

Ref: 10CFR50.90

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CPSES-200600123 Log # TXX-06011 File # 00236

February 21, 2006

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) DOCKET NOS. 50-445 AND 50-446 LICENSE AMENDMENT REQUEST (LAR) 05-06 REVISION TO TECHNICAL SPECIFICATION (TS) 5.6.5 REVISE LISTING OF LOCA AND NON-LOCA ANALYSIS METHODOLOGIES

REF: 1. TXU Power letter, logged TXX-05037, from Mike Blevins to the NRC dated February 17, 2005.

Dear Sir or Madam:

Pursuant to 10CFR50.90, TXU Generation Company LP (TXU Power) hereby requests an amendment to the CPSES Unit 1 Operating License (NPF-87) and CPSES Unit 2 Operating License (NPF-89) by incorporating the attached change into the CPSES Unit 1 and 2 Technical Specifications. This change request applies to both Units.

The proposed change will revise TS 5.6.5 entitled "Core Operating Limits Report (COLR)." TXU Power proposes to revise the listed LOCA and non-LOCA analysis methodologies used at CPSES Unit 1 to support the planned replacement of the CPSES Unit 1 Steam Generators in 2007. The revised analysis methodologies are currently under review by the NRC (Reference 1). Once approved, the incorporation of these acceptable methodologies in TS 5.6.5 is an administrative change to the TS.

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Attachment 1 provides a detailed description of the proposed changes, a technical analysis of the proposed changes, TXU Power's determination that the proposed changes do not involve a significant hazard consideration, a regulatory analysis of the proposed changes and an environmental evaluation. Attachment 2 provides the affected Technical Specification (TS) pages marked-up to reflect the proposed changes. Attachment 3 provides retyped Technical Specification pages which incorporate the requested changes. Attachment 4 provides marked-up pages of the Final Safety Analysis Report (for information only) to reflect the proposed changes to the FSAR.

TXU Power requests approval of the proposed License Amendment by February 15, 2007, to be implemented within 120 days of the issuance of the license amendment. This approval date was selected to be consistent with the replacement of the Unit 1 steam generators during refueling outage 1RF12 scheduled for early 2007.

In accordance with 10CFR50.91(b), TXU Power is providing the State of Texas with a copy of this proposed amendment.

Should you have any questions, please contact Mr. Robert Kidwell at (254) 897-5310.

I state under penalty of perjury that the foregoing is true and correct.

Executed on February 21, 2005.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC Its General Partner

Mike Blevins By:

Director, Regulatory Affairs

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Attachments 1. Description and Assessment

- 2. Proposed Technical Specifications Changes
- 3. Retyped Technical Specification Pages
- 4. Proposed FSAR changes (for information)
- B. S. Mallett, Region IV с -M. C. Thadani, Region IV Resident Inspectors, CPSES

Ms. Alice Rogers Environmental & Consumer Safety Section Texas Department of State Health Services 1100 West 49th Street Austin, Texas 78756-3189

ATTACHMENT 1 to TXX-06011

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DESCRIPTION AND ASSESSMENT

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LICENSEE'S EVALUATION

- 1.0 **DESCRIPTION**
- 2.0 PROPOSED CHANGE
- 3.0 BACKGROUND
- 4.0 TECHNICAL ANALYSIS
- 5.0 **REGULATORY ANALYSIS**
 - 5.1 No Significant Hazards Consideration
 - 5.2 Applicable Regulatory Requirements/Criteria
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- 7.0 **PRECEDENTS**
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1.0 **DESCRIPTION**

By this letter, TXU Generation Company LP (TXU Power) requests an amendment to the CPSES Unit 1 Operating License (NPF-87) and CPSES Unit 2 Operating License (NPF-89) by incorporating the attached change into the CPSES Unit 1 and 2 Technical Specifications. Proposed change LAR 05-06 is a request to revise Technical Specification (TS) 5.6.5, "Core Operating Limits Report (COLR)" for Comanche Peak Steam Electric Station (CPSES) Units 1 and 2.

2.0 PROPOSED CHANGE

The proposed change would revise Technical Specification 5.6.5, by adding the latest NRC-approved analytical methods used for CPSES Unit 1 LOCA and non-LOCA transient analysis to those listed in Section 5.6.5.b. Specifically, the proposed change would add to Technical Specification 5.6.5.b:

- Item 19) ERX-04-004; "Replacement Steam Generator Supplement To TXU Power's Large and Small Break Loss Of Coolant Accident Analysis Methodologies" Revision 0, January 2005; and
- Item 20) ERX-04-005; "Application of TXU Power's Non-LOCA Transient Analysis Methodologies to a Feed Ring Steam Generator Design" Revision 0, January 2005.

These two CPSES-specific topical reports describe the revised accident analysis methodologies that are necessary to support the operation of CPSES Unit 1 upon replacement of its steam generators in 2007.

3.0 BACKGROUND

The Core Operating Limits Report (COLR) was established through implementation of Generic Letter (GL) 88-16, which provides guidelines for the removal of cycle-specific parameter limits from the Technical Specifications. The limits presented in the COLR may be modified without prior NRC approval provided the requirements of Technical Specification 5.6.5 are met (i.e., the modifications are determined using specific NRC-approved methodologies and meet all applicable limits of the plant safety analysis).

