



**TXU Power**  
Comanche Peak Steam  
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**Mike Blevins**  
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CPSES-200601335  
Log #TXX-06123

July 11, 2006

Mr. Stuart A. Richards, Deputy Director  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446 - GROUNDWATER  
PROTECTION – DATA COLLECTION QUESTIONNAIRE**

Dear Mr. Richards:

The nuclear industry, in conjunction with the Nuclear Energy Institute, has developed a questionnaire to facilitate the collection of groundwater data at commercial nuclear reactor sites. The objective of the questionnaire is to compile baseline information about the current status of site programs for monitoring and protecting groundwater and to share that information with NRC. The completed questionnaire for CPSES is contained in the attachment to this letter.

Please contact Scott Bradley at (254) 897-5495 if you have questions about the attached information.

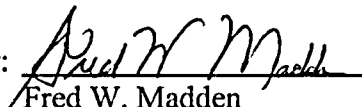
This submittal contains no new regulatory commitments.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC  
Its General Partner

Mike Blevins

By:   
Fred W. Madden  
Director, Regulatory Affairs

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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RJK  
Attachment

c - USNRC Document Control Desk  
B. S. Mallett, Region IV  
M. C. Thadani, NRR  
Resident Inspectors, CPSES  
Ralph Andersen, Nuclear Energy Institute

**Plant: Comanche Peak**

- 1. Briefly describe the program and/or methods used for detection of leakage or spills from plant systems, structures, and components that have a potential for an inadvertent release of radioactivity from plant operations into groundwater.**
  - a. Comanche Peak has an operable Spent Fuel Leakage Detection system which is used to monitor for leakage from the spent fuel pools.
  - b. Engineers perform periodic walkdowns of the systems for which they are responsible. These rounds include the requirement to identify and report leaks and spills. Leaks and spills are addressed through: immediate clean-up, notifying supervision for assistance, writing a work request or initiating a Corrective Action Report.
  - c. Operations personnel perform routine surveillance rounds each shift. These rounds include the requirement to identify and report leaks and spills. Leaks and spills are addressed through: immediate clean-up, notifying supervision for assistance, writing a work request or initiating a Corrective Action Report.
  - d. Radiation Protection performs routine radiological surveys in and around the plant. Abnormal readings or leaks and spills are addressed through: immediate clean-up, notifying supervision for assistance, writing a work request or initiating a Corrective Action Report.
  - e. Other groups, such as Environmental and Security, perform routine observations on-site, outside the plant, and would also report any leaks or spills.
  
- 2. Briefly describe the program and/or methods for monitoring onsite groundwater for the presence of radioactivity released from plant operations.**
  - a. The Radiological Environmental Monitoring Program (REMP) has been implemented since plant start-up. It consists of the following water samples:
    - **Surface Water**
      - Squaw Creek Reservoir
        - i. Near spillway or service outlet tower at or beyond mixing zone
        - ii. Squaw Creek Park Marina beyond significant influence of discharge
      - Lake Granbury
        - i. South end of dam by Pecan Plantation intake structure mixing zone
        - ii. Brazos River at Tin Top Bridge - control sample

- **Groundwater (aquifer)**
  - On-site well (NOSF)
  - Plant drinking water supply
  - Glen Rose city water supply
  - Squaw Creek Park and Marina Well water supply
  - Control - Granbury City Well water supply
  
- **Surface Drinking Water**
  - Squaw Creek Reservoir - Circ water intake structure
  - Lake Granbury - at City Park and Marina

REMP samples are analyzed by an offsite laboratory to Offsite Dose Calculation Manual (ODCM) Lower Limits of Detection. For Tritium:

- 2,000 PicoCuries/Liter for drinking water pathway
- 3,000 PicoCuries/Liter for non-drinking water.

- b. A program for sampling of onsite perched (shallow) groundwater wells began in 2006, which consists of 8 wells and an artesian basin. The samples are analyzed by on-site Chemistry for Tritium (REMP LLDs) and gamma emitting isotopes (nuclide identification only).

- 3. If applicable, briefly summarize any occurrences of inadvertent releases of radioactive liquids that had the potential to reach groundwater and have been documented in accordance with 10 CFR 50.75(g).**

There have been no occurrences of inadvertent releases of radioactive material at Comanche Peak with the potential to reach groundwater.

- 4. If applicable, briefly summarize the circumstances associated with any onsite or offsite groundwater monitoring result indicating a concentration in groundwater of radioactivity released from plant operations that exceeds the maximum contaminant level (MCL) established by the USEPA for drinking water.**

There have been no identified instances of radioactivity released from the Comanche Peak plant that resulted in groundwater concentrations exceeding the USEPA maximum contaminant levels for drinking water.

- 5. Briefly describe any remediation efforts undertaken or planned to reduce or eliminate levels of radioactivity resulting from plant operations in soil or groundwater onsite or offsite.**

Not Applicable.