



Jack C. Hicks  
Manager, Regulatory Affairs  
Luminant  
P.O. Box 1002  
6322 North FM 56  
Glen Rose, TX 76043  
o 254.897.6725

CP-202000210  
TXX-20021

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

Ref CPNPP EPP

April 23, 2020

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT  
DOCKET NOS. 50-445 AND 50-446  
2019 ANNUAL ENVIRONMENTAL OPERATING REPORT (NON-RADIOLOGICAL)


Dear Sir or Madam:

Vistra Operations Company LLC ("Vistra OpCo") hereby submits the Comanche Peak Nuclear Power Plant (CPNPP) 2019 Annual Environmental Operating Report (Non-Radiological). The attached report is provided pursuant to Appendix B to the CPNPP Units 1 and 2 Facility Operating License Nos. NPF 87 & NPF-89 (Environmental Protection Plan). The report covers the period from January 1, 2019 to December 31, 2019.

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

Should you have any questions, please contact Jim Barnette at (254) 897-5866 or Mark Clark at (254) 897-6835.

Sincerely,

  
\_\_\_\_\_  
Jack C. Hicks

Attachment:

1 CPNPP 2019 Annual Environmental Operating Report (Non-Radiological) (9 pages)

c - Scott A. Morris, Region IV  
Dennis Galvin, NRR  
Resident Inspectors, Comanche Peak

**VISTRA OPERATIONS COMPANY, LLC**  
**COMANCHE PEAK NUCLEAR POWER PLANT**  
**UNITS 1 & 2**  
**2019**  
**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 2019 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 2019, the CPNPP Non-Radiological Environmental Monitoring Program was effective in implementing and monitoring all CPNPP environmental regulatory commitments. Program effectiveness in 2019 was substantiated by both Environmental Services (ES) - Corporate audits and Texas Commission on Environmental Quality (TCEQ) inspections concerning 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 non-routine 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 2019. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2019.

#### **1. Groundwater Pumpage**

As indicated in Table 2, groundwater pumpage during 2019 averaged 0.076 gals /min. (gpm) or 39,800 total gallons withdrawn for the year. CPNPP continues to be supplied by Somervell County Water District (SCWD) which started in January 2012. Groundwater withdrawal dropped to <1 gpm after Somervell County Water District (SCWD) became our supplier.

Groundwater withdrawn during 2019 was used primarily for potable and sanitary purposes. No groundwater was used to supplement the station's Surface Water Treatment System.

The average annual pumpage rate of 0.076 gpm for 2019 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 0.1 % 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.

#### **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 2019 from a low level in October of 619.63 ft. Mean Sea Level (MSL) to a high level in December of 623.88 ft. MSL. Overall, the water level in OB-3 during the reporting period (January through December) decreased 1.01 ft. = 0.31 m. The 2019 annual average groundwater levels in wells OB-3 and OB-4 were 621.7 ft. MSL and 561.34 ft. MSL respectively.

3. **Surface Water Treatment System Operation**

The station's Water Treatment System processed 199.4 MGD of surface water during 2019 for plant process use. No outages in 2019 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	MGD Clarified
January	18.80
February	16.80
March	17.27
April	15.59
May	16.28
June	15.87
July	12.61
August	18.60
September	16.61
October	17.11
November	16.70
December	17.20
<b>Total annual production</b>	<b>199.4</b>

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

There were no non-compliances 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. **Non-routine Reports Submitted in Accordance with Subsection 5.4.2**

None

**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 electronic Discharge Monitoring Reports (netDMRs) for all wastewater outfalls were submitted to the Texas Commission on Environmental Quality (TCEQ) for each month during 2019 via EPA's netDMR tool Central Data Exchange (CDX)
2. Bio-monitoring (e.g. whole effluent toxicity (WET) testing was on a bi-annual frequency in 2019 for water flea and annual frequency for fathead minnow. All required test passed satisfactorily.
  - a. Chronic static renewal survival and reproduction test using water flea (*Ceriodaphnia dubia*) Method 1002.0.
  - b. Chronic static renewal 7-day larval survival and growth testing using fathead minnows (*Pimephales promelas*) Method 1000.0
3. There were no excursions in 2019 with reference to TPDES wastewater discharge permit.
4. There were nine (9) incidental spills in 2019 with none being reportable.
  - Petroleum – 4
  - Chemical – 1
  - Sewage – 1
  - Process Water - 1

**TABLE 1**

**2019 SUMMARY OF GROUNDWATER  
LEVELS IN OBSERVATION WELLS**

**ANNUAL GROUNDWATER LEVEL CHANGE FOR 2019:**

Well OB-3: 273.20 ft. – 274.21 ft. = - 1.01 ft. = 0.31 m (decrease)

Well OB-4: 285.76 ft. – 291.23 ft. = - 5.47 ft. = 1.67 m (decrease)

**NOTES:**

(1) Depth to water table (ft.)

