

**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-200300852 Log # TXX-03082 RP-52

April 29, 2003

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 2002

#### 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), attached is the CPSES Annual Environmental Operating Report for year 2002.

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

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

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

IE25



CPSES-200300852 TXX-03082 Page 2 of 2

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

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC

Its General Partner

C. L. Terry

Senior Vice President & Principal Nuclear Officer

By:

Roger D. Walker

Regulatory Affairs Manager

CLW/clw Attachment

c - E. W. Merschoff, Region IV w/attch.

W. D. Johnson, Region IV (clo)

D. H. Jaffe, NRR (clo)

Resident Inspectors, CPSES w/attch.

# TXU ELECTRIC

# **COMANCHE PEAK STEAM ELECTRIC STATION**

**UNITS 1 & 2** 

2002

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 calender year 2002 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 2002, 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 2002 by inhouse compliance visits by TXU Environmental, Health, and Safety and compliance evaluations conducted by the CPSES Nuclear Overview Department.

#### 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 Texas Pollutant Discharge Elimination System (TPDES) permit related reports relative to matters identified in Subsection 2.1 of the EPP which were submitted to the Texas Commission on Environmental Quality (TCEQ) 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 TCEQ TPDES 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 2002. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2002.

#### 1. Groundwater Pumpage

As indicated in Table 1, groundwater pumpage during 2002 averaged 22.0 gals./min. (gpm) or 11,541,100 total gallons withdrawn for the year. This withdrawal rate represents a 12% increase from the 2001 average rate of 19.7 gpm. Groundwater withdrawal was highest in October at 29.0 gpm and lowest in November with an average withdrawal rate of 16.7 gpm.

Groundwater withdrawn during 2002 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 22.0 gpm for 2002 represents 17.3% 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 13.9% of the actual average withdrawal rate (158 gpm) reported in the Station's Final Environmental Statement - Operating License Stage (Section 5.3.1.2) for 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 2002 was \*29.0 gpm. Therefore, the average operational rates are 58% 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.

\*This data was originally reported as 32.3 for 2001; however, actual average for that reporting period was 29.6 gpm.)

#### 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 2002 from a high level in June of 528.1 ft. Mean Sea Level (MSL) to a low level in January of 524.1 ft. MSL. Overall, the water level in OB-3 during the reporting period (January through December) increased 1.8 ft. (0.6m).

The 2002 annual average groundwater levels in well OB-3 and OB-4 were 525.7 ft. MSL and 559.7 ft. MSL, respectively. These average levels demonstrated an increase of 0.3 ft. (0.1m) for OB-3 and an increase of 2.9 ft. (0.9m) for OB-4 from the respective average 2001 levels (Figure 2).

3. Surface Water Treatment System Operation

The station's Water Treatment System processed 174,375,900 total gallons (331.8 gpm) of surface water during 2002 for plant process use. There were no outages during 2002 that required reporting in accordance with Section 4.2.2 of the EPP.

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

MONTH	SURFACE WATER PROCESSED (GALS.)					
JANUARY	14,961,900					
FEBRUARY	14,106,100					
MARCH	11,957,400					
APRIL	15,583,500					
MAY	13,683,100					
JUNE	15,424,600 14,738,800					
JULY						
AUGUST	15,772,600					
SEPTEMBER	15,042,300					
OCTOBER	15,323,900					
NOVEMBER	12,629,400					
DECEMBER	15,152,300					
TOTAL	174,375,900					

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.

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

Other than those nonroutine reports identified in section III.E, there were no other nonroutine reports submitted under this subsection.

# Attachment to TXX-03082 Page 5 of 9

- E. Texas Pollutant Discharge Elimination System (TPDES) 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 Texas Commission on Environmental Quality (TCEQ) for each month during 2002. The following is a summary list of correspondence pertaining to DMRs and TPDES permit related documents.

MONTH MONITORED	LOG NUMBER/DATE				
JANUARY	TXX-02034 - 02/25/02				
FEBRUARY	TXX-02052 - 03/25/02				
MARCH	TXX-02075 - 04/25/02				
APRIL	TXX-02095 - 05/24/02				
MAY	TXX-02111 - 06/25/02				
JUNE	TXX-02127 - 07/25/02 TXX-02131 - 07/17/02 / "Bio-Monitoring Submission"				
JULY	TXX-02149 - 08/23/02				
AUGUST	TXX-02167 - 09/25/02				
SEPTEMBER	TXX-02185 - 10/21/02				
OCTOBER	TXX-02199 - 11/20/02				
NOVEMBER	TXX-02212 - 12/20/02				
DECEMBER	TXX-03006 - 01/20/03 TXX-03013 - 01/20/03 / "Bio-Monitoring Submission"				

2. There was one (1) TPDES wastewater discharge permit noncompliance in 2002. This noncompliance pertained to the release of sewage sludge to Squaw Creek Reservoir. A written report to the release was submitted to the TCEQ on June 13, 2003, (TXX-02117) and to the NRC on June 19, 2002 (TXX-02118). There was no observed environmental impact to Squaw Creek Reservoir as a result of the release of approximately 50 gallons of sludge to this water body.

