

Ref. # 10CFR50.73(a)(2)(i)(B)

TXU Energy Comanche Peak Steam Electric Station P.O Box 1002 (E01) Glen Rose, TX 76043 Tel 254 897 8920 Fax, 254 897 6652 lance terry@txu com **C. Lance Terry** Senior Vice President & Principal Nuclear Officer

CPSES-200202603 Log #TXX-02121 File # 10200

August 19, 2002

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) UNIT 2 DOCKET NO. 50-446 CONDITION PROHIBITED BY TECHNICAL SPECIFICATIONS LICENSEE EVENT REPORT 446/02-002-00

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Enclosed is Licensee Event Report (LER) 02-002-00 for Comanche Peak Steam Electric Station (CPSES) Unit 2, "Missed Surveillance on Steam Generator High-High Level Channel Operational Test."

A member of the STARS (Strategic Teaming and Resource Sharing) Alliance

Callaway • Comanche Peak • Diablo Canyon • Palo Verde • South Texas Project • Wolf Creek



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This communication contains no new commitments regarding CPSES Unit 2.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC, Its General Partner

> C. L. Terry Senior Vice President and Principal Nuclear Officer

les By:

Roger D. Walker Regulatory Affairs Manager

GLM/gm Enclosures

c - E. W. Merschoff, Region IV
 W. D. Johnson, Region IV
 D. H. Jaffe, NRR
 Resident Inspectors, CPSES

NRC FORM 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) Facility Name (1) COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2										SION	APPROVED BY OMB NO. 3150-0104 EXPIRES 07/31/2004 Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U S Nuclear Regulatory Commission, Washington, DC 2055-0001, or by internet e-mail to bis1@nrc gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503 If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection Docket Number (2) Page (3) 050000446 1 OF 5												
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card was not covered by an approved surveillance procedure. This constituted a missed Technical Specification surveillance. This condition applies to twelve Unit 2 Steam Generator Level Channel Operational Test procedures.

TXU Generation Company LP (TXU Energy) believes that the cause of the event was less than adequate attention to detail on the part of the preparer and technical reviewer during revision of the Unit 2 Steam Generator level Channel Operational Test procedures following a design change to the circuitry. Corrective actions include procedure revisions, satisfactory performance of the Technical Specification surveillance tests, drawing reviews, and issuance of a Lessons Learned.

All times in this report are approximate and reflect Central Daylight Standard Time unless noted otherwise.

LICENSEE EVENT REPORT (LER)

Docket

Facility Name (1)

COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2

05000446 <u>Year</u>

 LER Number (6)
 Page(3)

 Sequential Number
 Revision Number

 002
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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

I. <u>DESCRIPTION OF THE REPORTABLE EVENT</u>

A. REPORTABLE EVENT CLASSIFICATION

Any operation or condition prohibited by the plant's Technical Specifications.

B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT

On June 19, 2002, Comanche Peak Steam Electric Station (CPSES) Unit 2 was in Mode 1, Power Operation, operating at 99.5 percent power.

C. STATUS OF STRUCTURES, SYSTEMS, OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

There were no structures, systems, or components that were inoperable at the start of the event that contributed to the event.

D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES

CPSES Technical Specification Surveillance Requirement (SR) 3.3.2.5 for Table 3.3.2-1, Item 5b, requires the performance of a Channel Operational Test (COT) every 92 days on the Steam Generator High-High Water Level instrumentation in order to provide protection against excessive feedwater flow. A COT is performed on each required channel to ensure that the entire channel (EIIS:(CHA)) will perform its intended safety function.

On June 19, 2002, at 1130 hours, while investigating a previous circuit card failure, Engineering department personnel (utility, non-licensed) discovered that the COT procedure for a Steam Generator Narrow Range Level failed to verify the Steam Generator High-High level actuation function on the NPL card, a required trip function in the Technical Specifications. The absence of this verification in the procedure constituted a missed surveillance (SR 3.3.2.5.5b).

This condition applies to twelve Unit 2 Steam Generator level COT procedures (three procedures on each of four Steam Generators). The condition does not apply to Unit 1 due to differences in design and testing methodology. The Unit 1 design utilizes lead-lag circuit cards versus NPL timer (EIIS:(TMR)) cards to affect the necessary time delay.

