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CPSES-200101028  
Log # TXX-01079  
File # 10300  
RP-52

April 30, 2001

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  
ENVIRONMENTAL PROTECTION PLAN  
ANNUAL ENVIRONMENTAL OPERATING REPORT FOR 2000

Gentlemen:

Pursuant to Section 5.4.1 of the Environmental Protection Plan (Appendix B to CPSES Unit 1 and Unit 2 Facility Operating License Nos. NPF-87 and NPF-89, respectively), TXU Electric hereby submits the CPSES 2000 Annual Environmental Operating Report in the attachment to this letter.

If you have any questions, please contact Mr. Bruce Turner at (254) 897-8901.

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This communication contains no new licensing basis commitments regarding CPSES Units 1 and 2.

Sincerely,

C. L. Terry

By: Roger D. Walker  
Roger D. Walker  
Regulatory Affairs Manager

CLW/clw  
Attachment

- c- E. W. Merschoff, Region IV
- D. N. Graves, Region IV (clo)
- D. H. Jaffe, NRR (clo)
- Resident Inspectors, CPSES w/attch.

**TXU ELECTRIC**  
**COMANCHE PEAK STEAM ELECTRIC STATION**  
**UNITS 1 & 2**  
**2000**  
**ANNUAL ENVIRONMENTAL OPERATING REPORT**  
**(NON-RADIOLOGICAL)**  
**FACILITY OPERATING LICENSE NOS. NPF-87 & 89**

## **I. INTRODUCTION**

This report describes implementation of the Environmental Protection Plan (EPP) for the calendar year 2000 as required by Appendix B to Facility Operating License Nos. NPF-87 & 89 for Comanche Peak Steam Electric Station (CPSES) for Units 1 & 2.

During 2000, the CPSES Nonradiological Environmental Monitoring Program was effective in implementing and monitoring all of CPSES's environmental regulatory commitments. Program effectiveness was substantiated by environmental audits conducted in 2000 by in-house compliance visits by TXU Corporate Environmental Services and compliance evaluations conducted by the CPSES Nuclear Overview Department. Also, the Texas Natural Resource Conservation Commission (TNRCC) and Environmental Protection Agency (EPA) performed a regulatory inspection of CPSES's wastewater management program. One finding was identified pertaining to analytical procedure references not being readily available in the laboratory. This finding was corrected.

## **II. SCOPE**

Section 5.4.1 of the EPP requires that CPSES submit to the NRC an Annual Environmental Operating report that shall address the following environmental protection activities:

- A. Summaries and analyses of the results of the environmental protection activities required by Section 4.2 of the EPP, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, a detailed analysis of the data and a proposed course of mitigating action is required. Section 4.2 of the EPP pertains to results from:
  - 1. Groundwater levels and station water use monitoring.
  - 2. Water treatment facility outages impact assessment and reporting.
- B. The report shall also include:
  - 1. A list of EPP noncompliances and the associated corrective actions.
  - 2. A list of all changes in station design and operation, tests, and experiments made in accordance with Subsection 3.1 of the EPP which involved a potentially significant unreviewed environmental question.
  - 3. A list of nonroutine reports submitted in accordance with Subsection 5.4.2 of the EPP.
  - 4. A summary list of National Pollutant Discharge Elimination System (NPDES) permit related reports relative to matters identified in Subsection 2.1 of the EPP which were submitted to the EPA Region VI during the report period. Subsection 2.1 of the EPP pertains to aquatic matters that are addressed by the effluent limitations, and the monitoring requirements contained in the EPA NPDES station wastewater discharge permit.

### III. RESULTS OF ACTIVITIES

- A. As required by Subsection 4.2 of the EPP, the following are summaries and analyses of the environmental protection activities during 2000. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2000.

#### 1. Groundwater Pumpage

As indicated in Table 1, groundwater pumpage during 2000 averaged 23.1 gals./min. (gpm) or 12,569,000 total gallons withdrawn for the year. This withdrawal rate represents a 19% decrease from the 1999 average rate of 28.6 gpm. Groundwater withdrawal was highest in October at 32.9 gpm and lowest in February with an average withdrawal rate of 12.3 gpm.

Groundwater withdrawn during 2000 was used primarily for potable and sanitary purposes with only a very small amount used as make-up to the plant fire protection system. No groundwater was used to supplement the station's Surface Water Treatment System.