The current steam generators in Unit 1 are the Westinghouse Model D4 design. The Utubes were fabricated of Alloy 600 material and, based on plant and industry experience, are relatively susceptible to several corrosion mechanisms. These steam generators are scheduled to be replaced with Westinghouse Model $\Delta 76$ steam generators during the Unit 1 refueling outage 1RF12, currently scheduled to begin in early 2007.

The methodologies to be used, on a cycle-specific basis, to perform the transient and accident analyses for the $\Delta 76$ steam generators have been submitted for NRC review and approval via Reference 8.1. Upon approval, these methodologies must be added to Technical Specification (TS) 5.6.5.b; the list of approved methodologies used to determine the core operating limits. Once approved by the NRC, the incorporation of these acceptable methodologies in TS 5.6.5.b is an administrative change to the TS.

Other License Amendment Requests have previously been submitted to address various aspects of the CPSES replacement steam generator program. Revised radiological dose consequences calculations, based on the methodologies presented in Regulatory Guide 1.195, and a proposed control room integrity Technical Specification were submitted for NRC review and approval via Reference 8.2. TS requirements related to steam generator (SG) tube integrity, consistent with NRC-approved Revision 4 to Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-449, "Steam Generator Tube Integrity," were submitted for NRC review and approval via Reference 8.3.

Conforming changes will be made to the reference sections of the CPSES Final Safety Analysis Report, Table 1.6-1 and Chapter 15 upon approval of this License Amendment Request. These changes are shown in Attachment 4 of this letter for information only and will be processed per CPSES site procedures.

4.0 TECHNICAL ANALYSIS

The proposed change in this license amendment request (05-06) is solely administrative in nature. This change is being submitted to maintain the accuracy and utility of the Core Operating Limits Report Technical Specification. The validity of the listed accident analysis methodologies will be affirmed through the NRC staff's review of the methodology topical reports (Reference 8.1).

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

TXU Power has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed 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 involves an administrative change only. Designation of the accident analysis methodologies, described in ERX-04-004 and ERX-04-005, as approved analytical methods is required to maintain the accuracy of the Technical Specification 5.6.5 (Cere Operating Limits Report) and to maintain consistency with the resolution of issues as prescribed in 10CFR50.46. 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

The proposed change involves an administrative change only. Technical Specification 5.6.5 is being changed to reference the revised accident analysis methodologies currently under NRC review. No actual plant equipment will be affected by the proposed change. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No

Margin of safety is associated with the confidence in the ability of the fission product barriers (i.e., fuel and fuel cladding, Reactor Coolant System pressure boundary, and containment structure) to limit the level of radiation dose to the public. This request involves an administrative change (subject to NRC approval) only to incorporate the NRC-approved methodologies into the allowable analysis methodologies specified in Technical Specification 5.6.5. No actual plant equipment will be affected by the proposed change. The compliance of the revised methodology with the requirements of 10CFR50.46 and Appendix K will be addressed through the NRC staff's review of the topical reports. Therefore, it is concluded that the use of the proposed methodology will not degrade the confidence in the ability of the fission product barriers to limit the level of radiation dose to the public. Therefore the proposed change does not involve a reduction in a margin of safety.

Based on the above evaluations, TXU Power concludes that the proposed amendment(s) present no significant hazards under the standards set forth in 10CFR50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The description of the Loss of Coolant Accident (LOCA) and non-LOCA analysis methodologies is described in the CPSES topical reports ERX-04-004; "Replacement Steam Generator Supplement To TXU Power's Large and Small Break Loss Of Coolant Accident Analysis Methodologies" Revision 0, January 2005 and ERX-04-005; "Application of TXU Power's Non-LOCA Transient Analysis Methodologies to a Feed Ring Steam Generator Design" Revision 0, January 2005. Subsequent to NRC approval, these revised methodologies will be used to demonstrate compliance with 10CFR50.46 (Acceptance Criteria for emergency core cooling systems for light-water nuclear power reactors) criteria and 10CFR50, Appendix K (ECCS Evaluation Models) requirements.

In conclusion, based on the considerations discussed above, (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. Attachment 1 to TXX-06011 Page 6 of 6

6.0 ENVIRONMENTAL CONSIDERATION

TXU Power has determined that the proposed amendment would change requirements with respect to the installation or use of a facility component located within the restricted area, as defined in 10CFR20, or would change an inspection or surveillance requirement.

Specifically, the proposed change revises the Loss of Coolant Accident (LOCA) and non-LOCA analysis methodologies used in preparation of the Core Operating Limits Report (COLR). These revised references could impact operating limits, specified in the COLR, used in the performance of surveillance requirements. TXU Power has evaluated the proposed changes and has determined that the changes do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amount of effluent that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10CFR51.22 (c)(9). Therefore, pursuant to 10CFR51.22 (b), an environmental assessment of the proposed change is not required.

