuation signal.	18 months

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 77 TO

FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89

TXU ELECTRIC

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated May 12, 2000, as supplemented by letter dated May 19, 2000, TXU Electric (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 change TS 3.7.3, Condition A, to extend the Completion Times for one or more feedwater isolation valves (FIVs) inoperable from four hours to 24 hours if, within four hours, the respective feedwater control valves (FCVs) and the FCV bypass valves in the same flowpath are verified to be capable of performing the feedwater isolation function. A footnote would be added that indicates that the extension of the Completion Time to 24 hours is only applicable for repair of the FIV hydraulic system through fuel cycle 8 for Unit 1 and fuel cycle 5 for Unit 2.

2.0 BACKGROUND

Each CPSES Unit contains four steam generators which are supplied with feedwater for the purpose of steam generation. The feedwater for each steam generator passes through a FCV, which modulates feedwater flow in response to changing steam flow/power demand. The FCV is equipped with a feedwater control bypass valve (FCBV) which modulates feedwater flow during startup and low power operation. Downstream of the FCV/FCBV, the feedwater stream splits into two branches; the main branch contains a FIV while the secondary branch contains a feedater isolation valve bypass valve (FIVBV). The configuration of the FCVs, FCBVs, FIV, and FIVBVs is shown on Figure M1-0203 in the updated CPSES Final Safety Analysis Report (FSAR).

The FIV and FIVBV perform a safety function in that they are credited in the safety analysis for isolation in the event of a feedwater line break inside containment. In addition, closure of a FIV/FIVBV limits the addition of feedwater to a steam generator in the event of a main steam line break. An allowable outage time (AOT), for the FIVs, of four hours is contained in CPSES TS 3.7.3

The licensee has found the hydraulic systems, which hold the FIVs in the open position (each FIV has an hydraulic system), have degraded due to the incompatibility of the seal material with the hydraulic fluid. The hydraulic systems are not safety-related since the safety function of the valves is to close on an isolation signal, a function performed by a nitrogen accumulator.

Degradation and eventual failure of the FIV hydraulic systems would cause loss of hydraulic pressure with resulting closure of the associated FIV and plant shutdown. Repair of the FIV hydraulic systems would require the associated FIVs to be made inoperable; the repair could take longer than the TS AOT time of four hours. The licensee has proposed that the AOT be extended to 24 hours if, within four hours, the respective FCVs and the FCVBVs in the same flowpath are verified to be capable of performing the feedwater isolation function. A footnote would be added that indicates that the extension of the Completion Time (AOT) to 24 hours is only applicable for repair of the FIV hydraulic system through fuel cycle 8 for Unit 1 and fuel cycle 5 for Unit 2, the current operating cycle for each CPSES unit.

3.0 EVALUATION

The licensee's proposed change to the TS essentially substitutes the functioning of the FCVs and FCVBVs for the safety function of the FIVs (closure on isolation signals); the safety function of the FIVBVs are not affected. Section 10.4.7.5 of the updated CPSES FSAR states the following with regard to the subject valves:

> Feedwater isolation valves are tripped closed upon receipt of the following safety-related instrumentation signals: a steam generator high-high level (two out of three high-high level signals from any steam generator), a safety injection signal, or a low average [reactor coolant] temperature with a reactor trip. When the plant is operating, these valves can be tested for partial closure of the valve. Feedwater isolation bypass valves, feedwater control valves and feedwater preheater bypass valves are all tripped closed by separate, redundant control circuits and solenoids.

While the FCVs and FCVBVs are not safety-grade equipment, they are highly reliable, close on the same isolation signals as those that close the FIVs, and are tested to the same standards (frequency and closure time) as the FIVs. Thus, the FCVs and FCVBVs can reliably fulfill the safety function of the FIVs during the extended period of inoperability for the purpose of performing repairs to the FIV hydraulic systems. Moreover, since the proposed change to TS 3.7.3 would only be applicable to the current operating cycle for each CPSES Unit, it is expected that the licensee will work diligently to correct the problem associated with the FIV hydraulic systems.

Based upon the above, the Nuclear Regulatory Commission (NRC or the Commission) staff concludes that the proposed change to TS 3.7.3, Condition A, (1) to extend the Completion Times for one or more FIVs inoperable from four hours to 24 hours if, within four hours, the respective FCVs and the FCVBVs in the same flowpath are verified to be capable of performing the feedwater isolation function, and (2) to add a footnote that indicates that the extension of the Completion Time to 24 hours is only applicable for repair of the FIV hydraulic system through fuel cycle 8 for Unit 1 and fuel cycle 5 for Unit 2, is acceptable.

4.0 EXIGENT CIRCUMSTANCES

The NRC staff has made a determination that exigent circumstances exist, with regard to issuance of a license amendment, in response to the licensee's application dated May 12, 2000, as supplemented by letter dated May 19, 2000, as defined in 10 CFR 50.91(a)(6). In this regard, a sudden failure of a FIV hydraulic pump seals could cause the affected FIV to close which would likely result in a reactor trip. The licensee became aware of the need to request a license amendment in April 2000, and submitted its request several weeks later. TXU Electric believes that it is prudent to repair the pump prior to the summer load demand when the potential adverse impact to the public from a plant shutdown is greater.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATIONS DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change extends the Completion Time for one or more Feedwater Isolation Valves (FIVs) inoperable from [four] hours to 24 hours for repair of FIV hydraulic system, if the Feedwater Control Valve (FCV) and associated bypass valve in the same flowpath has been verified to be available to perform feedwater isolation. Extending the Completion Time is not an accident initiator and thus does not change the probability that an accident will occur. However, it could potentially affect the consequences of an accident if an accident occurred during the extended unavailability of the inoperable FIV. The increase in time that the FIV is unavailability is small and the probability of an event occurring during this time period which would require isolation of the MFW [main feedwater] flow paths is low. Moreover, the redundancy provided by the FCVs, which have the same actuation signals and closure time requirements as the FIVs, provides adequate assurance that automatic feedwater isolation will occur if required.

   Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No

Closure of the FIVs is required to mitigate the consequences of a Main Steam Line Break and Main Feedwater Line Break accidents. The proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

   Response: No

   The proposed change does not change any Technical Specification Limit or accident analysis assumption. Therefore it does not involve a reduction in a margin of safety.

Based on the above considerations, the NRC staff concludes that the amendment meets the three criteria of 10 CFR 50.92. Therefore, the staff has made a final determination that the proposed amendment does not involve a significant hazards consideration.

6.0 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.

7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes 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 amendment involves 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 made a final finding that the amendment involves no significant hazards consideration. Accordingly, the amendment meets 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 amendment.

8.0 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: D. H. Jaffe

Date: May 25, 2000