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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
ANNUAL OPERATING REPORT FOR 2001**

Gentlemen:

Attached is the CPSES Annual Operating Report for 2001 prepared and submitted pursuant to guidance provided in C.1.b of U.S. NRC Regulatory Guide 1.16, Revision 4. The attachment also submits the annual Occupational Radiation Exposure Report as required by Technical Specification 5.6.1 contained in Appendix A to the Comanche Peak Steam Electric Station Unit 1 Operating License NPF-87 and Unit 2 Operating License NPF-89.

If you have any questions, please contact Mr. Douglas W. Snow at (254) 897-8448.

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

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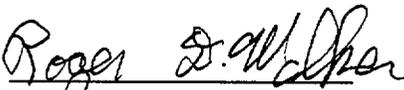
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Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC
Its General Partner

C. L. Terry
Senior Vice President and Principal Nuclear Officer

By: 
Roger D. Walker
Regulatory Affairs Manager

DWS/dws

Attachment

c - E. W. Merschoff, Region IV
D. N. Graves, Region IV
D. H. Jaffe, NRR
Resident Inspectors, CPSES

Mail Original copy of Personnel Exposure & Monitoring Report to:
Ms. M.L. Thomas, REIRS Project Manager
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, DC 20555

CPSES-200200528
Attachment to TXX-02040

COMANCHE PEAK STEAM ELECTRIC STATION

ANNUAL OPERATING REPORT

2001

TXU Generation Company LP

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1.0 SUMMARY OF OPERATING EXPERIENCE

The Comanche Peak Steam Electric Station (CPSES) is a dual unit pressurized water reactor power plant, Unit 1 is licensed at 3411 Megawatt thermal (MWt) and Unit 2 is licensed at 3458 MWt. It is located in Somervell County in North Central Texas approximately 65 miles southwest of the Dallas-Fort Worth Metropolitan area. The nuclear steam supply system was purchased from Westinghouse Electric Corporation and is rated for a 3425 MWt output. On October 16, 2001, Unit 2 implemented Technical Specification Amendment 89 and TRM Rev. 38, increasing the rating of Unit 2 from 3445 MWt to 3458 MWt output.

1.1 CPSES UNIT 1

CPSES Unit 1 achieved initial criticality on April 3, 1990. Initial power generation occurred on April 24, 1990, and the plant was declared commercial on August 13, 1990. Since being declared commercial, CPSES Unit 1 has generated 91,573,905 net Megawatt-hours (MWH) of electricity as of December 31, 2001, with a net unit capacity factor of 79.8% (using MDC). The unit and reactor availability factors were 86.6% and 90.3%, respectively, for the year 2001.

On March 24, 2001, the unit began the power ramp down for its eight refueling outage. The unit entered the refueling outage on March 24.

During the refueling outage, 92 fresh fuel assemblies were loaded for Cycle 9. The refueling outage lasted 29 days and ended on April 22, 2001. Unit 1 was returned to 100% power on April 28, 2001.

During the refueling outage, the major work scope completed included:

- Power range detector replacement
- Replaced flux thimble tube
- Smart Motor Modification on RCP 1-03
- Low Pressure Turbine and Casing Replacement.
- Eddy current inspection of Last Stage Blades for both LP Turbines
- Emergency Diesel Generator replacement of four cylinder liners.
- Emergency Diesel Generators 18 month Inspection
- 100% Eddy Current Testing on all four Steam Generators
- Refueling machine Modifications for increased reliability

Figure 1.1-1 provides the generation profile of the average daily net electrical output of Unit 1 for 2001. Table 1.1-1 is a compilation of the monthly summaries of the operating data and Table 1.1-2 contains the yearly and total summaries of the operating data.

1.2 CPSES UNIT 2

CPSES Unit 2 achieved initial criticality on March 24, 1993. Initial power generation occurred on April 9, 1993, and the plant was declared commercial on August 3, 1993. Since being declared commercial, CPSES Unit 2 has generated 70,138,093 net Megawatt-hours (MWH) of electricity as of December 31, 2001, with a net unit capacity factor of 82.7% (using MDC). The unit and reactor availability factors were 88.3% and 92.0%, respectively, for the year 2001.

There were no refueling outages for this unit in 2001. During this reporting period there were no failures or challenges to the Power Operated Relief Valves or Safety Valves.

