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ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT
DOCKET NOS. 50-445/446
SUBMITTAL OF THE ANNUAL NON-RADIOLOGICAL
ENVIRONMENTAL OPERATING REPORT FOR 2012

Dear Sir or Madam:

Luminant Generation Company LLC (Luminant Power) hereby submits for Comanche Peak Nuclear Power Plant (CPNPP), the enclosed copy of the Annual Non-Radiological Environmental Operating Report for the CPNPP Radiological Environmental Monitoring Program. This report is submitted pursuant to Appendix B of the CPNPP Unit 1 and 2 Operating License Nos. NPF-87 and NPF-89. The report covers the period from January 1, 2012 through December 31, 2012 and summarizes the results of measurements and analysis of data obtained from samples collected during this interval.

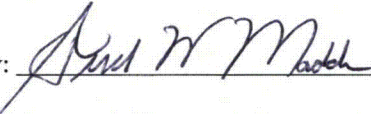
This communication contains no new licensing basis commitments regarding CPNPP Units 1 and 2.

If there are any questions regarding this report, contact Steve Dixon at (254) 897-5482 or Tim Curtis at (254) 897-5660.

Sincerely,

Luminant Generation Company LLC

Rafael Flores

By: 

Fred W. Madden
Director, Oversight & Regulatory Affairs

A member of the STARS Alliance

Callaway · Comanche Peak · Diablo Canyon · Palo Verde · San Onofre · South Texas Project · Wolf Creek

IEZ5
NR

Enclosure - Annual Non-Radiological Environmental Operating Report for 2012

c - A. T. Howell, Region IV
L. K. Gibson, NRR
Resident Inspectors, Comanche Peak

Enclosure 1

Comanche Peak 2012 Annual Environmental Operating Report
(Non-Radiological)

LUMINANT POWER
COMANCHE PEAK NUCLEAR POWER PLANT
UNITS 1 & 2
2012
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 2012 as required by Appendix B to Facility Operating License Nos. NPF-87 & 89 for Comanche Peak Nuclear Power Plant (CPNPP) for Units 1 & 2.

During 2012, the CPNPP Non-radiological Environmental Monitoring Program was effective in implementing and monitoring all CPNPP environmental regulatory commitments. Program effectiveness in 2012 was substantiated by Luminant Corporate environmental audits and compliance evaluations of the CPNPP Environmental program.

II. SCOPE

Section 5.4.1 of the EPP requires that CPNPP 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 non-radiological 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 actions are 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 non-compliances 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 2012. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2012.

1. Groundwater Pumpage

As indicated in Table 2, groundwater pumpage during 2012 averaged 1.2 gals /min. (gpm) or 632,500 total gallons withdrawn for the year. This withdrawal rate represents a 91.6% decrease from the 2011 due to the supply of potable water from Somervell County Water District (SCWD) as of January 2012. Groundwater withdrawal dropped to <1 gpm after Somervell County Water District became our supplier.

Groundwater withdrawn during 2012 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 1.2 gpm for 2012 represents <1% 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 0.8 % 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.

Since transfer to SCWD in January 2012, the combined annual rate for all recorded pre-operational groundwater pumpage averaged 68.8 gpm, while the average operational pumpage for the period 1990 through 2011 was 23.46 gpm. Therefore, the average operational rates are 65.9% less than the groundwater pumpage during the preoperational period.

2. Groundwater Levels

As indicated in Table 1, the groundwater level in the on-site observation well OB-3 (intersection of Highway 56 and the Plant Access Road) fluctuated during 2012 from a low level in September of 605.43ft. Mean Sea Level (MSL) to a high level in April of 611.13ft. MSL. Overall, the water level in OB-3 during the reporting period (January through December) increased 1.3ft. (0.4m).

The 2012 annual average groundwater levels in wells OB-3 and OB-4 were 607.76ft.MSL and 550.81ft. MSL respectively.

3. Surface Water Treatment System Operation

The station's Water Treatment System processed **204,010,000** total gallons (**388** gpm) of surface water during 2012 for plant process use. There was one outage during 2012 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	14,790,000
FEBRUARY	14,446,000
MARCH	15,438,000
APRIL	20,482,000
MAY	20,091,000
JUNE	19,077,000
JULY	18,177,000
AUGUST	15,182,000
SEPTEMBER	13,288,000
OCTOBER	18,187,000
NOVEMBER	18,234,000
DECEMBER	15,964,000
TOTAL	204,010,000

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.

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 2012. The following is a summary list of correspondence pertaining to DMRs and TPDES permit related documents.

