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C. Lance Terry
Group Vice President

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

SUBJECT:

COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) -

UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446 ANNUAL OPERATING REPORT FOR 1995

### Gentlemen:

Attached is the CPSES Annual Operating Report for 1995 prepared and submitted pursuant to Technical Specification 6.9.1.2 contained in Appendix A to the Comanche Peak Steam Electric Station Unit 1 Operating License NPF-87 and Unit 2 Operating License NPF-89. This attachment also complies with the annual operating report guidance provided in position C.1.b of U.S. NRC Regulatory Guide 1.16 Revision 4.

If you have any questions, please contact Mr. Jacob M. Kulangara at (214) 812-8818.

Sincerely,

C. L. Terry

By: The

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JMK/jmk Attachment

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## COMANCHE PEAK STEAM ELECTRIC STATION

ANNUAL OPERATING REPORT 1995

TEXAS UTILITIES ELECTRIC COMPANY

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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, each unit licensed at 3411 Megawatt thermal (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.

### 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 39,167,193 net Megawatt-hours (MWH) of electricity as of December 31, 1995, with a net unit capacity factor of 72.2% (using MDC). The unit and reactor availability factors were 85.0% and 87.9%, respectively, for the year 1995.

On March 3, 1995, power reduction was initiated for the unit for its fourth refueling outage and the main turbine was tripped on March 4, 1995, for the outage. Overall, the outage was successful in its implementation with a duration of 46 days. Ninety-six fresh fuel assemblies were loaded for Cycle 5. The unit was returned to service on April 18, 1995.

Figure 1.1-1 provides the generation profile of the average daily net electrical output of Unit 1 for 1995. 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.

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

- Replacement of Main Transformer 1MT2
- Reactor Coolant Pump 1-04 Motor Changeout
- Upgrade of All Four Reactor Coolant Pump Cartridge Seals
- Snubber Functional Testing
- Train A Residual Heat Removal Pump Coupling Design Modification
- Impeller Changeout for All Four Containment Spray Pumps
- Eddy Current Testing of Steam Generators 2 and 3
- Sludge Lancing on All Four Steam Generators
- Maintenance Inspections on Trains A and B Diesel Generators
- Local Leak Rate Testing
- Core Funnel Inspections
- High Pressure Turbine Stop and Control Valve Inspections
- Low Pressure Turbine Stop and Control Valve Testing
- Eddy Current Testing of Low Pressure Turbine Blades
- Repair Groove on Main Generator Shaft
- Reactor Coolant System Check Valve Seat Leakage Testing
- Trains A and B Integrated Test Sequence

## 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 17,858,358 net Megawatt-hours(MWH) of electricity as of December 31, 1995, with a net unit capacity factor of 73.5% (using MDC). The unit and reactor availability factors were 95.7% and 97.0%, respectively, for the year 1995.

On November 24, 1994, the unit was returned to service following its first refueling outage and a refueling outage was neither required nor executed for the unit in the calendar year 1995.

Figure 1.2-1 provides the generation profile of the average daily net electrical output of Unit 2 for 1995. 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.

### 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 REPORT OF RESULTS OF SPECIFIC ACTIVITY ANALYSIS IN WHICH THE PRIMARY COOLANT EXCEEDED THE LIMITS OF TECHNICAL SPECIFICATION 3.4.7

Technical Specification 6.9.1.2.b requires the reporting of results of specific activity analyses in which the primary coolant exceeded the limits of Technical Specification 3.4.7.

CPSES Units 1 and 2 primary coolant did not exceed the limits of Technical Specification 3.4.7 for the calendar year 1995.

## 5.0 IRRADIATED FUEL INSPECTION RESULTS

### 5.1 CPSES UNIT 1

The reactor coolant fission product activity levels were carefully monitored throughout Cycle 4 operation. There were no indications of leaking fuel during steady-state operation or during reactor power changes. Nonetheless, visual inspections were performed to assess the external condition of the fuel assemblies.