On October 16, 2001, Unit 2 implemented Technical Specification Amendment 89 and TRM Rev. 38, increasing the rating of Unit 2 from 3445 MWt to 3458 MWt output.

Figure 1.2-1 provides the generation profile of the average daily net electrical output of Unit 2 for 2001. Table 1.2-1 is a compilation of the monthly summaries of the operating data and Table 1.2-2 contains the yearly and the total summaries of the operating data.

During this reporting period there were no failures or challenges to the Safety Valves.

2.0 OUTAGES AND REDUCTIONS IN POWER

2.1 CPSES UNIT 1

Table 2.1 describes unit operating experience including unit shutdowns and provides explanations of significant dips in average power levels for CPSES Unit 1.

2.2 CPSES UNIT 2

Table 2.2 describes unit operating experience including unit shutdowns and provides explanations of significant dips in average power levels for CPSES Unit 2.

3.0 EXPOSURE AND MONITORING REPORT

The personnel exposure and monitoring report for CPSES is provided in Table 3.0.

4.0 IRRADIATED FUEL INSPECTION RESULTS

4.1 CPSES UNIT 1

The reactor coolant fission product activity levels were carefully monitored throughout Unit 1, Cycle 8. Analysis of the activity levels indicated no leaking fuel throughout the cycle. During refueling outage 1RFO8, visual inspections were performed by inspection personnel from the edge of the spent fuel pool to assess the external condition of the fuel assemblies. Underwater camera inspections of randomly selected fuel assemblies were also performed. During 2001, several Westinghouse fueled plants continued to report fractured fuel assembly top nozzle holddown spring screws. As a result, underwater camera visual inspections of the top nozzle clamps of the only Westinghouse fuel assembly which operated in Cycle 8 was performed in order to observe any indications of fractured holddown spring screw damage. All fuel assemblies inspected appeared to be in good condition with no anomalies observed.

4.2 CPSES UNIT 2

There were no irradiated fuel inspections performed on Unit 2 fuel since Unit 2 did not have a refueling outage in 2001.

4.3 CPSES FUEL POOL

As a result of reports of potential top nozzle separation in certain Westinghouse fuel assemblies, CPSES performed underwater camera visual inspections of 9 of 26 Westinghouse fuel assemblies at CPSES that were identified as potentially susceptible to this condition. The inspections were performed in the CPSES spent fuel pool area in June 2001, and consisted of underwater camera visual inspections of a sample of the top nozzle-to-guide tube bulge joints in each of the 9 assemblies. Also, a Westinghouse review of CPSES spent fuel pool chemistry had concluded that the chemistry data was considered good and that potentially susceptible fuel could be handled normally. The results of the visual inspections showed no significant indications of guide tube sleeve corrosion, which would lead to top nozzle separation.

5.0 OUTAGE RELATED SINGLE RADIOACTIVITY RELEASE OR RADIATION EXPOSURE TO AN INDIVIDUAL THAT ACCOUNTS FOR MORE THAN 10 PERCENT OF ALLOWABLE ANNUAL VALUES

CPSES Units 1 and 2 did not experience any single release of radioactivity greater than 10% of an allowable dose limit during an outage or forced reduction in power of over 20% of designed power level during 2001.

During 2001 CPSES 1 conducted a refueling outage (see section and 1.1). During the outage activities, two individuals received radiation exposure exceeding 10% of an allowable dose limit in a single exposure event. Exposure is tabulated in Table 6.0.

FIGURE 1.1-1
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1
GENERATION PROFILE
AVERAGE DAILY UNIT POWER LEVEL for 2001

