UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

October 25, 2001

Mr. C. L. Terry
TXU Electric
Senior Vice President & Principal Nuclear Officer
ATTN: Regulatory Affairs Department
P.O. Box 1002
Glen Rose, Texas 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION - NRC INSPECTION REPORT 50-445/01-04; 50-446/01-04

Dear Mr. Terry:

On October 6, 2001, the NRC completed an inspection at your Comanche Peak Steam Electric Station, Units 1 and 2, facility. The enclosed report documents the inspection findings which were discussed on October 4, 2001, with Mr. J. J. Kelly and other members of your staff.

This inspection examined activities conducted under your license as they related to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

There was one finding of very low safety significance (Green) identified in the report.

Since September 11, 2001, Comanche Peak Steam Electric Station has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to TXU Electric. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Claude Johnson, Chief
Project Branch A
Division of Reactor Projects

Dockets: 50-445
50-446
Licenses: NPF-87
NPF-89

Enclosure:
NRC Inspection Report
50-445/01-04; 50-446/01-04

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket Nos:	50-445 50-446
License Nos:	NPF-87 NPF-89
Report No:	50-445/01-04 50-446/01-04
Licensee:	TXU Electric
Facility:	Comanche Peak Steam Electric Station, Units 1 and 2
Location:	FM-56 Glen Rose, Texas
Dates:	July 8 - October 6, 2001
Inspectors:	D. B. Allen, Senior Resident Inspector S. C. Schwind, Resident Inspector R. L. Nease, Senior Reactor Inspector R. W. Deese, Reactor Inspector W. A. Maier, Senior Emergency Preparedness Inspector P. J. Elkman, Emergency Preparedness Inspector J. S. Dodson, Health Physicist
Accompanying Personnel:	B. W. Tindell, Engineering Associate
Approved by:	C. E. Johnson, Chief Project Branch A Division of Reactor Projects

SUMMARY OF FINDINGS

Comanche Peak Steam Electric Station, Units 1 and 2
NRC Inspection Report 50-445/01-04; 50-446/01-04

IR 05000445-01-04, IR 05000446-01-04; on 07/08/2001-10/06/2001; TXU Electric; Comanche Peak Steam Electric Station; Units 1 and 2. Integrated Resident & Regional Report; Personnel Performance During Nonroutine Evolutions

The inspection was conducted by resident inspectors and regional office inspectors. The inspection identified one Green finding. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609 "Significance Determination Process." Findings for which the significance determination process does not apply are indicated by No Color or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Cornerstone: Mitigating Systems

Green. The licensee failed to recognize entry conditions for a short duration Technical Specification action statement due to the Unit 2 Shutdown Bank C rods being below their rod insertion limit.

This issue had an actual impact on safety because the shutdown margin was reduced when rods were inserted below their insertion limit and operators did not recognize the requirement to verify adequate shutdown margin until prompted by the inspectors. This finding was characterized under the significance determination process as having very low safety significance because the actual position of Shutdown Bank C rods had minimal impact on the shutdown margin and an adequate shutdown margin remained (Section 1R14.1).

B. Licensee Identified Violations

Violations of very low significance which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in section 4OA7 of this report.

Report Details

Summary of Plant Status

Both units began the report period at 100 percent power.

Unit 1 was shutdown on August 18, 2001, to repair a leak in the main generator's primary water system. The Unit was returned to 100 percent power on August 30, after replacing the exciter rotor.

Unit 2 received an automatic reactor trip on July 18, 2001. A faulty light socket in the anticipated transient without scram mitigation system actuation circuitry (AMSAC) generated an invalid actuation signal and caused a turbine and reactor trip from 100 percent power. The unit was returned to 100 percent power on July 20.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown

a. Inspection Scope

The inspectors conducted partial inspections of the following risk-significant systems to verify that they were in their proper standby alignment. In addition, the inspectors evaluated the effectiveness of the licensees problem identification and resolution program in resolving issues which could increase event initiation frequency or impact mitigation system availability.

