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

Ref CPNPP EPP

Subject: Comanche Peak Nuclear Power Plant (CPNPP)
Docket Nos. 50-445 and 50-446
2020 Annual Environmental Operating Report (Non-Radiological)

References:

Dear Sir or Madam:

Vistra Operations Company LLC ("Vistra OpCo") hereby submits the Comanche Peak Nuclear Power Plant (CPNPP) 2020 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, 2020 to December 31, 2020.

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 James.barnette@luminant.com.

Sincerely,



Jack C. Hicks

Attachment: CPNPP 2020 Annual Environmental Operating Report (Non-Radiological) (9 pages)

c (email) - Scott Morris, Region IV [Scott.Morris@nrc.gov]
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VISTRA OPERATIONS COMPANY, LLC
COMANCHE PEAK NUCLEAR POWER PLANT
UNITS 1 & 2
2020
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 2020 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 2020, the CPNPP Non-Radiological Environmental Monitoring Program was effective in implementing and monitoring all CPNPP environmental regulatory commitments. Program effectiveness in 2020 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 2020. Based on the results of these activities, there were no observed adverse environmental impacts resulting from plant operation during 2020.

1. Groundwater Pumpage

As indicated in Table 2, groundwater pumpage during 2020 averaged 0.068 gals /min. (gpm) or 35,900 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 2020 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 0.068 gpm for 2020 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 2020 from a low level in September of 615.72 ft. Mean Sea Level (MSL) to a high level in April of 621.32 MSL. Overall, the water level in OB-3 during the reporting period (January through December) decreased 3.7 ft. = 1.13 m The 2020 annual average groundwater levels in wells OB-3 and OB-4 were 618.72 ft. MSL and 555.58 ft. MSL respectively.

3. Surface Water Treatment System Operation

The station's Water Treatment System processed 190.0 MGD of surface water during 2020 for plant process use. No outages in 2020 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	17.01
February	15.67
March	15.53
April	15.10
May	19.60
June	15.00
July	16.80
August	15.10
September	14.32
October	15.09
November	14.38
December	16.44
Total annual production	190.0

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 2020 via EPA's netDMR tool Central Data Exchange (CDX)
2. Bio-monitoring (e.g. whole effluent toxicity (WET) testing was on a quarterly frequency in 2020 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 2020 with reference to TPDES wastewater discharge permit.
4. There were seven (7) incidental spills in 2020 with none being reportable.
 - Petroleum – 2
 - Chemical – 3
 - Sewage – 2

TABLE 1

**2020 SUMMARY OF GROUNDWATER
LEVELS IN OBSERVATION WELLS**

ANNUAL GROUNDWATER LEVEL CHANGE FOR 2020:

Well OB-3: 273.55 ft. – 277.25 ft. = - 3.70 ft. = 1.13 m (decrease)

Well OB-4: 280.21 ft. – 296.53 ft. = -16.32 ft. = 4.97 m (decrease)

NOTES:

(1) Depth to water table (ft.)