The average annual pumpage rate of 23.1 gpm for 2000 represents 18.2% of the predicted operational pumpage (127 gpm) identified in Section 3.3 of the Station's Environmental Report - Operational License Stage. This rate also represents approximately 14.6% of the actual average withdrawal rate (158 gpm) reported in the Station's Final Environmental Statement - Operating License Stage (Section 5.3.1.2) of the period 1975 to May 1979.

The combined annual rate for all recorded preoperational groundwater pumpage averaged 68.8 gpm, while the average operational pumpage for the period 1990 through 2000 was 30.5 gpm. Therefore, the average operational rates are 56% less than the groundwater pumpage during the preoperational period. Figure 1 illustrates the annual fluctuation of groundwater withdrawal over the entire preoperational and operational period.

#### 2. Groundwater Levels

As indicated in Table 2, the groundwater level in the on-site observation well OB-3 (intersection of Highway 56 and the Plant Access Road) fluctuated during 2000 from a high level in April of 527.8 ft. Mean Sea Level (MSL) to a low level in September of 519.8 ft. MSL. Overall, the water level in OB-3 during the reporting period (January through December) decreased 1.5 ft. (0.5m).

The 2000 annual average groundwater levels in well OB-3 and OB-4 were 524.6 ft. MSL and 558.3 ft. MSL, respectively. These average levels demonstrated a decrease of 2.7 ft. (0.8m) for OB-3 and a decrease of 5.6 ft. (1.7m) for OB-4 from the respective average 1999 levels (Figure 2).

During 2000, rainfall patterns continued to create significant regional drought conditions. For example, during the months of July, August, and September, only 0.1 inch<sup>1</sup> of precipitation was recorded. It appears that the continuous decline in groundwater levels is predominantly influenced by two major factors; 1) regional drought conditions, and 2) population growth of the surrounding communities.

### 3. Surface Water Treatment System Operation

The station's Water Treatment System processed 170,066,400 total gallons (323 gpm) of surface water during 2000 for plant process use. There were no outages during 2000 that required reporting in accordance with Section 4.2.2 of the EPP.

The following is a summary list of monthly surface water usage:

<b>MONTH</b>	<b>SURFACE WATER PROCESSED (GALS.)</b>
JANUARY	16,965,500
FEBRUARY	16,390,700
MARCH	13,549,900
APRIL	12,906,800
MAY	13,997,400
JUNE	14,447,600
JULY	15,448,200
AUGUST	2,232,100
SEPTEMBER	14,717,800
OCTOBER	16,436,400
NOVEMBER	14,706,400
DECEMBER	18,267,600
<b>TOTAL</b>	<b>170,066,400</b>

### B. EPP Noncompliance and Corrective Actions - Subsection 5.4.1(1)

There were no noncompliances with the requirements of the EPP during the reporting period.

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<sup>1</sup>Precipitation data as recorded in official records maintained for the U.S. Weather Service by a local observer located in Glen Rose, TX (Somervell County).

- C. Changes In Station Design or Operation, Tests, and Experiments Made In Accordance With Subsection 3.1 Which Involved A Potentially Significant Unreviewed Environmental Question.

There were no changes in station design, operation, tests or experiments conducted during the reporting period that are reportable under this subsection.

- D. Nonroutine Reports Submitted In Accordance With Subsection 5.4.2

There were no nonroutine reports submitted under this subsection.

- E. NPDES Permit-Related Reports Relative To Matters Identified In Subsections 2.1 and 5.4.1

1. Routine monthly Discharge Monitoring Reports (DMR) for all wastewater outfalls were submitted to the EPA and Texas Natural Resource Conservation Commission (TNRCC) for each month during 2000. The following is a summary list of correspondence pertaining to DMRs and NPDES permit related documents.