- Unit 1, Train A containment spray
- Unit 1, Train B emergency diesel generator
- Unit 2, Train B safety injection

b. Findings

No findings of significance were identified.

.2 Detailed Semi-Annual Walkdown

a. Inspection Scope

The inspectors conducted a detailed semi-annual inspection of the Unit 2, Train B emergency diesel generator using System Operating Procedure SOP 609B, "Diesel Generator System," Revision 14, to ascertain if the system and its operating procedures were in accordance with the design and licensing bases of the system. Outstanding maintenance work requests and design issues were reviewed to determine if any impacted the system's ability to operate as designed.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

.1 Routine Fire Area Walkdowns

a. Inspection Scope

The inspectors toured the following areas to assess the licensee's control of transient combustible materials, the material condition and lineup of fire detection and suppression systems, the material condition of manual fire equipment and passive fire barriers, and evaluated the effectiveness of compensatory measures for degraded equipment:

- Fire Zone 1SB4 (Unit 1 safeguards building 790' corridor)
- Fire Zones SI12a and SI12b (Unit 1 diesel generator and fuel oil day tank rooms, Train B)
- Fire Area EC, which includes:
  - Unit 2 battery room 2-2 (Fire Zone 1EC48)
  - Unit 1 battery room 1-2 (Fire Zone 1EC49)
  - Units 1 and 2 Train B inverters (Fire Zones 1EC50, 1EC51)
- Fire Area EH, which includes:
  - Units 1 and 2 Train A inverters (Fire Zones 1EH52, 1EH53)
  - Unit 2 battery room 2-1 (Fire Zone 1EH55)
  - Unit 1 battery room 1-1 (Fire Zone 1EH56)
- Fire Area EA, in part, including:
  - Unit 1 inverter & battery room corridor (Fire Zone 1EA54)
  - Unit 2 inverter & battery room corridor (Fire Zone 1EA57)
  - Unit 1 UPS and distribution room Train C (Fire Zone 1EA58)
  - Unit 2 battery room 2-3 (Fire Zone 1EA59)
  - Unit 1 battery room 1-3 (Fire Zone 1EA60)
  - Unit 2 UPS and distribution room Train C (Fire Zone 1EA61)
- Fire Zone 1AA153 (Unit 1 safety chiller room)
- Fire Zone 1AA154 (Unit 2 safety chiller room)
- Fire Zone 1W8104 (station service water intake structure)
- Fire Zone 1SB144 (Unit 1 nonradiological pipe penetration room)

b Findings

No findings of significance were identified.

.2 Annual Fire Drill

a. Inspection Scope

The inspectors observed the plant fire brigade during a fire drill on September 24, 2001, to assess its ability to fight fires. Observations focused on the following aspects of the drill:

- Material condition, availability, and use of fire fighting equipment
- Command and control of the fire brigade
- Communications between the fire brigade and the control room
- Fire fighting strategy
- Control of the drill and postdrill critique

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

.1 External Flood Protection

a. Inspection Scope

The inspector reviewed the Final Safety Analysis Report regarding flooding from external sources and Design Basis Document DBD-CS-071, “Probable Maximum Flood Level,” Revision 5 to verify that the assumption made in the external flooding analysis remained valid.

b. Findings

No findings of significance were identified.