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

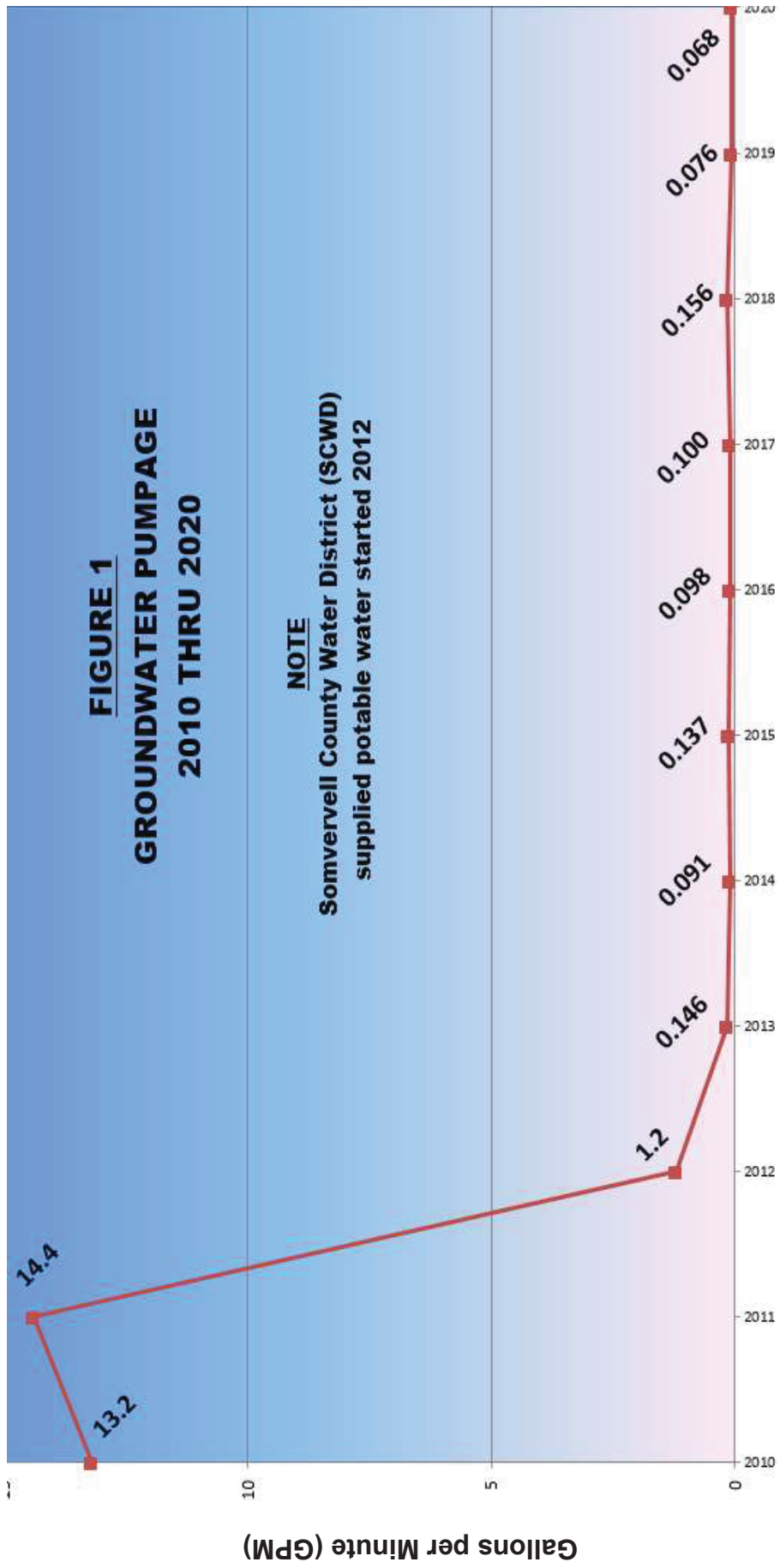
MONTH	WELL OB-3 (G-3)		WELL OB-4 (G-4)	
	DEPTH (1)	MSL (2)	DEPTH (1)	MSL (2)
January	273.55	620.58	280.21	567.67
February	273.55	620.58	288.00	559.88
March	273.41	620.72	288.98	558.90
April	272.81	621.32	286.47	561.41
May	273.50	620.63	286.94	560.94
June	274.33	619.80	289.76	558.12
July	275.36	618.77	293.89	553.99
August	277.13	617.00	297.31	550.57
September	278.41	615.72	301.46	546.42
October	277.85	616.28	299.26	548.62
November	277.75	616.38	298.82	549.06
December	277.25	616.88	296.53	551.35