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RRATIVE (If more a	space is required, use additional copies of NRC Form 366A) (17)		_11	1							
	The NPL card involved is a dual input, due that the timer on the card is shared betwe Generator High-High Level Turbine Trip Generator Low-Low Level Reactor Trip/	en two circui /Feedwater Is	ts. These solation s	e two circ	uits are the uit and the	Steam Steam					
	The circuit configuration and required test Process Instrument Loops was changed a Unit 2 in April 1996 during the unit's sec setpoints being sensed at a different point modification, setpoints were sensed down for both the High-High and Low-Low po High-High setpoint was sensed upstream sensed both upstream and downstream of	s a result of a ond refueling t in the circui nstream of the rtions of the o of the NPL c	n modific g outage. t. Prior t e NPL ca card. Sub card. On	ation which These ch to implem and thereby posequent to	ch was insta anges result entation of y verifying of the modifi	alled in ted in th the continui ication,					
	To incorporate the 1996 modification, the test signal through the Steam Generator I order to verify timer functionality. By vi the Steam Generator High-High Level or NPL card would verify the functionality both the High-High and Low-Low circuit of the procedure revisions, and this approx	Low-Low Lev rtue of its des the Steam G of the timer. try of the card	vel circui sign, inje enerator Therefor l was vie	try portion cting a tes Low-Low re, injectin	n of the NP st signal thro Level circu ng a test sign	L card in ough eit uitry of the nal through					
	Although it is true that the timer function of the card was adequately verified by injecting the test signal through only the Low-Low circuitry portion of the card, this test methodology faile to verify continuity through both logic circuits of the NPL card itself and therefore failed to satisfy the strict definition for Channel Operational Test in the CPSES Technical Specifications.										
Е.	THE METHOD OF DISCOVERY OF OR PROCEDURAL OR PERSONNE		MPONE	NT OR S	SYSTEM F	AILUR					
	During investigation into a failed circuit System, Engineering personnel (utility, n was not covered by an approved surveilla Specification surveillance.	non-licensed)	discover	ed that a c	component (on the c					

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U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

Facility Name (1)

COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2

Docket LER Number (6) Year 05000446 02

Sequential

Number

002

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

II. COMPONENT OR SYSTEM FAILURES

FAILURE MODE, MECHANISM, AND EFFECTS OF EACH FAILED COMPONENT Α.

Not applicable – No component or system failures were identified during this event.

CAUSE OF EACH COMPONENT OR SYSTEM FAILURE **B**.

Not applicable – No component or system failures were identified during this event.

SYSTEMS OR SECONDARY FUNCTIONS THAT WERE AFFECTED BY FAILURE **C**. OF COMPONENTS WITH MULTIPLE FUNCTIONS

Not applicable – No component or system failures were identified during this event.

FAILED COMPONENT INFORMATION D.

Not applicable – No component or system failures were identified during this event.

III. ANALYSIS OF THE EVENT

SAFETY SYSTEM RESPONSES THAT OCCURRED Α.

Not applicable - no safety system responses occurred as a result of this event.

DURATION OF SAFETY SYSTEM TRAIN INOPERABILITY **B.**

Not applicable - no safety system train was deemed inoperable.

C. SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

The Steam Generator High-High level function (including the NPL card) was verified via Response Time Testing on October 3, 2000 for six of the twelve channels, and on April 3, 2002 for the remaining six channels.

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LICENSEE EVENT REPORT (LER)

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During the time period that these surveillances were not fully performed, a plant transient or event that would have required these channels to operate did not occur. Also, all of the affected channels were subsequently tested, and this testing demonstrated that the channels would have performed their intended safety function, if required. There were no safety system functional failures associated with this event.

Based on the above, it is concluded that the event of June 19, 2002 did not adversely impact the safe operation of CPSES or the health and safety of public.

IV. CAUSE OF THE EVENT

TXU Energy believes that the cause of the event was less than adequate attention to detail on the part of both the preparer and technical reviewer of the Unit 2 Steam Generator Level Channel Operational Test procedure revisions that incorporated the 1996 Westinghouse 7300 System Design Modification.

The procedure revisions did not specifically verify the continuity of PROM logic cards in the Westinghouse 7300 Series Process Instrumentation System. This verification of continuity is necessary to satisfy the strict definition for "Channel Operational Test" in the CPSES Technical Specifications, and this resulted in the failure to satisfy Technical Specification Channel Operational Test surveillance requirements.

V. CORRECTIVE ACTIONS

The twelve affected surveillance testing procedures have been revised to incorporate verification of High-High level actuation function through the NPL card and all of the affected Technical Specification surveillance tests were successfully completed per the revised procedures.

Westinghouse 7300 Series Process Instrument Loop drawings were reviewed to determine whether there are any other instances where logic cards are located downstream of a bistable. The review identified no instances where circuitry installed downstream of a bistable was not adequately tested. A Lessons Learned regarding this event has been issued to procedure writers and test personnel involved with testing of safety-related logic circuits in order to reinforce the importance of verifying card continuity in order to satisfy Technical Specification requirements.

VI. PREVIOUS SIMILAR EVENTS

There have been other previous events related to missed surveillances. However, the causes for those events were sufficiently different from this event such that the corrective actions would not have prevented this event.