.2 Internal Flood Protection

a. Inspection Scope

The inspectors conducted an inspection of flood protection measures at Comanche Peak. This included a review of flood analysis documentation and calculations to determine areas in the plant susceptible to flooding from internal sources. Based on that review and a review of the probabilistic risk assessment, a walkdown of the Unit 1 and Unit 2 containment spray pump rooms was performed to assess the adequacy of flood protection measures.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance (71111.07)

a. Inspection Scope

The inspector observed the inspection and cleaning of the Unit 2 Component Cooling Water Heat Exchanger 2-01. The inspector also verified that the performance criteria used to determine when this heat exchanger should be cleaned were sufficient to ensure operability.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalifications (71111.11)

a. Inspection Scope

The inspectors observed operator performance during a scenario in the control room simulator and attended the posttraining critique. Simulator observations concentrated on the conduct of operations, procedure usage, command and control and previously identified performance deficiencies during similar scenarios. The inspectors also compared the simulator control board configuration with the actual control room board configuration for consistency.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors independently verified that the licensee properly implemented 10 CFR 50.65, “Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” for the following equipment performance problems:

- Containment spray relief Valve 1CT-0056 lifted during start of containment spray Pump 1-03 (Smart Form 2001-001368-00)

- Unit 2 Diesel Generator A frequency swings during start for monthly surveillance (Smart Form 2001-001815-00)

- Unit 2 residual heat removal Pump A containment sump suction isolation valve motor operator failure (Smart Form 2001-001386-00)

- Unit 1 pressurizer safety Valve C outlet temperature high alarm (Smart Form 2001-001233-00)
- Unit 2 accumulator liquid space sample line relief valve leakage (Smart Form 2001-001627-00)
- Failures of diesel generator starting air pressure annunciator alarm pressure switches (Smart Forms 2001-000272-00, 2001-000852-00, 2001-001248-00)
- Broken sight glass on Pressure Switch 2-PS-3422-1E which controls diesel generator starting air Compressor 2-03 (Smart Form 2001-000184-00)
- Broken cylinder petcock on diesel Generator 1-02 (Smart Form 2001-001866-00)
- Condition monitoring of floor drain backwater check Valves 2-FD-0135, 2-FD-0148, and 2-FD-0207 (Smart Form 2001-002369-00)

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)

a. Inspection Scope

The inspectors independently verified that the licensee performed risk assessments related to the following planned and emergent maintenance activities as required by 10 CFR 50.65 (a)(4), “Monitoring the Effectiveness of Maintenance at Nuclear Power Plants.”

- Unit 2, Train A K630A replacement due to failure to latch during OPT 461B
- Unit 2, Train B diesel generator annunciator power supply failure and replacement concurrent with switchyard work and station service water pump surveillance
- Continued operation with the Unit 2 power operated relief Valve 2-PCV-455A isolated
- Unit 1 feed flow Transmitter 1-FT-520 logic card replacement
- Maintenance on 138 Kv Breaker 7040 (supply to the Unit 2 Class 1E Transformer XST1)

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Nonroutine Evolutions (71111.14)

.1 Logic Card Failure in the Unit 2 Rod Control System

a. Inspection Scope

On July 13, 2001, the inspector observed the Unit 2 operators respond to a failure in the rod control system which resulted in Shutdown Bank C being inserted into the reactor core two steps below the shutdown bank rod insertion limit. The inspectors evaluated the use of the abnormal procedures and adherence to Technical Specifications.

b. Findings

The inspectors identified a Green finding when the licensee failed to recognize entry conditions for a short duration Technical Specification action statement due to the Unit 2 Shutdown Bank C rods being below their rod insertion limit.

On July 13, 2001, the licensee was performing Operations Test Procedure (OPT) 106B, "Control Rod Exercise", Revision 7, when a failure in the rod control system resulted in the Unit 2 Shutdown Bank C rod being inserted two steps below their rod insertion limit. Shutdown Bank C was initially positioned at 222 steps but when the in/hold/out switch was taken to the out position, the bank was inserted two steps to the 220 step position. The rod insertion limit for shutdown banks was 222 steps.

The inspectors entered the control room approximately 40 minutes after this occurred and questioned operators if they had entered any Technical Specification action statements. When operators stated that no action statements were applicable, the inspectors directed their attention to Technical Specification 3.1.5 which required shutdown margin to be verified within one hour if a shutdown bank was below its rod insertion limit. The operators agreed that this was applicable and were able to demonstrate adequate shutdown margin within the one hour time limit. Subsequent troubleshooting attributed the incorrect rod motion to two failed logic cards in the rod control system. These cards were replaced and the rod control system was tested satisfactorily.