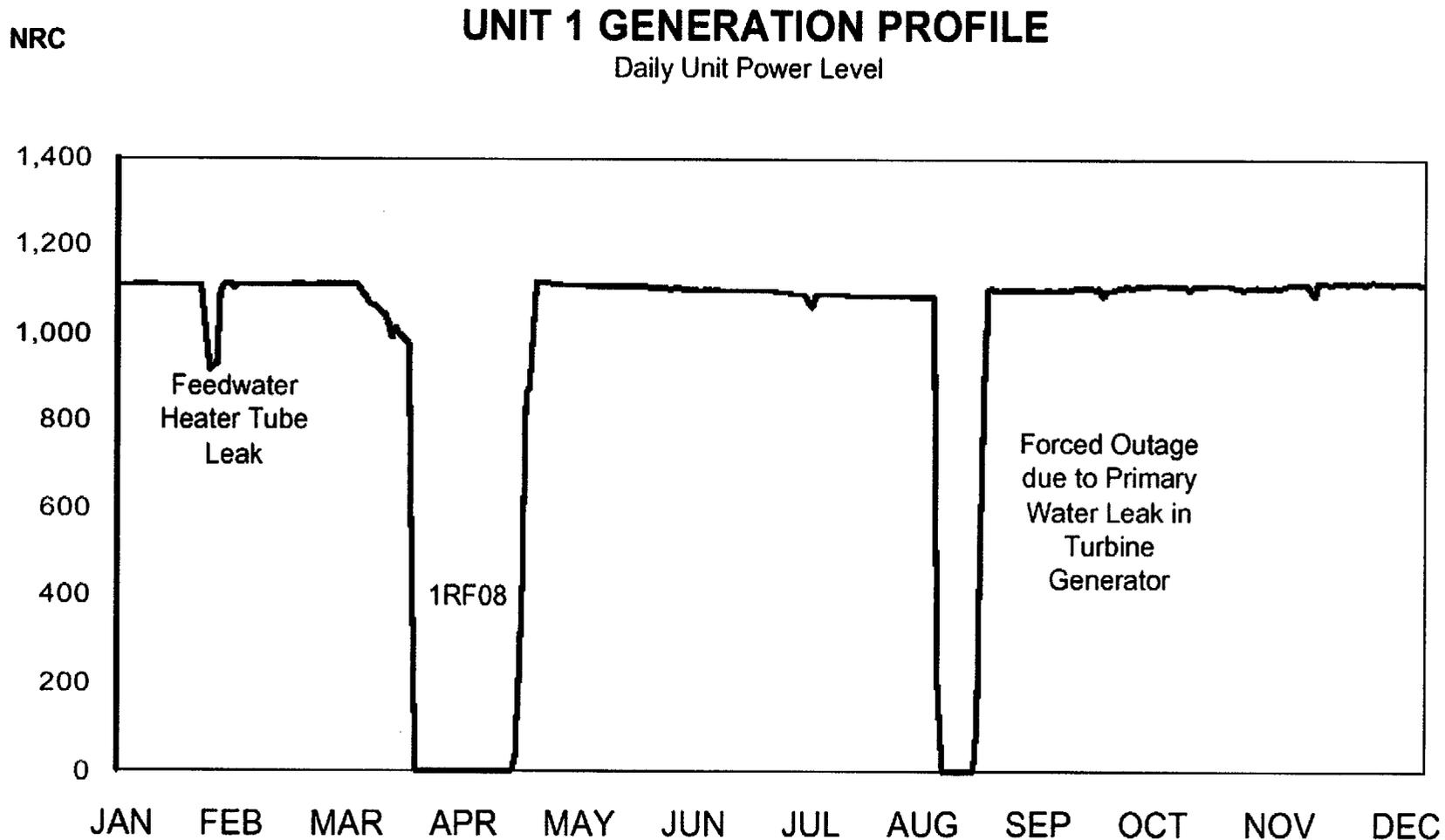


TABLE 1.1-1 (PAGE 1 OF 2)
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1
MONTHLY ELECTRIC POWER GENERATION DATA (2001)

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
Hours RX was Critical	744	672	565.5	224.7	744	720
RX Reserve Shutdown Hours	0	0	0	0	0	0
Hours Generator On-line	744	672	565.6	200.7	744	720
Unit Reserve Shutdown Hours	0	0	0	0	0	0
Gross Thermal Energy Generated (MWH)	2,497,884	2,290,169	1,839,526	509,186	2,535,590	2,453,316
Gross Electric Energy Generated (MWH)	841,880	775,826	621,059	171,025	860,289	825,328
Net Electric Energy Generated (MWH)	809,489	746,416	594,420	156,022	824,791	791,051
RX Service Factor (%)	100.0	100.0	76.0	31.2	100.0	100.0
RX Availability Factor (%)	100.0	100.0	76.0	31.2	100.0	100.0
Unit Service Factor (%)	100.0	100.0	76.0	27.9	100.0	100.0
Unit Availability Factor (%)	100.0	100.0	76.0	29.9	100.0	100.0
Unit Capacity Factor(% , using MDC net)	94.6	96.6	69.5	18.9	96.4	95.5
Unit Capacity Factor(% , using DER net)	94.6	96.6	69.5	18.9	96.4	95.5
Unit Forced Outage Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0
Hours in Month	744	672	744	719	744	720