Visual inspections (using underwater television cameras) were performed on Unit 1 fuel assemblies which were scheduled for reload in Cycle 5 as the fuel was off-loaded from the reactor into the spent fuel pool. All four faces of each fuel assembly were examined for anomalies, including grid strap damage. The visual inspections revealed no anomalies and no indications of grid strap damage. The assemblies scheduled for discharge were visually scanned by inspection personnel from the edge of the spent fuel pool. All fuel assemblies appeared to be in good condition.

### 5.2 CPSES UNIT 2

CPSES Unit 2 did not enter a refueling outage in 1995 and therefore irradiated fuel examinations were not performed for the unit in calendar year 1995.

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

During 1995, CRSES Units 1 and 2 did not experience any single release of radioactivity or single radiation exposure event to an individual greater than 10% of an allowable dose limit during an outage or a forced reduction in power of over 20% of designed power level.

FIGURE 1.1-1 COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1

## **GENERATION PROFILE**

AVERAGE DAILY UNIT POWER LEVEL

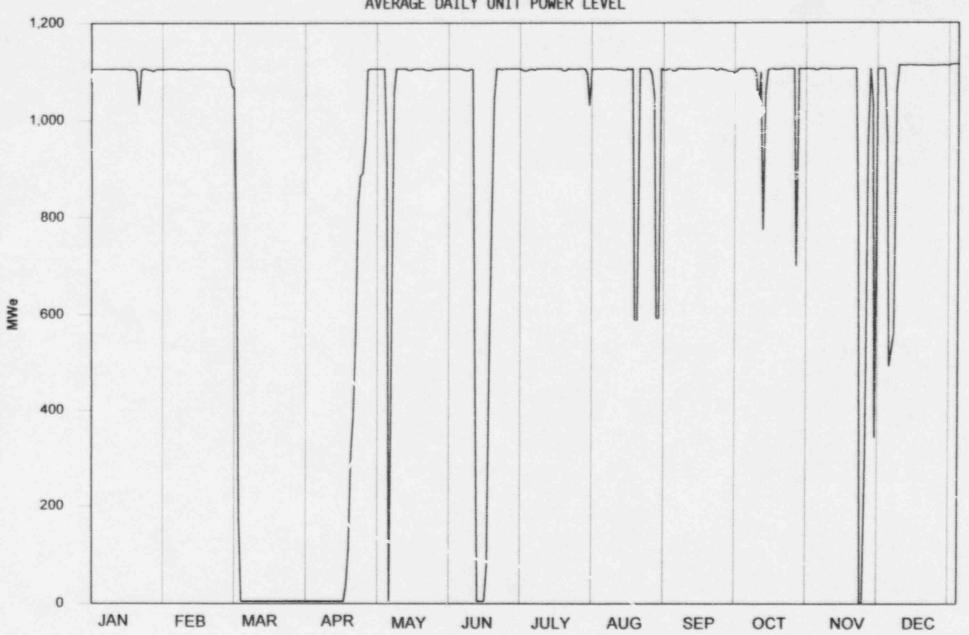


TABLE 1.1-1 (PAGE 1 OF 2)

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1

MONTHLY ELECTRIC POWER GENERATION DATA (1995)

	January	February	March	April	May	June
Hours RX was Critical	744	672	76.0	354	720	603
RX Reserve Shutdown Hours	0	0	0.0	0.0	6.0	117
Hours Generator On-Line	744	672	75	278	717	596
Unit Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	0.0
Gross Thermal Energy Generated (MWH)	2,531,633	2,292,703	215,769	697,466	2,399,707	1,934,088
Gross Electric Energy Generated (MWH)	850,444	770,311	72,661	224,340	804,061	643,121
Net Electric Energy Generated (MWH)	817,252	740.402	65,763	201,915	769,346	609,788
RX Service Factor (%)	100.0	100.0	10.2	49.3	96.8	83.7
RX Availability Factor (%)	100.0	100.0	10.2	49.3	96.8	100.0
Unit Service Factor (%)	100.0	100.0	10.0	38.6	96.4	82.8
Unit Availability Factor (%)	100.0	100.0	10.0	38.6	96.4	82.8
Unit Capacity Factor (%,using MDC net)	95.5	95.8	7.7	24.4	89.9	73.6
Unit Capacity Factor (%,using DER net)	95.5	95.8	7.7	24.4	89.9	73.6
Unit Forced Outage Rate (%)	0.0	0.0	0.0	10.7	3.6	17.2
Hours in Month	744	672	744	719	744	720
Net MDC (MWe) Estimated	1150.0	1150.0	1150.0	1150.0	1150.0	1150.0