Month Monitored	Log Number/Date
January	TXE-12018 02/20/2012
February	TXE-12045 03/20/2012
March	TXE-12068 04/20/2012
April	TXE-12081 05/18/2012
May	TXE-12099 06/20/2012
June	TXE-12110 07/19/2012 TXE-12113 (Biomonitoring Report for 01/01/2012-06/30/2012)
July	TXE-12128 08/20/2012
August	TXE-12140 09/20/2012
September	TXE-12155 10/19/2012 TXE-12157(Biomonitoring Report for 07/01/2012-09/30/2012) TXE-12164 10/29/2012 Revision
October	TXE-12169 11/20/2012
November	TXE-12199 12/20/2012
December	TXE-13012 TXE-13013(Biomonitoring Report for 10/01/2012 -12/31/2012)

2. The New TPDES Permit was issued in July. The Bio-monitoring was on the reduced frequency until then. The first half sample was conducted in April. The new permit requires quarterly sampling for the first four quarters. If no problems are found then reduced frequency can be reinstated. The 3rd quarter was sampled in September and 4th quarter in December. All required test were passed satisfactorily for the three test performed in 2012. The previously mentioned agreement to allow usage of the 4-day *Daphnia magna* instead of *Ceriodaphnia dubia* when the TDS is above 2800 mg/L is now included in the permit.

3. There was one TPDES wastewater discharge permit noncompliance in 2012. The weekly pH analysis of Outfall 004 was 9.2 from a grab sample obtained 6/18/2012. This was non-compliant with the TPDES wastewater permit which allows 6.0 to 9.0. This condition appears to have resulted from an algae bloom. Upon discovery the pond was isolated. pH was adjusted and discharge "blended" to within discharge parameter of 6.0 to 9.0. No further actions were required based on a single, one time occurrence. This condition did not constitute a regulatory reportable event, instead was documented in the monthly Discharge Monitoring Report (DMR) as required by the TPDES Wastewater Permit.
4. There was one reportable spill during 2012. On March 13th 2012 a sewer lift station primary power transformer failed resulting in an a loss of all power resulting in an unauthorized discharge into Squaw Creek Reservoir (SCR) of raw sewage. Determination of exact spill quantity indeterminate, due to nature of spill, but believed to be several hundred gallons with much fewer actually entering SCR via storm drainage system. The associated lift station was repaired and upgraded with a highly visible light to assist with more timely identification of lift station failure and returned to service. Additional actions are being taken to install the notification system on the five most significant lift stations. The spill was reported to TCEQ (see Log # TXX12043) and a report sent to the EPA.

TABLE 1**2012 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	288.5	605.63	297.76	550.12
February	285.4	608.73	294.17	553.71
March	283	611.13	293.1	554.78
April	282.5	611.63	292.73	555.15
May	282.9	611.23	295.15	552.73
June	285.6	608.53	297.17	550.71
July	288.15	605.98	300.79	547.09
August	288.6	605.53	301.01	546.87
September	288.7	605.43	300.05	547.83
October	288	606.13	297.94	549.94
November	287.9	606.23	297.5	550.38
December	287.2	606.93	297.49	550.39

ANNUAL GROUNDWATER LEVEL CHANGE FOR 2012:

Well OB-3: 288.5 ft. – 287.2 ft. = 1.3 ft. = .4 m (increase)

Well OB-4: 297.76 ft. – 297.49 ft. = .27 ft. = .08 m (increase)

NOTES:

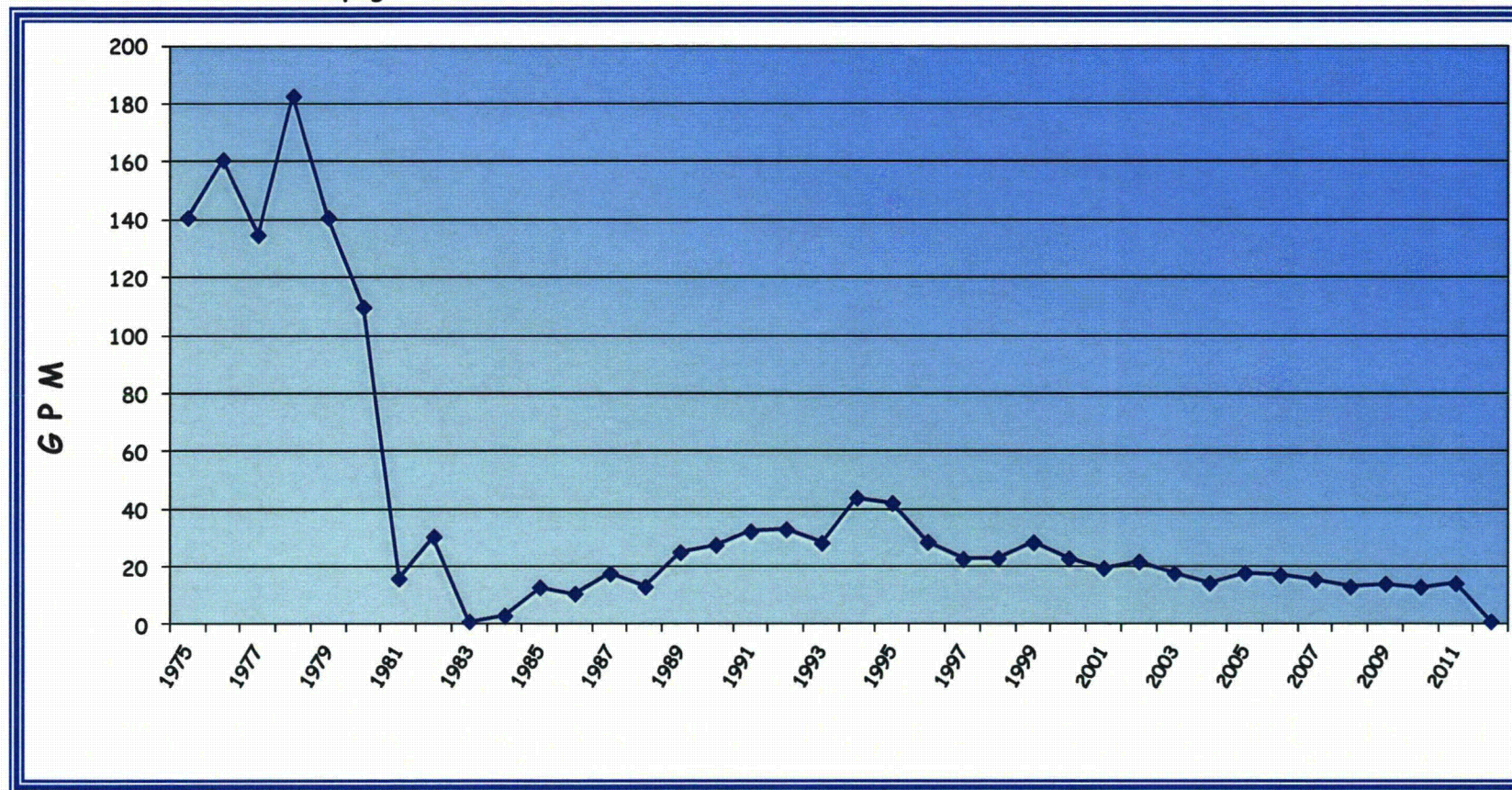
- (1) Depth to water table (ft.)
- (2) Water table elevation (ft.) Mean Sea Level (MSL)

Table 2
SUMMARY OF GROUNDWATER PUMPAGE
For 2012

Month	PLANT WELL 1		PLANT WELL 2		NOSF WELL 1		NOSF WELL 2		REC/TRAINING		TOTALS		NO. OF DAYS BETWEEN READINGS
	Total Gallons	Avg. Gallons/ Minute	Total Gallons	Avg. Gallons/ Minute	Total Gallons	Avg. Gallons/ Minute	Total Gallons	Avg. Gallons/ Minute	Total Gallons	Avg. Gallons/ Minute	Total Gallons	Avg. Gallons/ Minute	
January	375800	8.4	0	0	106,300	2.381	83,500.00	1.9	1,200	0.027	566,800	12.7	31
February	0	0.0	0	0	0	0.000	0	0.0	1,600	0.038	1,600	0.0	29
March	0	0.0	0	0	0	0.000	0	0.0	3,100	0.069	3,100	0.1	31
April	0	0.0	0	0	100	0.002	22,100	0.5	1,800	0.042	24,000	0.6	30
May	0	0.0	0	0	0	0.000	0	0.0	7,900	0.177	7,900	0.2	31
June	0	0.0	0	0	0	0.000	0	0.0	1,800	0.042	1,800	0.0	30
July	0	0.0	0	0	0	0.000	0	0.0	3,100	0.069	3,100	0.1	31
August	0	0.0	0	0	200	0.004	200	0.0	4,800	0.108	5,200	0.1	31
September	0	0.0	0	0	0	0.000	0	0.0	5,300	0.123	5,300	0.1	30
October	0	0.0	0	0	0	0.000	0	0.0	3,500	0.078	3,500	0.1	31
November	0	0.0	0	0	0	0.000	0	0.0	1,700	0.039	1,700	0.0	30
December	0	0.0	0	0	0	0.000	0	0.0	8,500	0.190	8,500	0.2	31
Total	375,800	0.7	0	0	106,600	0.199	105,800	0.2	44,300	0.084	632,500	1.2	

FIGURE 1
SUMMARY OF GROUNDWATER PUMPAGE
1976 THROUGH 2012 (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 2012

