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Ref: 10 CFR 50.54(f)

CPSES-200202095  
Log # TXX-02094  
File # 10119

May 17, 2002

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

**SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
60 DAY RESPONSE TO NRC BULLETIN 2002-01, "REACTOR  
PRESSURE VESSEL HEAD DEGRADATION AND REACTOR  
COOLANT PRESSURE BOUNDARY INTEGRITY"**

REF: Letter logged TXX-02067 from C. L. Terry to the NRC dated  
April 2, 2002

Gentlemen:

In accordance with 10CFR50.54(f), attached is the TXU Generation Company LP (TXU Energy) 60 day response to U.S. Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity" dated March 18, 2002. TXU Energy coordinated preparation of this response with the other participants in the Strategic Teaming and Resource Sharing (STARS) group.

If you should have any questions regarding this submittal, please call Mr. J. D. Seawright at (254) 897-0140 (Email - jseawright@txu.com).

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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TXX-02094  
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No new commitments are identified in this letter.

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

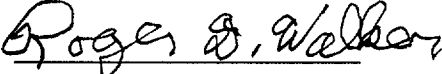
**Executed on May 17, 2002.**

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC,  
Its General Partner

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

By:   
Roger D. Walker  
Regulatory Affairs Manager

JDS/js  
Attachment

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

**Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity"**

NRC Requested Information

3. *Within 60 days of the date of this bulletin, all PWR addressees are required to submit to the NRC the following information related to the remainder of the reactor coolant pressure boundary:*
  - A. *the basis for concluding that your boric acid inspection program is providing reasonable assurance of compliance with the applicable regulatory requirements discussed in Generic Letter 88-05 and this bulletin. If a documented basis does not exist, provide your plans, if any, for a review of your programs.*

CPSES Response:

The CPSES boric acid leakage inspection program is described in TXU Generation Company LP (TXU Energy) letter TXX-02067, "Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity" dated April 2, 2002. TXU Energy's policy is to minimize boric acid induced corrosion by applying an administrative program that provides for: (1) early detection of boric acid leaks; (2) thorough inspection of the areas surrounding identified boric acid leakage; (3) proper evaluation of areas where leakage has occurred; and (4) prompt action to mitigate the leak, perform repairs, and avoid future damage. This program applies to any system within containment that contains boric acid, and systems, structures or components that could be adversely affected by leakage from systems containing borated water.

Boric acid leakage is identified during program-required walkdowns and the system leakage test required by ASME Section XI for the Code Class 1 pressure boundary, including the Reactor Coolant System. These walkdowns are performed by in-service inspection, engineering, and/or maintenance personnel. The objective is to identify boric acid leakage from any source inside containment with particular emphasis on locations where boric acid corrosion of ASME Code Class 1 low alloy/carbon steel Reactor Coolant Pressure Boundary (RCPB) components may be affected. A listing of piping and components that are potential sources of boric acid leakage is maintained in station procedures governing the boric acid corrosion control program. The walkdowns include inspection of RCPB sources as well as a comprehensive inspection for any target of reactor coolant leakage. The walkdowns are begun just prior to each refueling outage to observe evidence of boric acid leakage prior to maintenance activities.

The ASME Section XI system leakage test and VT-2 inspection is performed at normal operating pressure following a refueling outage, or other outage where the reactor coolant pressure boundary integrity has been affected. As a minimum it includes all joints that have been opened and closed since the last performance of the test. This inspection includes the reactor pressure

vessel head with the insulation installed. The inspection is conducted by certified VT-2 level II personnel, and is witnessed or verified by the Authorized Nuclear Inservice Inspector (ANII).

Components are considered acceptable if there is no ASME Code Class 1 (RCPB) pressure boundary leakage and they are free from evidence of leakage. If leakage is identified, corrective action is taken to correct the leakage, or an evaluation is done to ensure the leakage has no adverse impact on continued operation.

During power operations, additional walkdowns of accessible containment areas are performed by Operations personnel. These walkdowns include observations for evidence of RCS leakage. Identified leakage is entered into the corrective action program and appropriate actions are taken to control the leak and protect systems, structures and components.

Typically leaks at CPSES have been evidenced by dry boric acid crystals with no visible moisture at locations such as flanged connections, tubing connections, and valve packing or bonnet connections. There have been a limited number of active boric acid leaks, but significant degradation of plant components has not been found. Corrective actions have included cleaning, tightening flange bolting, tubing connections or valve packing, repacking, or replacement of gaskets. Engineering evaluations are conducted to assess effects on systems, structures, and components when degradation is present. Identified leaks from systems containing borated water are entered in the corrective action program to ensure timely evaluation and corrective action. The initiation of the corrective action document typically identifies the location of the leak, the leak rate, and whether the leak is causing damage to other components. Engineering evaluates the effects of leaks on the affected systems, structures and components. Additional engineering evaluations may be required to assess acceptability of degradation discovered during corrective actions.

The CPSES operating experience review program evaluates boric acid corrosion experience at other plants. TXU Energy has reviewed the Davis-Besse Root Cause Analysis Report, specifically the section associated with their boric acid corrosion control program. Where applicable, industry experience, such as the Davis-Besse experience, is factored into the boric acid leakage program to prevent similar events from occurring at CPSES.

In implementing the boric acid leakage program, TXU Energy has taken steps to minimize the potential for boric acid corrosion and to improve the boric acid leakage identification process. To date, there has been no degradation of RCPB material observed at CPSES due to boric acid corrosion.

Based on the above, the CPSES boric acid inspection program provides assurance of compliance with the applicable regulatory requirements discussed in GL 88-05 and Bulletin 2002-01.