TABLE 1.1-1 (PAGE 2 OF 2)

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1

MONTHLY ELECTRIC POWER GENERATION DATA (1995)

	July	August	September	October	November	December
Hours RX was Critical	744	744	720	745	673	744
RX Reserve Shutdown Hours	0.0	0.0	0.0	0.0	47.0	0.0
Hours Generator On-Line	744	744	720	745	665	744
Unit Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	0.0
Gross Thermal Energy Generated (MWH)	2,529,907	2,415,617	2,451,485	2,494,591	2,115,398	2,411,782
Gross Electric Energy Generated (MWH)	837,295	793,438	813,170	838,956	710,103	811,676
Net Electric Energy Generated (MWH)	802,009	758,224	779,394	804,492	677,112	778.049
RX Service Factor (%)	100.0	100.0	100.0	100.0	93.5	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	92.4	100.0
Unit Availability Factor (%)	100.0	100.0	100.0	100.0	92.4	100.0
Unit Capacity Factor (%,using MDC net)	93.7	88.6	94.1	93.9	81.8	90.9
Unit Capacity Factor (%,using DER net)	93.7	88.6	94.1	93.9	81.8	90.9
Unit Forced Outage Rate (%)	0.0	0.0	0.0	0.0	7.6	0.0
Hours in Month	744	744	720	745	720	744
Net MDC (Mwe) Estimated	1150.0	1150.0	1150.0	1150.0	1150.0	1150.0

TABLE 1.1-2

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1

ANNUAL ELECTRIC POWER GENERATION DATA (1995)

	YEAR	CUMULATIVE
Hours RX was Critical	7,539	38,752
RX Reserve Shutdown Hours	164	2,604
Hours Generator On-Line	7.443	38,189
Unit Reserve Shutdown Hours	0.0	0.0
Gross Thermal Energy Generated (MWH)	24,490,147	123,425,253
Gross Electric Energy Generated (MWH)	8,169,576	41,066,203
Net Electric Energy Generated (MWH)	7,803,746	39,167,193
RX Service Factor (%)	86.1	82.1
RX Availability Factor (%)	87.9	87.6
Unit Service Factor (%)	85.0	80.9
Unit Availability Factor (%)	85.0	80.9
Unit Capacity Factor (%, using MDC net)	77.5	72.2
Unit Capacity Factor (%.using DER net)	77.5	72.2
Unit Forced Outage Rate (%)	3.1	4.5
Hours in Reporting Period	8.760	47,201