MONTH MONITORED	LOG NUMBER/DATE
JANUARY	TXX-99233 - 02-25-00
FEBRUARY	TXX-00057 - 03-25-00
MARCH	TXX-00080 - 04-25-00
APRIL	TXX-0000109 - 05-18-00 / "Bio-Monitoring Submission" TXX-0000107 - 05-25-00
MAY	TXX-00123 - 06-27-00 / "Bio-Monitoring Submission" TXX-00121 - 06-23-00
JUNE	TXX-00142 - 07-25-00
JULY	TXX-00158 - 08-25-00
AUGUST	TXX-00182 - 09-25-00
SEPTEMBER	TXX-00197 - 10-25-00
OCTOBER	TXX-00209 - 11-22-00
NOVEMBER	TXX-00229 - 12-14-00 / "Bio-Monitoring Submission" TXX-00225 - 12-21-00
DECEMBER	TXX-01011 - 01-25-01

2. There were no NPDES wastewater discharge permit noncompliances in 2000. This compares to one noncompliance in 1999.
3. There was one (1) on-site spill during 2000 that required reporting in accordance with the TNRCC's 24-hour notification requirements. The spill

resulted when rainfall runoff transported an oil sheen from on-site paving activities to the Squaw Creek Reservoir. There were no impacts to Squaw Creek Reservoir's aquatic life. The spill was reported to the Texas Natural Resource Conservation Commission (correspondence TXX-00044 dated February 17, 2000).



**TABLE 1**  
**SUMMARY OF GROUNDWATER PUMPAGE**  
**For 2000**

MONTH	PLANT WELL 1		PLANT WELL 2		NOSF WELL 1		NOSF WELL 2		TOTALS		NO. OF DAYS BETWEEN READINGS
	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	Total Gals.	Avg. Gal. Per Min.	
January	919,600	21.3	10,100	0.2	40,600	0.9	36,300	0.1	1,006,600	23.3	30
February	203,800	5.0	201,200	4.9	42,200	1.0	49,100	1.2	496,300	12.3	28
March	0	0.0	914,200	19.8	52,900	1.1	50,200	1.1	1,017,300	22.1	32
April	644,400	14.9	221,900	5.1	54,000	1.2	78,100	1.8	998,400	23.1	30
May	885,800	18.6	2,100	0.0	73,700	1.6	72,500	1.5	1,034,100	21.8	33
June	906,100	20.3	0	0.0	56,200	1.3	59,500	1.3	1,021,800	22.9	31
July	877,500	21.8	0	0.0	83,600	2.1	81,600	2.0	1,042,700	25.9	28
August	953,000	22.8	1,000	0.0	89,900	2.2	98,300	2.4	1,129,200	27.0	29
September	1,008,300	23.4	100	0.0	83,500	1.9	97,900	2.3	1,189,800	27.5	30
October	1,361,000	30.5	0	0.0	58,100	1.3	47,900	1.1	1,467,000	32.9	31
November	361,100	8.4	607,900	14.1	42,000	0.9	43,300	1.0	1,054,300	24.4	30
December	430,200	9.6	609,400	13.7	36,900	0.8	35,000	0.8	1,111,500	24.9	31
<b>TOTAL</b>	<b>8,550,800</b>	<b>16.4</b>	<b>2,567,900</b>	<b>4.9</b>	<b>713,600</b>	<b>1.4</b>	<b>749,700</b>	<b>1.4</b>	<b>12,569,000</b>	<b>23.1</b>	<b>363</b>

**TABLE 2**

**2000 SUMMARY OF GROUNDWATER  
LEVELS IN OBSERVATION WELLS**

MONTH	WELL OB-3 (G-3)		WELL OB-4 (G-4)	
	DEPTH (1)	MSL (2)	DEPTH (1)	MSL (2)
January	268.6	525.2	285.7	562.2
February	266.8	527.0	285.0	562.9
March	266.7	527.1	283.3	564.6
April	266.0	527.8	281.9	565.9
May	266.6	527.2	282.7	565.2
June	267.2	526.6	284.3	563.6
July	268.1	525.7	289.3	558.6
August	271.2	522.6	294.0	553.9
September	274.0	519.8	297.8	550.1
October	273.8	520.0	300.0	547.6
November	271.6	522.2	298.1	549.8
December	270.1	523.7	292.5	555.4

**ANNUAL GROUNDWATER LEVEL CHANGE FOR 2000:**

Well OB-3: 268.6 ft. - 270.1 ft = (-)1.5 ft. = (-)0.5m (Decrease)

Well OB-4: 285.7 ft. - 292.5 ft = (-)6.8 ft. = (-)2.1m (Decrease)