TABLE 1.1-1 (PAGE 2 OF 2)
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1
MONTHLY ELECTRIC POWER GENERATION DATA (2001)

	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Hours RX was Critical	744	505.4	720	745	720	744
RX Reserve Shutdown Hours	0	238.6	0	0	0	0
Hours Generator On-line	744	463.8	720	745	720	744
Unit Reserve Shutdown Hours	0	0	0	0	0	0
Gross Thermal Energy Generated (MWH)	2,532,595	1,547,417	2,453,381	2,538,204	2,451,413	2,533,493
Gross Electric Energy Generated (MWH)	845,417	513,078	823,704	859,399	829,190	860,315
Net Electric Energy Generated (MWH)	809,808	481,606	789,870	822,826	795,545	822,474
RX Service Factor (%)	100.0	67.9	100.0	100.0	100.0	100.0
RX Availability Factor (%)	100.0	100.0	100.0	100.0	100.0	100.0
Unit Service Factor (%)	100.0	62.3	100.0	100.0	100.0	100.0
Unit Availability Factor (%)	100.0	62.3	100.0	100.0	100.0	100.0
Unit Capacity Factor(% , using MDC net)	94.6	56.3	95.4	96.0	96.1	96.1
Unit Capacity Factor(% , using DER net)	94.6	56.3	95.4	96.0	96.1	96.1
Unit Forced Outage Rate (%)	0.0	37.7	0.0	0.0	0.0	0.0
Hours in Month	744	744	720	745	720	744

TABLE 1.1-2
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1
ANNUAL ELECTRIC POWER GENERATION DATA (2001)

	YEAR	CUMULATIVE
Hours RX was Critical	7,848.7	87,234
RX Reserve Shutdown Hours	238.6	2,871
Hours Generator On-line	8,784	78,665
Unit Reserve Shutdown Hours	0	0
Gross Thermal Energy Generated (MWH)	26,182,174	285,982,131
Gross Electric Energy Generated (MWH)	8,826,510	95,766,621
Net Electric Energy Generated (MWH)	8,444,318	91,573,905
RX Service Factor (%)	89.6	87.4
RX Availability Factor (%)	92.3	90.3
Unit Service Factor (%)	88.8	86.6
Unit Availability Factor (%)	88.8	86.6
Unit Capacity Factor(% , using MDC net)	83.8	79.8
Unit Capacity Factor(% , using DER net)	83.8	79.8
Unit Forced Outage Rate (%)	3.5	3.0

FIGURE 1.2-1
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2
GENERATION PROFILE
AVERAGE DAILY UNIT POWER LEVEL for 2001