Since the licensee was able to complete the required Technical Specification action statement within the allotted time, no violation of Technical Specifications occurred. However, this issue had an actual impact on safety because the shutdown margin was reduced when rods were inserted below their insertion limit and operators did not recognize the requirement to verify adequate shutdown margin. In this context, the shutdown banks were considered to be a mitigating system since their function is to provide adequate shutdown margin to render the core subcritical following an accident. However, only the mitigation systems cornerstone was affected. Since the actual position of the shutdown bank had minimal impact on the shutdown margin and adequate shutdown margin remained, this finding did not represent an actual loss of safety function. Since this finding did not screen as potentially risk significant due to a

seismic, fire, flooding, or severe weather initiating event, the phase 1 significance determination process characterized the finding to be of very low safety significance (Green).

.2 Unit 2 Trip

a. Inspection Scope

On July 18, 2001, the inspectors observed the Unit 2 operators' response to the turbine trip and reactor trip from 100 percent power as a result of an invalid AMSAC actuation. The inspectors evaluated the command and control of personnel activities, the use of appropriate procedures, and the effectiveness of communications following the plant transient. The inspector reviewed the posttrip report, prepared in accordance with ODA-108, "Post RPS/ESF Actuation Evaluation," Revision 7, and documented in Smart Form 2001-1704. The inspectors also observed portions of the subsequent Unit 2 startup and evaluated the operators use of procedures and compliance with Technical Specifications.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors selected operability evaluations conducted by the licensee during the report period involving risk-significant systems or components to review. The inspectors evaluated the technical adequacy of the licensee's operability determination, verified that appropriate compensatory measures were implemented, and verified that the licensee considered all other pre-existing conditions, as applicable. Additionally, the inspectors evaluated the adequacy of the licensee's problem identification and resolution program as it applied to operability evaluations. Specific operability evaluations reviewed are listed below.

- QTE 2110-001721-01-00: Containment Isolation Phase A Slave Relay 2-K630-A failed to latch during OPT-461B
- QTE 2001-001627-01-01: 2-PS-0500 (Unit 2 accumulator liquid space sample line relief valve) was found leaking at 120 drops per minutes
- QTE 2001-001700-01-00: Containment Pressure Transmitter 2-PT-0936 failed sensor time response testing
- Eval 2001-001980-02-00: loss of oil from residual heat removal Pump 1-02 lower bearing

- Smart Form 2001-001870-00: indicated Unit 2 power operated relief valve seat leakage

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17B)

a. Inspection Scope

The inspectors reviewed procedures governing plant modifications to evaluate the effectiveness of the programs for implementing modifications to risk-significant systems, structures, and components, such that these changes did not adversely affect the design and licensing basis of the facility. The inspectors also reviewed six permanent plant modification packages and associated documentation, such as 10 CFR 50.59 review screens and safety evaluations, to verify that they were performed in accordance with plant procedures. Procedures and permanent plant modifications reviewed are listed in Attachment 1.

The inspectors interviewed the cognizant design and system engineers for the identified modifications as to their understanding of the modification packages.