# TABLE 1 SUMMARY OF GROUNDWATER PUMPAGE For 2002

MONTH	PLANT WELL 1		PLANT WELL 2		NOSF WELL 1		NOSF WELL 2		REC/TRAINING		TOTALS		NO. OF DAYS BETWEEN
	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.	Total Gals.	Avg. Gal. Per Min.	READINGS
January	508,700	11.4	308,800	6.9	0	0.0	130,400	2.9	0	0.0	947,900	21.2	31
February	725,800	18.0	0	0.0	0	0.0	101,000	2.5	0	0.0	826,800	20.5	28
March	355,000	8.0	490,500	11.0	8,000	0.2	236,100	5.3	14,800	0.3	1,104,400	24.7	31
April	0	0.0	1,014,000	23.5	0	0.0	138,800	3.2	6,000	0.1	1,158,800	26.8	30
Мау	213,800	4.8	506,000	11.3	46,000	1.0	109,100	2.4	3,800	0.1	878,700	19.7	31
June	582,500	13.5	0	0.0	80,700	1.9	92,000	2.1	5,500	0.1	760,700	17.6	30
July	662,300	14.8	139,300	3.1	91,000	2.0	100,700	2.3	1,300	<0.1	994,600	22.3	31
August	1,000	0.0	764,400	17.1	95,900	2.1	86,900	1.9	2,800	0.1	951,000	21.3	31
September	666,500	15.4	200,900	4.7	57,900	1.3	59,100	1.4	400	<0.1	984,800	22.8	30
October	1,193,800	26.7	0	0.0	49,700	1.1	49,100	1.1	600	<0.1	1,293,200	29.0	31
November	314,100	7.3	342,800	7.9	32,700	0.8	33,100	0.8	1,100	<0.1	723,800	16.8	30
December	536,000	12.0	297,900	6.7	41,400	0.9	39,900	0.9	1,200	<0.1	916,400	20.5	31
TOTAL	5,759,500	11.0	4,064,600	7.7	503,300	1.0	1,176,200	2.2	37,500	0.1	11,541,100	22.0	365

TABLE 2 **2002 SUMMARY OF GROUNDWATER LEVELS IN OBSERVATION WELLS** 

MONTH	(1	. OB-3 -3)	WELL OB-4 (G-4)			
	DEPTH (1)	MSL (2)	DEPTH (1)	, MSL (2)		
January	269.7	524.1	289.8	558.1		
February	268.3	525.5	285.9	561.9		
March	267.8	526.0	284.9	562.9		
April	268.3	525.5	283.4	564.5		
Мау	266.6	527.2	283.1	564.8		
June	265.7	528.1	283.9	563.9		
July	266.6	527.2	287.2	560.7		
August	269.3	524.5	291.1	556.8		
September	269.1	524.7	294.5	553.4		
October	269.0	524.8	295.3	552.6		
November	268.8	525.0	291.7	556.2		
December	267.9	525.9	287.6	560.3		

#### ANNUAL GROUNDWATER LEVEL CHANGE FOR 2002:

269.7 ft. - 267.9 ft = (+)1.8 ft. = (+)0.5m (Increase) 289.8 ft. - 287.6 ft = (+)2.2 ft. = (+)0.7m (Increase) Well OB-3: Well OB-4:

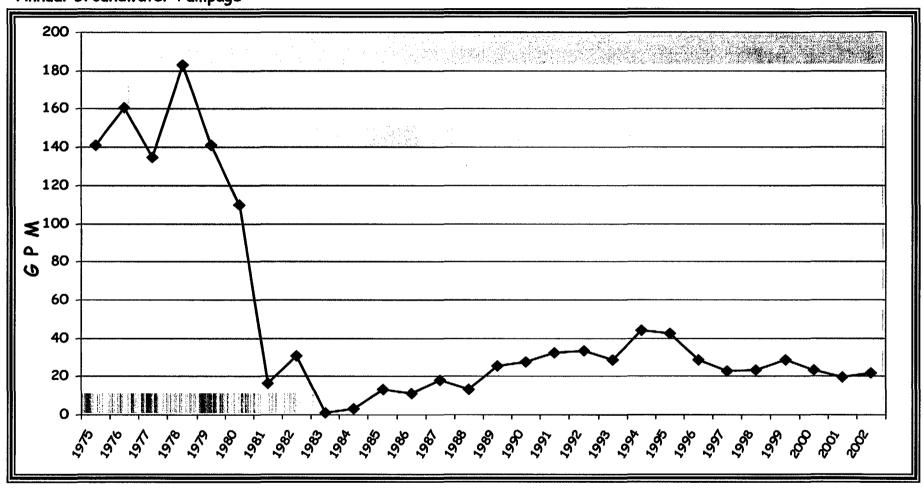
# NOTES:

(1)

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

# FIGURE 1 SUMMARY OF GROUNDWATER PUMPAGE 1975 THROUGH 2002 (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 2002