FIGURE 1.2-1
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2

## **GENERATION PROFILE**

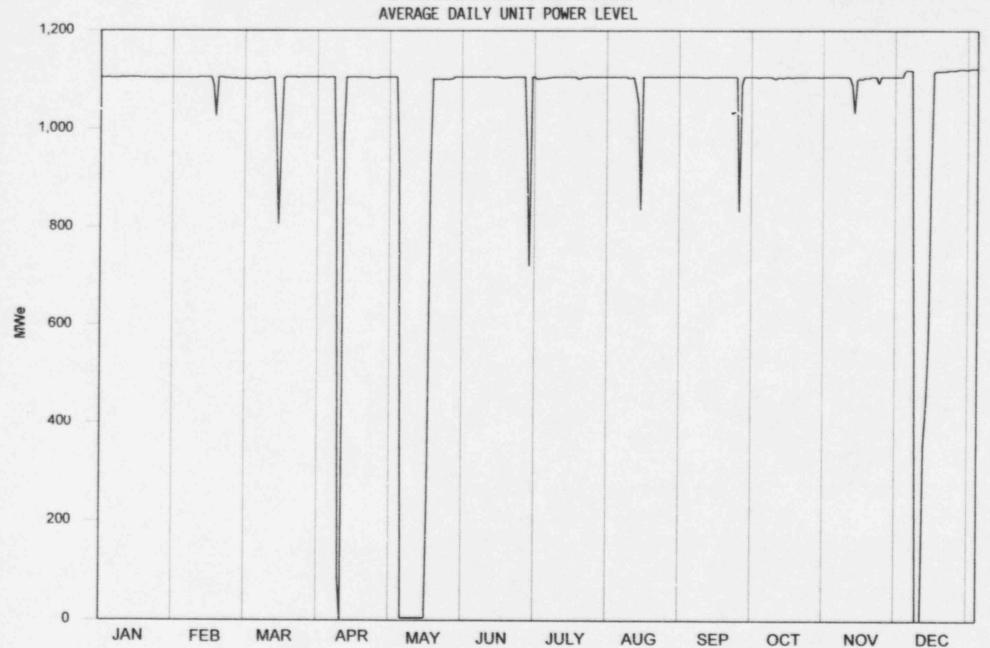


TABLE 1.2-1 (PAGE 1 OF 2)

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2

## MONTHLY ELECTRIC POWER GENERATION DATA (1995)

	January	February	March	<u>April</u>	May	June
Hours RX was Critical	744	672	744	719	486	720
RX Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	0.0
Hours Generator On-Line	744	672	744	691	475	720
Unit Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	0.0
Gross Thermal Energy Generated (MWH)	2,527,414	2,280,718	2,496,290	2,291,023	1,629,662	2,414,758
Gross Electric Energy Generated (MWH)	864,314	779.380	850,218	775,489	524,309	815,433
Net Electric Energy Generated (MWH)	832,504	750,385	815,623	742,238	495.799	783,133
RX Service Factor (%)	100.0	100.0	100.0	100.0	65.3	100.0
RX Availability Factor (%)	100.0	100.0	100.0	100.0	65.3	100.0
Unit Service Factor (%)	100.0	100.0	100.0	96.1	63.8	100.0
Unit Availability Factor (%)	100.0	100.0	100.0	96.1	63.8	100.0
Unit Capacity Factor (%, using MDC net)	97.3	97.1	95.3	89.8	57.9	94.6
Unit Capacity Factor (%, using DER net)	97.3	97.1	95.3	89.8	57.9	94.6
Unit Forced Outage Rate (%)	0.0	0.0	0.0	3.9	5.3	0.0
Hours in Month	744	672	744	719	744	720
Net MDC (MWe) Estimated	1150.0	1150.0	1150.0	1150.0	1150.0	1150.0

TABLE 1.2-1 (PAGE 2 OF 2)

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2

MONTHLY ELECTRIC POWER GENERATION DATA (1995)

	July	August	September	October	November	December
Hours RX was Critical	744	744	720	745	720	669
RX Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	75.0
Hours Generator On-Line	744	744	720	745	720	663
Unit Reserve Shutdown Hours	0.0	0.0	0.0	0.0	0.0	0.0
Gross Thermal Energy Generated (MWH)	2,537,400	2,533,570	2,451,221	2,537,868	2,447,148	2.115.914
Gross Electric Energy Generated (MWH)	850,624	847,873	824,472	864,071	835,182	717.201
Net Electric Energy Generated (MWH)	817,024	814,478	792,462	830,804	803,550	685,402
RX Service Factor (%)	100.0	100.0	100.0	100.0	100.0	89.9
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	89.1
Unit Availability Factor (%)	100.0	100.0	100.0	100.0	100.0	89.1
Unit Capacity Factor (%, using MDC net)	95.5	95.2	95.7	97.0	97.0	80.1
Unit Capacity Factor (%, using DER net)	95.5	95.2	95.7	97.0	97.0	80.1
Unit Forced Outage Rate (%)	0.0	0.0	0.0	0.0	0.0	10.9
Hours in Month	744	744	720	745	720	744
Net MDC (Mwe) Estimated	1150.0	1150.0	1150.0	1150.0	1150.0	1150.0