The inspectors evaluated the effectiveness of the licensee's corrective action process to identify and correct problems concerning the performance of permanent plant modifications. In this effort, the inspectors reviewed corrective action documents entitled, Smart Forms (listed in Attachment 1) and the subsequent corrective actions pertaining to licensee identified problems and errors in the performance of permanent plant modifications.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspector witnessed or reviewed the results of postmaintenance testing for the following maintenance activities:

- Centrifugal Charging Pump 1-01 speed increaser inspection
- Replacement of Relay TD-2 in Diesel Generator 1-01
- Voltage regulator replacement in Diesel Generator 1-01
- Logic card replacement in feed flow Instrument 1-FT-520

- Speed sensor replacement in Diesel Generator 2-01
- Limit switch fingerbase replacement for containment sump to RHR Pump 2-01 suction isolation Valve 2-8811A

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors evaluated the adequacy of periodic testing of safety-related plant equipment including aspects such as preconditioning; the impact of testing during plant operations; the adequacy of acceptance criteria including test frequency and test equipment accuracy, range, and calibration; procedure adherence; record keeping; the restoration of standby equipment; test failure evaluations; jumper control (if applicable); and the effectiveness of the licensee's problem identification and correction program. The following surveillance test activities were observed by the inspectors:

- Unit 1 Train B motor driven auxiliary feedwater pump (OPT 206A, Revision 19) coincident with Slave Relay K640 actuation test (OPT 473A, Revision 8)
- Unit 1, Train B solid state protection system logic test (OPT 448A, Revision 3)
- Unit 1, Train A diesel generator monthly surveillance (OPT 214A, Revision 14)
- Unit 2, Train B safety injection pump (OPT 204B, Revision 8)
- Class 1E electrical systems operability, Section 8.1, offsite transmission network status (OPT 215, Revision 11)
- Unit 2, Train A residual heat removal pump (OPT 203B, Revision 10)

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors walked down and reviewed the following temporary plant modifications:

- Single cell battery charger attached to Cell 9 of station Battery 2BTED2
- Installation of gantry crane for spent fuel pool rerack project
- Temporary duct attached to the fuel building HVAC system

b. Findings

No findings of significance were identified.

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

The inspectors reviewed the objectives and scenario for the 2001 exercise to determine if the exercise would acceptably test major elements of the emergency plan. The scenario included equipment and electrical power failures, a steam generator tube rupture, core damage, and a radiological release to demonstrate the licensee's capabilities to implement the emergency plan.

The inspectors evaluated exercise performance by focusing on the risk-significant activities of classification, notification, protective action recommendations, and assessment of offsite dose consequences in the following emergency response facilities:

- Simulator control room
- Technical support center
- Operations support center
- Emergency operations facility

The inspectors also assessed personnel recognition of abnormal plant conditions, the transfer of emergency responsibilities between facilities, communications, protection of emergency workers, emergency repair capabilities, and the overall implementation of the emergency plan to verify compliance with the requirements of 10 CFR 50.47(b) and 10 CFR Part 50, Appendix E.

The inspectors attended the postexercise critiques in each of the above facilities to evaluate the initial licensee self-assessment of exercise performance. The inspectors also attended a subsequent presentation of critique items to plant management.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed two control room simulator scenarios which were conducted for the purpose of emergency preparedness evaluation. Observations concentrated on the three opportunities for emergency classification and offsite notification which were presented to the crews during each scenario.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS2 ALARA Planning and Controls (71121.02)

a. Inspection Scope

The inspector interviewed radiation workers and radiation protection personnel involved in high dose rate and high exposure jobs in the radiologically controlled areas during normal operations. Independent radiation surveys of selected work areas within the radiologically controlled areas were conducted. The following items were reviewed and compared with regulatory requirements to determine whether the licensee had an adequate program to maintain occupational exposure as low as is reasonably achievable (ALARA):

- ALARA program procedures
- Processes used to estimate and track exposures
- Plant collective exposure history for the past 3 years, current exposure trends, and 3-year rolling average dose information
- Five radiation work permit (RWP) packages (2001-1215, 2001-1301, 2001-1305, 2001-1400, and 2001-1600) for work activities that had resulted in the highest personnel collective exposures during the inspection period
- One job (RWP 2001-0300, rerack Units 1 and 2 spent fuel pools) was observed and tours were conducted in various areas of the plant
- Use of engineering controls to achieve dose reductions including the permanent shielding package for the Unit 1 pressurizer spray line and ten temporary shielding requests (TSR 2001-01, 2001-02, 2001-03, 2001-04, 2001-05, 2001-06, 2001-07, 2001-08, 2001-13 and 2001-15)
- Exposures of selected work groups (radiation protection, maintenance services, Westinghouse, and mechanical maintenance Smart Team 2)
- Hot spot tracking and reduction program
- Plant related source term data, including source term control strategy
- Radiological work planning