UNIT 2 GENERATION PROFILE

Daily Unit Power Level

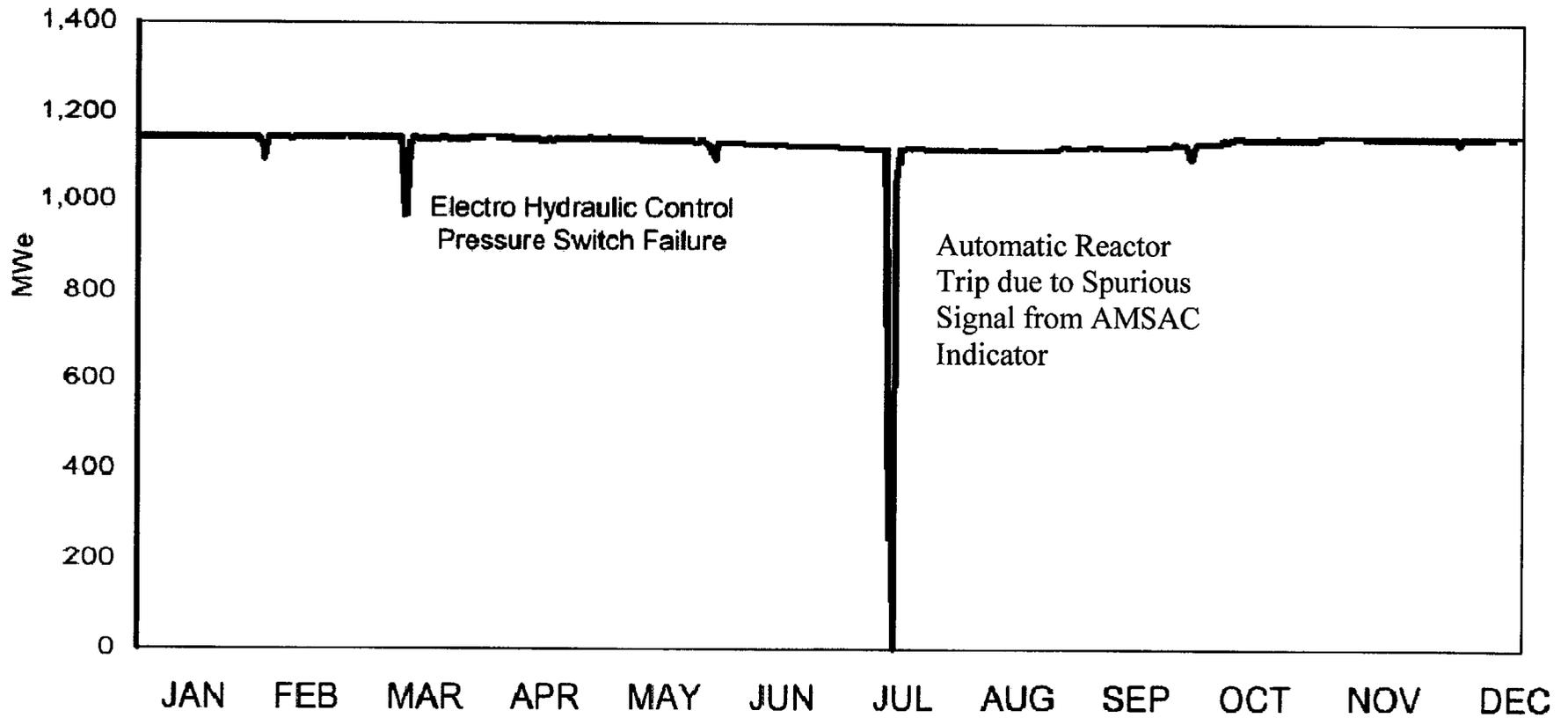


TABLE 1.2-1 (PAGE 1 OF 2)
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2
MONTHLY ELECTRIC POWER GENERATION DATA (2001)

	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
Hours RX was Critical	744	672	744	719	744	720
RX Reserve Shutdown Hours	0	0	0	0	0	0
Hours Generator On-line	744	672	744	719	744	720
Unit Reserve Shutdown Hours	0	0	0	0	0	0
Gross Thermal Energy Generated (MWH)	2,560,733	2,308,855	2,551,289	2,478,854	2,561,153	2,474,729
Gross Electric Energy Generated (MWH)	881,704	795,045	877,443	852,120	878,011	842,391
Net Electric Energy Generated (MWH)	849,500	765,984	844,311	818,892	845,478	810,717
RX Service Factor (%)	100.0	100.0	100.0	100.0	100.0	100.0
RX Availability Factor (%)	100.0	100.0	100.0	100.0	100.0	100.0
Unit Service Factor (%)	100.0	100.0	100.0	100.0	100.0	100.0
Unit Availability Factor (%)	100.0	100.0	100.0	100.0	100.0	100.0
Unit Capacity Factor(% , using MDC net)	99.3	99.1	98.7	99.0	98.8	97.9
Unit Capacity Factor(% , using DER net)	99.3	99.1	98.7	99.0	98.8	97.9
Unit Forced Outage Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0
Hours in Month	744	672	744	719	744	720

TABLE 1.2-1 (PAGE 2 OF 2)
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2
MONTHLY ELECTRIC POWER GENERATION DATA (2001)

	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
Hours RX was Critical	724.6	744	707.52	745	720	744
RX Reserve Shutdown Hours	0	0	0	0	0	0
Hours Generator On-line	715	744	707.52	745	720	744
Unit Reserve Shutdown Hours	0	0	0	0	0	0
Gross Thermal Energy Generated (MWH)	2,431,970	2,560,721	2,478,055	2,565,725	2,486,882	2,569,795
Gross Electric Energy Generated (MWH)	820,754	864,510	841,292	878,006	853,557	882,796
Net Electric Energy Generated (MWH)	787,919	831,509	809,215	844,979	818,754	850,689
RX Service Factor (%)	97.4	100.0	100.0	100.0	100.0	100.0
RX Availability Factor (%)	97.4	100.0	100.0	100.0	100.0	100.0
Unit Service Factor (%)	96.1	100.0	100.0	100.0	100.0	100.0
Unit Availability Factor (%)	96.1	100.0	100.0	100.0	100.0	100.0
Unit Capacity Factor(% , using MDC net)	92.1	97.2	97.7	98.6	98.9	99.4
Unit Capacity Factor(% , using DER net)	92.1	97.2	97.7	98.6	98.9	99.4
Unit Forced Outage Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0
Hours in Month	744	744	720	745	720	744