TABLE 1.2-2

COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2

ANNUAL ELECTRIC POWER GENERATION DATA (1995)

	YEAR	CUMULATIVE
Hours RX was Critical	8,427	17,544
RX Reserve Shutdown Hours	75	2,229
Hours Generator On-Line	8,382	17.322
Unit Reserve Shutdown Hours	0.0	0.0
Gross Thermal Energy Generated (MWH)	28,262,985	55,562,911
Gross Electric Energy Generated (MWH)	9,548,566	18,704,621
Net Electric Energy Generated (MWH)	9.163,402	17,858,358
RX Service Factor (%)	96.2	83.0
RX Availability Factor (%)	97.0	93.6
Unit Service Factor (%)	95.7	82.0
Unit Availability Factor (%)	95.7	82.0
Unit Capacity Factor (%,using MDC net)	91.0	73.5
Unit Capacity Factor (%.using DER net)	91.0	73.5
Unit Forced Outage Rate (%)	1.6	7.3
Hours in Reporting Period	8,760	21,136

## TABLE 2.1 (PAGE 1 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

<u>NO</u>	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
1	950303	S	669.5	С	1	Commenced power reduction for fourth refueling outage (1RF04) at 0800 (CST). Tripped the turbine generator and the unit removed from the grid at 0230 on March 4, 1995. Core off-load completed at 0310 on March 14, 1995.
1A	950401	S	408.0	С	1	Fourth refueling outage continued. Following the refueling outage, reactor entered MODE 1 at 2308 on April 17, 1995 and the unit synchronized to the grid at 0107 on April 18, 1995.
2	950418	F	33.2	A	1	Unit taken off line and entered MODE 2 at 0502, since feed flow could not be established due to a stuck closed Feedwater Bypass Isolation Valve 1FW-0207; On April 19, 1995 at 1309, repaired the valve and unit entered MODE 1. Unit synchronized to the grid at 1415.

## TABLE 2.1 (FAGE 2 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
3	950505	f	26.9	Н	3	At approximately 2008, reactor tripped due to a lightning strike which caused a surge in the rod control power supplies; unit entered MODE 3. On May 16, 1995, unit returned to MODE 1 and synchronized to the grid at 2300. Unit restored to 100% power at approximately 1026 on May 8, 1995. (Reference: LER 445/95-002-00)
4	950611	F	123.9	A	2	At approximately 1202, initiated manual reactor trip due to a loss of both main feed pumps and both condensate pumps. Unit entered MODE 3. Investigation revealed that failed non-safety invertor IVIC2 caused the problem. Also during this event, the Turbine Driven Auxiliary Feedwater (TDAFW) pump tripped on overspeed. Completed

## TABLE 2.1 (PAGE 3 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

<u>NO</u>	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
						repairs to IV1C2 and TDAFW pump and unit entered MODE 1 at 1536 and unit synchronized to the grid at 1558 (Reference: LER 445/95-003-00). Reactor power held at 50% due to water intrusion problems in Main Feedwater pump lube oil storage tank. Unit returned to 100% power on June 19, 1995 at approximately 1440 after correcting lube oil storage tank problem.
5	950818	F	0.0	A	4	At 1611, unit ramped down to 56% power to troubleshoot MFWP-1B speed oscillations. On August 20, at 1140, unit restored to 100% power after replacing the power supplies and controller cards to correct the speed oscillation problem.
6	950825	F	0.0	A	4	At 2333, unit power reduced to 55% to perform more troubleshooting on MFWP-1B due to continuing speed oscillations. Replaced additional cards and completed repairs on MFWP-1B. Unit regained power to 100% level approximately at 0618 on August 28, 1995.