- One quality audit (EVAL-2001-036) and two self-assessments (SA-2001-019 and 2001-023)

- Selected corrective action documents involving the ALARA program and radiation worker practice deficiencies (Smart Forms 2000-3407, 2000-3354, 2001-0558, 2001-0630, 2001-0679, 2001-0729, 2001-0755, 2001-0850, 2001-0881, 2001-0968, 2001-1019, 2001-1069, 2001-1352, 2001-1646, 2001-1883, and 2001-1884)

- ALARA Committee meeting minutes (2001-01, 2001-02, 2001-03, 2001-04, and 2001-05)

- Declared pregnant worker dose monitoring controls

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Mitigating Systems Cornerstone

a. Inspection Scope

The inspector reviewed a sample of performance indicator data submitted by the licensee regarding the mitigating systems cornerstone to determine its accuracy and completeness. The sample included data on safety system unavailability for emergency AC power system, high pressure injection system, auxiliary heat removal system, and residual heat removal system taken in April, May, and June, 2001, for both units. Documents reviewed included reactor operator logs and limiting condition for operation action requirement logs. Licensee event reports for January through July, 2001, were reviewed to identify safety system functional failures.

b. Findings

No findings of significance were identified.

.2 Drill and Exercise Performance

a. Inspection Scope

The inspectors verified the licensee's reported results for the drill and exercise performance indicator by reviewing a sample of records for exercises, actual declared emergencies, drills, and simulator training scenarios conducted from the third calendar quarter 2000 through the second calendar quarter 2001 to verify the accuracy of the reported performance indicator data. The inspectors evaluated licensee performance

indicator collection and reporting practices against the standards of NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

.3 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors verified the licensee's reported results for the emergency response organization drill participation performance indicator from the third calendar quarter 2000 through the second calendar quarter 2001 by reviewing drill participation attendance records for a sample of eight key emergency responders. The inspectors evaluated licensee performance indicator collection and reporting practices against the standards of NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

.4 Alert and Notification System Reliability

a. Inspection Scope

The inspectors verified the licensee's reported results for the alert and notification system reliability performance indicator by reviewing a sample of offsite siren test results performed from the third calendar quarter 2000 through the second calendar quarter 2001 to verify the accuracy of the reported performance indicator data. The inspectors evaluated licensee performance indicator collection and reporting practices against the standards of NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 (Closed) Licensee Event Report 50-446/01-001-00, "Reactor Trip Due to Spurious Turbine Trip Signal Originating From AMSAC"

The inspectors reviewed this event and identified no violations of NRC requirements. The inspectors documented their review of the event in Section 1R14.2 of this report. The licensee documented this event in their corrective action program as Smart Form 2001-001704-00.

4OA6 Meetings, including Exit

Exit Meeting Summary

On September 13, 2001, the resident inspectors presented the inspection results to Mr. Lance Terry, Senior Vice President, and other members of his staff who acknowledged the findings.

The results of the radiation safety inspection were presented on September 13, 2001, to Mr. Mike Blevins, Vice President, and other members of licensee management who acknowledged the findings.

The results of the emergency preparedness inspection were presented on August 24, 2001, to Mr. Lance Terry, Senior Vice President and Principal Nuclear Officer, and other members of licensee management who acknowledged the findings.

In each case, the inspectors also asked the licensee whether any materials examined during the inspections should be considered proprietary. No proprietary information was identified.

4OA7 Licensee Identified Violations. The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as noncited violations (NCV).