TABLE 1.2-2
 COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2
 ANNUAL ELECTRIC POWER GENERATION DATA (2001)

	YEAR	CUMULATIVE
Hours RX was Critical	8,740.6	65,503
RX Reserve Shutdown Hours	0	2,366
Hours Generator On-line	8,731.0	65,089
Unit Reserve Shutdown Hours	0	0
Gross Thermal Energy Generated (MWH)	30,028,761	215,590,765
Gross Electric Energy Generated (MWH)	10,267,629	73,148,859
Net Electric Energy Generated (MWH)	9,877,947	70,138,093
RX Service Factor (%)	99.8	88.8
RX Availability Factor (%)	99.8	92.0
Unit Service Factor (%)	99.7	88.3
Unit Availability Factor (%)	99.7	88.3
Unit Capacity Factor(% , using MDC net)	98.1	82.7
Unit Capacity Factor(% , using DER net)	98.1	82.7
Unit Forced Outage Rate (%)	0.3	3.1

TABLE 2.1 (PAGE 1 OF 1)
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1
UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS DURING 2001

NO	DATE	TYPE F: FORCED S: SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTION/COMMENTS
1	010125	F		A	4	At 0819 on January 25, 2001, the unit began downpower to 88% power to repair feedwater heater 1B tube leak. The leak was repaired and the unit returned to 100% power at 0530 on January 28, 2001.
2	010324	S	178.4	C	4	At 1336, on March 24, 2001, the unit initiated a manual reactor trip per procedure to begin 1RF08 refueling outage. The unit ended the month in Mode 6 in 1RF08.
2a	010401	S	518.3	C	4	At 1336, on March 24, 2001, the unit initiated a manual reactor trip per procedure to begin 1RF08 refueling outage. The unit began the month of April in Mode 6 in 1RF08. The refueling was completed and the unit returned to power operations, sync to grid at 1516 on April 22, 2001. The unit returned to 100% power on April 27, 2001 at 1720.
3	010818	F	280.20	A	1	On August 18, 2001 at 0335, the unit began to power down to repair a leak in the primary water system. The unit was taken offline at 0601 August 18, 2001. The leak was isolated to the main generator exciter rotor. The exciter rotor was repaired and replaced and the unit returned to power operations on August 29, 2001 at 2213. The unit returned to full power on August 30, 2001 at 1806.

1) REASON

A: EQUIPMENT FAILURE (EXPLAIN)
B: MAINT OR TEST
C: REFUELING
D: REGULATORY RESTRICTION

E: OPERATOR TRAINING AND LICENSE EXAMINATION
F: ADMINISTRATIVE
G: OPERATIONAL ERROR (EXPLAIN)
H: OTHER (EXPLAIN)

2) METHOD

1: MANUAL
2: MANUAL SCRAM
3: AUTOMATIC SCRAM
4: OTHER (EXPLAIN)

* INDICATES SHUTDOWN HOURS/OTHERWISE "NA" FOR NOT APPLICABLE

TABLE 2.2 (PAGE 1 OF 1)
 COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2
 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS DURING 2001

NO	DATE	TYPE		DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTION/COMMENTS
		F: FORCED	S: SCHEDULED				
1	010718	F		29.00	A	3	On July 18, 2001 at 0759, the unit experienced a turbine trip/ reactor trip from 100% power due to a spurious signal from a short in an AMSAC (Anticipated Transient Without SCRAM Mitigation System Actuation Circuitry) indicator. The AMSAC indicator was repaired and the unit returned to power operations. The unit was critical on July 19, 2001 at 0322 and sync to the grid at 1259. The unit returned to 100% power on July 20 at 0620. During this event the Atmospheric Relief Valves opened slightly in auto. (Reference LER 446-2001-001-00)

1) REASON

- A: EQUIPMENT FAILURE (EXPLAIN)
- B: MAINT OR TEST
- C: REFUELING
- D: REGULATORY RESTRICTION

- E: OPERATOR TRAINING AND LICENSE EXAMINATION
- F: ADMINISTRATIVE
- G: OPERATIONAL ERROR (EXPLAIN)
- H: OTHER (EXPLAIN)