# TABLE 2.1 (PAGE 4 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
7	951009	F	0.0	A	4	At 2243, initiated power reduction to 70% level to correct Heater Drain Pump shutdown from oil cooler leak. On October 11, 1995 unit returned to 100% power at 0720 after replacing the Heater Drain Pump oil cooler.
8	951024	F	0.0	A	4	At 0044. Main Feedwater Pump 1B Recirculation Valve failed open due to a blown control power fuse. The Main Feedwater Pump 1B tripped on low suction pressure. Turbine runback to 700 Mwe to unit power level of approximately 60%. At 0444, the Control Circuit Card fuse replaced and the Main Feedwater Pump restored back in service: subsequently replaced the card for further trouble shooting and unit returned to 100% power at 1550.
9	951119	F	55.0	A	3	Main Feedwater Pump 1A Recirculation Valve failed open at 1735, due to failure of 7300 card resulting from blown fuse on the tracking driver card. During the transient, Main Feedwater Pump 1B tripped on low suction pressure. After manual isolation of the failed Recirculation Valve, the

## TABLE 2.1 (PAGE 5 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
						Steam Generator 1-02 level increased to High-High level causing turbine and reactor trip. After troubleshooting and replacement of the tracking driver card, restored the Main Feedwater Pump 1A Recirculation Valve and unit synchronized to the grid at 1610 approximately, on November 23, 1995. (Reference: LER 445/95-007-00)
10	951125	F	0.0	н	4	At 2030 initiated power reduction to 30% level to restore Steam Generator chemistry due to resin intrusion from Steam Generator Blowdown System. Verified blowdown integrity and maximized blowdown flow for Steam

Generator cleanup. Following cleanup of all Steam Generators, unit restored to 100% power at 0607 on November 28.

1995.

## TABLE 2.1 (PAGE 6 OF 6) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
11	951201	F		A	4	At 1300, unit power level was reduced to approximately 53% to troubleshoot Main Feedwater Pump 1A vibrations. On December 4, 1995 at 1930, initiated power ascension following replacement of the Pump 1A bearings and unit returned to 100% power at 1121 on December 5, 1995.
1) REA	SON					2) METHOD
B: MA C: RE	UIPMENT FAILURE (EXP INT OR TEST FUELING GULATORY RESTRICTION		F: ADMINISTRA	TIVE L ERROR (EXPLA	CENSE EXAMINATION	1: MANUAL 2: MANUAL SCRAM 3: AUTOMATIC SCRAM 4: OTHER (EXPLAIN)

<sup>\*</sup> INDICATES SHUTDOWN HOURS

## TABLE 2.2 (PAGE 1 OF 3) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

<u>NO</u>	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
1	950315	F	0.0	A	4	At 1515, a fault on switchyard breaker caused breaker to open creating electrical transient to Condensate Polishing System resulting in condensate/feedwater transient. At this time, heater drain pump was intentionally shutdown to cause a generator runback in order to stabilize the transient. Power reduced approximately to 70% to repair minor damage. Repair included replacement of bearing on the heater drain pump. Unit restored to full power at approximately 1645 on March 17, 1995.
2	950410	F	28.4	A	1	Latching mechanism on the turbine overspeed device failed. At 0504, the plant was taken off line and maintained in MODE 2 for repairs. Subsequently replaced the overspeed trip device release-mechanism connecting rods and unit returned to MODE 1 and synchronized to the grid. Unit restored full power at 1500 on April 12, 1995.
3	950505	F	26.9	Н	3	At approximately 2009, reactor tripped due to a lightning strike which caused a surge in the rod control power supplies; unit entered MODE 3.  (Reference: LER 445/95-002-00)

# TABLE 2.2 (PAGE 2 OF 3) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
4	950506	S	242.1	A	4	While the reactor in MODE 3, unit entered a scheduled maintenance outage to repair leaks on charging line check valves. Unit entered MODE 5 on May 9, 1935. On May 14, 1995 at 1249, unit entered MODE 4 after completing the check valve repairs. Subsequently unit entered MODE 1 and synchronized to the grid. Unit returned to 100% power at approximately 1803 on May 18, 1995.
5	950627	F	0.0	A	4	Main feedwater pump 2B speed sensor probe failed. At 2230, unit power level was reduced to approximately 57% to allow investigation of the speed sensor failure. Replaced the sensor and initiated power ramp up. Unit returned to 100% power at G219 on June 29, 1995.
6	951205	F	81.0	A	3	At 1311, the reactor tripped on a Steam Generator 2-03 Lo-Lo level due to Main Feedwater Pump 2A speed oscillations. On December 8, 1995 following completion of repair on the Pump 2A speed controller, unit entered MODE 2. Following MODE 1 entry, unit was synchronized to the grid at 2211. (Reference: LER 446/95-004-00)