**NOTES:**

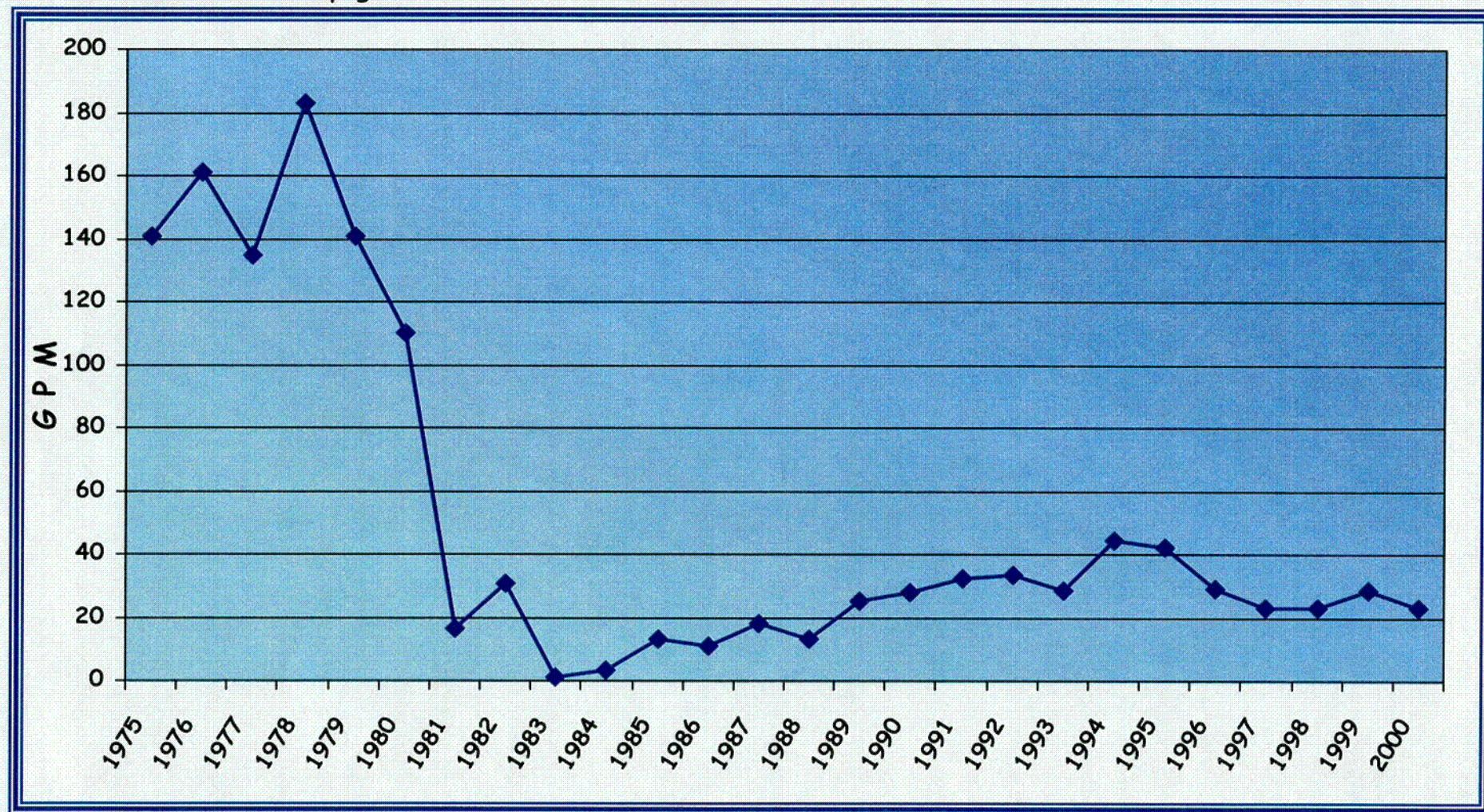
(1) Depth to water table (ft.)

(2) Water table elevation (ft.) Mean Sea Level (MSL)



**FIGURE 1**  
**SUMMARY OF GROUNDWATER PUMPAGE**  
**1975 THROUGH 2000 (GPM)**

Annual Groundwater Pumpage



1. 2/8/90 - Unit #1 Operational. Discontinued using treated surface water for potable use.
2. 2/2/93 - Unit #2 Operational



FIGURE 2  
ANNUAL AVERAGE GROUNDWATER LEVEL  
1980 through 2000