2) METHOD

- 1: MANUAL
- 2: MANUAL SCRAM
- 3: AUTOMATIC SCRAM
- 4: OTHER (EXPLAIN)

* INDICATES SHUTDOWN HOURS/OTHERWISE [NA] FOR NOT APPLICABLE

TABLE 3.0
COMANCHE PEAK STEAM ELECTRIC STATION - UNITS 1 AND 2
2001 PERSONNEL EXPOSURE AND MONITORING REPORT

<u>Work & Job Function</u>	<u>Station</u>	<u>#Personnel</u>		<u>Total</u> <u>Station</u>	<u>Person -</u> <u>Utility</u>	<u>rem</u> <u>Contract</u>
		<u>Utility</u>	<u>Contract</u>			
Reactor Operations & Surveillance						
Maintenance & Construction	147	0	167	0.311	.000	0.299
Operations	315	0	183	2.294	.000	0.171
Health Physics & Lab	56	0	39	1.413	.000	0.098
Supervisory & Office Staff	40	1	9	0.029	.000	0.034
Engineering Staff	162	0	84	0.331	.000	0.063
Routine Plant Maintenance						
Maintenance & Construction	207	0	471	3.618	.000	22.125
Operations	147	0	30	3.290	.000	0.305
Health Physics & Lab	44	0	72	1.158	.000	3.386
Supervisory & Office Staff	18	0	2	0.067	.000	0.147
Engineering Staff	73	0	135	0.917	.000	0.516
In-service Inspection						
Maintenance & Construction	4	0	7	0.110	.000	0.018
Operations	10	0	3	0.426	.000	0.471
Health Physics & Lab	21	0	22	1.374	.000	1.961
Supervisory & Office Staff	0	0	0	0.000	.000	0.000
Engineering Staff	4	0	115	0.009	.000	28.487
*Special Plant Maintenance						
Maintenance & Construction	56	0	195	0.625	.000	22.406
Operations	43	0	10	0.166	.000	0.663
Health Physics & Lab	41	0	7	0.268	.000	0.013
Supervisory & Office Staff	6	0	0	0.021	.000	0.000
Engineering Staff	28	0	56	0.526	.000	6.830
Waste Processing						
Maintenance & Construction	21	0	21	0.081	.000	0.203
Operations	24	0	9	0.283	.000	0.274
Health Physics & Lab	36	0	21	0.619	.000	0.173
Supervisory & Office Staff	0	0	0	0.000	.000	0.000
Engineering Staff	1	0	0	0.017	.000	0.000
Refueling						
Maintenance & Construction	72	0	112	0.771	.000	1.698
Operations	44	0	4	1.091	.000	0.009
Health Physics & Lab	26	0	32	0.698	.000	1.617
Supervisory & Office Staff	3	0	0	0.045	.000	0.000
Engineering Staff	20	1	63	0.320	.001	11.749
Totals						
Maintenance & Construction	507	0	973	5.516	.000	46.748
Operations	583	0	239	7.549	.000	1.893
Health Physics & Lab	224	0	193	5.529	.000	7.247
Supervisory & Office Staff	67	1	11	0.162	.000	0.182
Engineering Staff	288	1	453	2.122	.001	47.644
Grand Totals	1669	2	1869	20.879	0.001	103.714

* PRZ Spray Permanent Shielding, PRZ Compartment permanent platform, Modify S/G Platform access, Grating clamp replacement, Festoon modification/Crane Digital Controls, Spent Fuel Rerack.

TABLE 6.0

2001 COMANCHE PEAK STEAM ELECTRIC STATION - UNITS 1 AND 2

OUTAGE RELATED RADIATION EXPOSURE TO AN INDIVIDUAL FOR A SINGLE
MAINTENANCE ACTIVITY WHICH EXCEEDS 10 PERCENT OF AN ALLOWABLE ANNUAL
DOSE LIMIT*

<u>Maintenance Activity</u>	<u>Department</u>	<u>Individual's Single Event Exposure (mrem)</u>	<u>Total Annual Exposure (mrem)</u>
Steam Generator Nozzle Dam Installation	DES Inc.	715	818
Steam Generator Nozzle Dam Removal	DES Inc.	530	815

*Subject annual dose limit is 5000 mrem deep dose equivalent