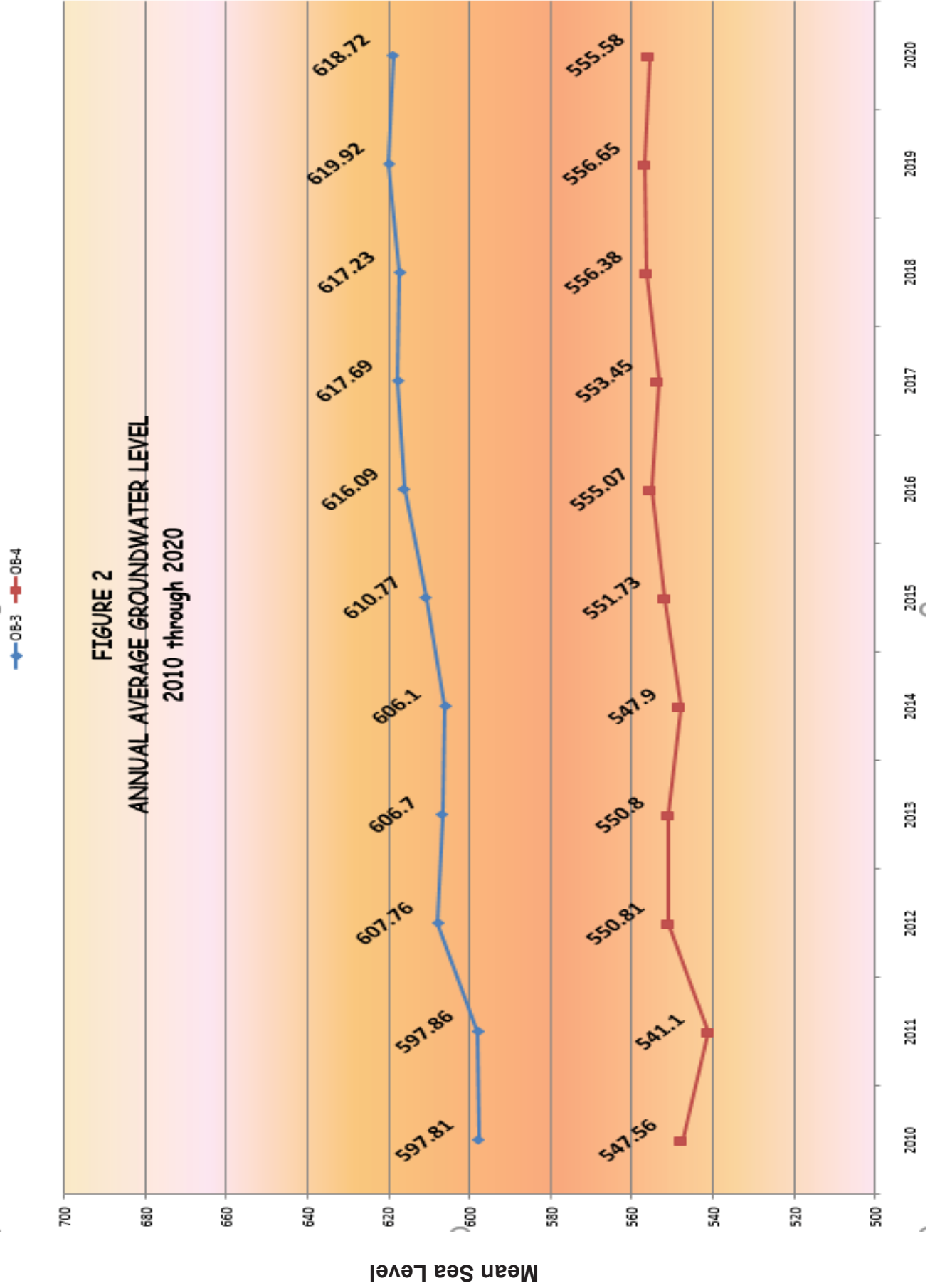
TABLE 2

Annual Production Well Report for Recreation/Training System									
Month	Well Reading Last Day of Month (gallons)	Monthly Well Total (gallons)	Well Cumulative Total (gallons)	YEAR		Gallons Per Day (average)	Monthly GPM	Yearly Cumulative GPM	
				Number Days/Month	Total Days/Year				
December	469100				2020				
January	470600	1500	1500	31		48.39	0.034	0.0336	
February	471700	1100	2600	29		37.93	0.026	0.0301	
March	472500	800	3400	31		25.81	0.018	0.0259	
April	473800	1300	4700	30		43.33	0.030	0.0270	
May	475300	1500	6200	31		48.39	0.034	0.0283	
June	479000	3700	9900	30		123.33	0.086	0.0378	
July	481200	2200	12100	31		70.97	0.049	0.0394	
August	484400	3200	15300	30		106.67	0.074	0.0437	
September	485500	1100	16400	31		35.48	0.025	0.0416	
October	493000	7500	23900	31		241.94	0.168	0.0544	
November	498300	5300	29200	30		176.67	0.123	0.0605	
December	505000	6700	35900	31		216.13	0.150	0.0681	
Totals		35900			366			0.0681	

FIGURE 1
GROUNDWATER PUMPAGE
2010 THRU 2020

NOTE
Somervell County Water District (SCWD)
supplied potable water started 2012





Mean Sea Level