7.0. PRECEDENTS

7.1 CPSES License Amendment 80; "Revision of Large Break LOCA Methodology," dated 10/06/2000. [ADAMS Accession number ML003764383]

8.0 **REFERENCES**

- 8.1 TXU Power letter, logged TXX-05037, from Mike Blevins to the NRC dated February 17, 2005.
- 8.2 TXU Power letter, logged TXX-05127, from Mike Blevins to the NRC dated August 22, 2005.
- 8.3 TXU Power letter, logged TXX-05182, from Mike Blevins to the NRC dated December 16, 2005.

ATTACHMENT 2 to TXX-06011

PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

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5.6 Reporting Requirements (continued)

5.6.	5 <u>Core Opera</u>	re Operating Limits Report (COLR) (continued)		
	10)	TXX-88306, "Steam Generator Tube Rupture Analysis," March 15, 1988.		
	11)	RXE-91-005-A, "Methodology for Reactor Core Response to Steamline Break Events," February 1994.		
	12)	RXE-94-001-A, "Safety Analysis of Postulated Inadvertent Boron Dilution Event in Modes 3, 4, and 5," February 1994.		
	13)	RXE-95-001-P-A, "Small Break Loss of Coolant Accident Analysis Methodology," September 1996.		
	14)	Caldon, Inc. Engineering Report-80P, "Improving Thermal Power Accuracy and Plant Safety While Increasing Operating Power level Using the LEFM√ System," Revision 0, March 1997 and Caldon Engineering Report – 160F, "Supplement to Topical Report ER-80P; Basis for a Pcwer Uprate With the LEFM√ tm System," Revision 0, May 2C00.		
	15)	ERX-2001-005-P, "ZIRLO™ Cladding and Boron Coating Models for TXU Electric's Loss of Coolant Accident Analysis Methodologies," October 2001.		
	16)	WCAP-10444-P-A, "Reference Core Report VANTAGE 5 Fuel Assembly," September 1985.		
	17)	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.		
	18)	WCAP-13060-P-A, "Westinghouse Fuel Assembly Reconstitution Evaluation Methodology," July, 1993.		
	c. The appli hydra nucle analy	core operating limits shall be determined such that all cable limits (e.g., fuel thermal mechanical limits, core thermal aulic limits, Emergency Core Cooling Systems (ECCS) limits, ear limits such as SDM, transient analysis limits, and accident vsis limits) of the safety analysis are met.		
	d. The be pr	COLR, including any midcycle revisions or supplements, shall ovided upon issuance for each reload cycle to the NRC.		
		(continued)		
19)	ERX-04-004; "Replace Small Break Loss Of (ement Steam Generator Supplement To TXU Power's Large and Coolant Accident Analysis Methodologies" Revision 0, January 2005		
20)	ERX-04-005; "Applica a Feed Ring Steam G	tion of TXU Power's Non-LOCA Transient Analysis Methodologies to enerator Design" Revision 0, January 2005.		

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RETYPED TECHNICAL SPECIFICATION PAGES

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5.6 Reporting Requirements (continued)

5.6.5	Core Operating Limits Report (COLR) (continued)		
		10)	TXX-88306, "Steam Generator Tube Rupture Analysis," March 15, 1988.
		11)	RXE-91-005-A, "Methodology for Reactor Core Response to Steamline Break Events," February 1994.
		12)	RXE-94-001-A, "Safety Analysis of Postulated Inadvertent Boron Dilution Event in Modes 3, 4, and 5," February 1994.
		13)	RXE-95-001-P-A, "Small Break Loss of Coolant Accident Analysis Methodology," September 1996.
		14)	Caldon, Inc. Engineering Report-80P, "Improving Thermal Power Accuracy and Plant Safety While Increasing Operating Power level Using the LEFM√ System," Revision 0, March 1997 and Caldon Engineering Report – 160P, "Supplement to Topical Report ER-80P; Basis for a Power Uprate With the LEFM√ tm System," Revision 0, May 2000.
		15)	ERX-2001-005-P, "ZIRLO™ Cladding and Boron Coating Models for TXU Electric's Loss of Coolant Accident Analysis Methodologies," October 2001.
	r	16)	WCAP-10444-P-A, "Reference Core Report VANTAGE 5 Fuel Assembly," September 1985.
		17)	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.
		18)	WCAP-13060-P-A, "Westinghouse Fuel Assembly Reconstitution Evaluation Methodology," July, 1993.
		19)	ERX-04-004; "Replacement Steam Generator Supplement To TXU Power's Large and Small Break Loss Of Coolant Accident Analysis Methodologies" Revision 0, January 2005
		20)	ERX-04-005; "Application of TXU Power's Non-LOCA Transient Analysis Methodologies to a Feed Ring Steam Generator Design" Revision 0, January 2005.
	C.	The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.	
	d.	The CO	OLR, including any midcycle revisions or supplements, shall vided upon issuance for each reload cycle to the NRC.

(continued)

Amendment 119, 123

ATTACHMENT 4 to TXX-06011

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PROPOSED FSAR CHANGES (For Information Only)

Pages Table 1.6-1 (Sheet 3 of 3) 15.6-26