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

MONTH	WELL OB-3 (G-3)		WELL OB-4 (G-4)	
	DEPTH (1)	MSL (2)	DEPTH (1)	MSL (2)
January	273.20	620.93	285.76	562.12
February	272.57	621.56	285.45	562.43
March	272.41	621.72	286.17	561.71
April	271.72	622.41	284.63	563.25
May	271.61	622.52	284.60	563.28
June	270.53	623.60	280.87	567.01
July	270.25	623.88	280.67	567.21
August	270.90	623.23	284.99	562.89
September	273.31	620.82	291.14	556.74
October	274.50	619.63	291.88	556.00
November	273.95	620.18	291.04	556.84
December	274.21	619.92	291.23	556.65

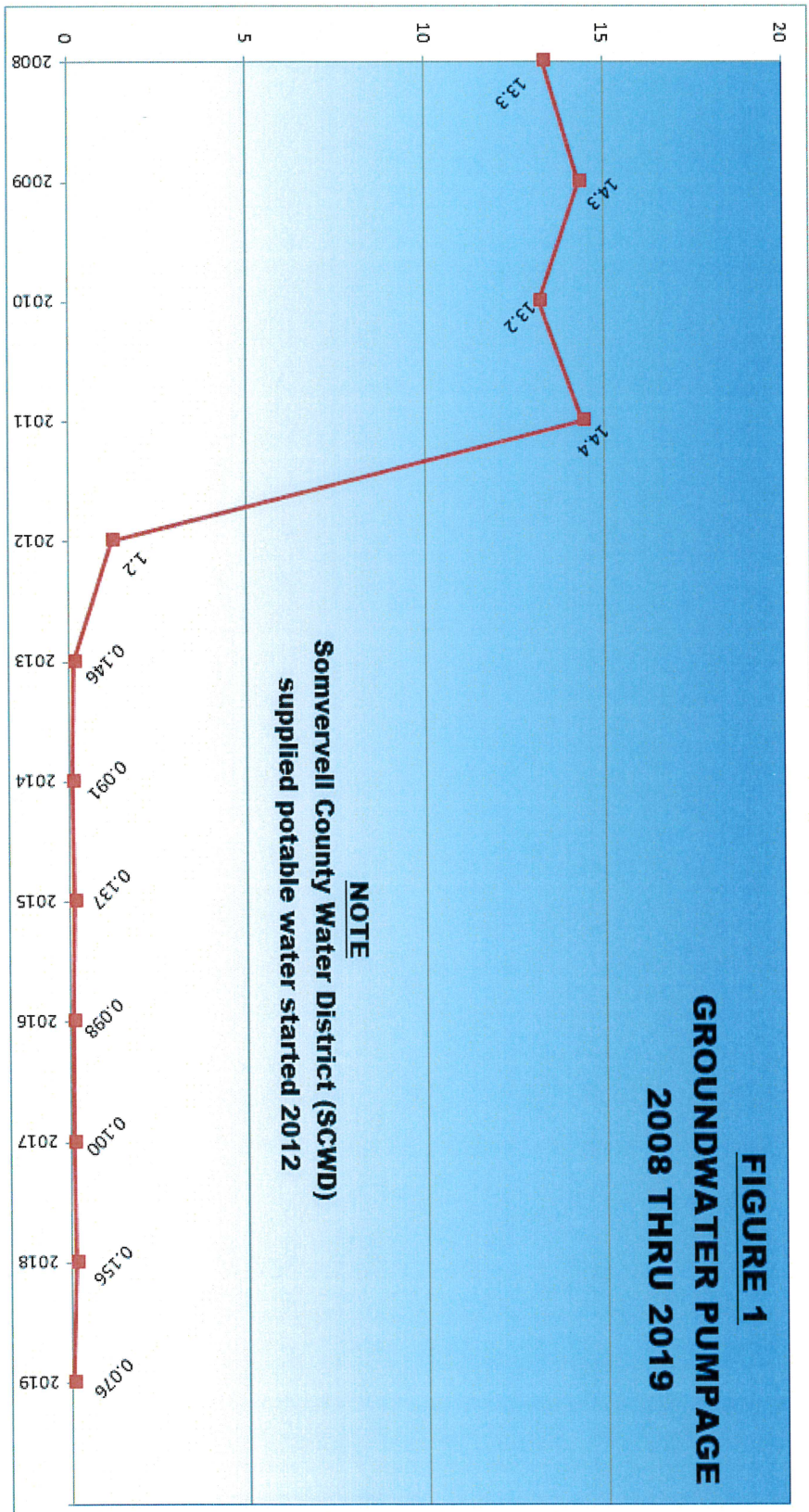
# Annual Production Well Report for Recreation/Training System

YEAR 2019

Month	Well Reading Last Day of Month (gallons)	Monthly Well Total (gallons)	Well Cumulative Total (gallons)	Number Days/Month	Total Days/Year	Gallons Per Day (average)	Monthly GPM	Yearly Cumulative GPM
December	429300							
January	432500	3200	3200	31	31	103.23	0.072	0.0717
February	436200	3700	6900	28	59	132.14	0.092	0.0812
March	439500	3300	10200	31	90	106.45	0.074	0.0787
April	443200	3700	13900	30	120	123.33	0.086	0.0804
May	446100	2900	16800	31	151	93.55	0.065	0.0773
June	449600	3500	20300	30	181	116.67	0.081	0.0779
July	454000	4400	24700	31	212	141.94	0.099	0.0809
August	457300	3300	28000	30	242	110.00	0.076	0.0803
September	460700	3400	31400	31	273	109.68	0.076	0.0799
October	464300	3600	35000	31	304	116.13	0.081	0.0800
November	466500	2200	37200	30	334	73.33	0.051	0.0773
December	469100	2600	39800	31	365	83.87	0.058	0.0757
Totals		2600	39800		365			0.0757

**NOTE:** All other site wells plugged in 2012

Gallons per Minute (GPM)



# Mean Sea Level