### TABLE 2.2 (PAGE 3 OF 3) COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 2 UNIT OPERATING EXPERIENCE INCLUDING SHUTDOWNS AND POWER REDUCTIONS

NO	DATE	TYPE F:FORCED S:SCHEDULED	DURATION* (HOURS)	REASON	METHOD OF SHUTTING DOWN THE REACTOR OR REDUCING POWER	CORRECTIVE ACTIONS/COMMENTS
7	951209	F	0.0	Α	4	Unit power level was maintained at 47% power to complete repairs on the Main Feedwater Pump 2B speed controller and on December 12. 1995. unit resumed 100% power at approximately 1800.

#### 1) REASON

B: MAINT OR TEST C: REFUELING

D: REGULATORY RESTRICTION

\* INDICATES SHUTDOWN HOURS

A: EQUIPMENT FAILURE (EXPLAIN) 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)

TABLE 3.0

COMANCHE PEAK STEAM ELECTRIC STATION - UNITS 1 AND 2

## PERSONNEL EXPOSURE AND MONITORING REPORT

	# Personnel (>100 mRem)			Total Person - Rem		
Work & Job Function	Station	Utility	Contract	Station	Utility	Contract
Reactor Operations & Surveillance						
Maintenance & Construction	0	0	8	.023	.000	2.077
Operations	13	0	2	5.922	.073	1.038
Health Physics & Lab	11	0	29	2.700	.071	7.488
Supervisory & Office Staff	0	0	0	.031	.000	.153
Engineering Staff	2	0	1	1.088	.000	.321
Routine Plant Maintenance						
Maintenance & Construction	23	0	172	6.790	.000	54.220
Operations	3	0	6	1.243	.000	1.553
Health Physics & Lab	2	0	5	.801	.000	2.019
Supervisory & Office Staff	0	0	0	.001	.000	.001
Engineering Staff	1	0	6	.949	.045	1.816
Inservice Inspection						
Maintenance & Construction	1	0	125	.462	.000	45.824
Operations	0	0	7	.146	.000	2.679
Health Physics & Lab	4	0	8	1.031	.000	2.543
Supervisory & office Staff	0	0	0	.000	.000	.000
Engineering Staff	0	0	3	.251	.000	1.514
Special Plant Maintenance						
Maintenance & Construction	2	0	15	.698	.000	7.578
Operations	0	0	0	.034	.000	.171
Health Physics & Lab	0	0	0	.001	.000	.043
Supervisory & Office Staff	0	0	0	.000	.000	.000
Engineering Staff	0	0	0	.000	.000	.177
Waste Processing						
Maintenance & Construction	0	0	0	.013	.000	.327
Operations	1	0	1	.676	.000	.774
Health Physics & Lab	4	0	1	.773	. 095	.746
Supervisory & Office Staff	0	0	0	.000	.000	.000
Engineering Staff	0	0	0	.071	.000	.000
Refueling						
Maintenance & Construction	1	0	42	.349	.000	18.388
Operations	4	0	0	.720	.000	.005
Health Physics & Lab	0	0	6	.238	.000	2.282
Supervisory & Office Staff	0	0	0	.000	.000	.000
Engineering Staff	0	0	1	.148	.000	.178
Totals						
Maintenance & Construction	29	0	323	8.336	.000	128.413
Operations	24	0	15	8.742	.073	6.219
Health Physics & Lab	19	1	57	5.544	.166	15.121
Supervisory & Office Staff	0	0	0	.032	.000	.154
Engineering Staff	3	0	12	2.506	. 045	4.006
Grand Totals	75	1	407	25.159	.284	153.913