If you deny this noncited violation, you should provide a response with the basis of your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001: with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at the Comanche Peak Steam Electric Station.

NCV Tracking Number	Requirement Licensee Failed to Meet
50-445; 446/0104-01	10 CFR 20.1501(a) states, in part, that each licensee shall make or cause to be made surveys that are reasonable under the circumstances to evaluate the magnitude and extent of radiation levels and concentrations or quantities of radioactive material. In the following three instances, the licensee failed to properly survey tools and equipment and determine the quantities of radioactive material present. On March 27, 2001, the licensee discovered a Chicago fitting containing 2000 counts per minute of radioactive material outside the radiologically controlled area. The fitting caused the yard access small article monitor to alarm when personnel were exiting the yard access area. This event is described in the licensee's

corrective action program, reference Smart Form SMF 2001-000630. On April 1, the licensee identified that eddy current equipment was not properly surveyed prior to decontamination. The label indicated contamination levels of 20,000 disintegrations per minute per 100 square centimeters when the actual contamination levels were mrad smearable. This event is described in the licensee's corrective action program, reference Smart Form SMF 2001-000729. On May 24, the licensee identified that a tool removed from the clean tool room contained 7000 counts per minute of radioactive material. The tool caused an alarm on the personnel monitor at the Alternate Access Point located outside the radiologically controlled area. This event is described in the licensee's corrective action program, reference Smart Form SMF 2001-001352. These three examples are being treated as a noncited violation.

The safety significance of this violation was determined to be very low by the Occupational Radiation Safety Significance Determination Process because there was no over exposure, no substantial potential for over exposure, and the ability to assess dose was not compromised.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Aldredge, Supervisor, ALARA
B. Bird, Manager, Plant Support
M. Blevins, Vice President, Nuclear Operations
D. Bozeman, Manager, Emergency Planning
S. Bradley, Supervisor, Radiation Protection
J. Curtis, Manager, Radiation Protection
D. Davis, Manager, Maintenance
C. Dupre, Mod Team Engineer
S. Ellis, Manager, Operations
J. Finneran, Manager, Mod Team 2
T. Franch, Consultant
T. Evans, Manager, Modifications
R. Garcia, Supervisor, Radiation Protection
R. Gilada, Senior Engineer, Joint Engineering Team
A. Hall, Manager, Operations Overview
S. Harvey, Manager, Prompt Team
T. Hope, Manager, Regulatory Compliance
J. Kelley, VP, Nuclear Engineering and Support
J. Meyer, Manager, Engineering Analysis
J. Mcgill, Consultant
D. Moore, Plant Manager
C. Montgomery, Manager, Mod Team 1
D. Pendleton, Executive Assistant
M. Sunseri, Manager, System Engineering
C. Terry, Senior Vice President
D. Wilder, Manager, Radiological and Industrial Safety
C. Wilkerson, Senior Engineer, Licensing
L. Windham, Senior Engineer, Joint Engineering Team
G. Yezefski, System Engineer

NRC

D. Allen, Senior Resident Inspector
S. Schwind, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed During this Inspection

50-445;446/0104-01	NCV	Failure to survey (Section 4OA7)

Closed

50-446/01-001-00	LER	Reactor trip due to spurious turbine trip signal originating from AMSAC (Section 4OA3.1)

DOCUMENTS REVIEWED

Smart Forms

SMF-1999-001458-00
SMF-1999-002716-00
SMF-2000-000058-00
SMF-2000-000174-00

Calculations

NUMBER	TITLE	REVISION
SI-2-C610	Supplemental calculation for safety injection system pressure of 2000 psi	0
CS-CA-5700-5100	Special ⅛" diameter tubing stress analysis for TM 2-96-008	0 CCN 1
IMT-NEQ-MS34-06	Equipment nozzle load exceedance evaluation	4

Permanent Plant Modifications

NUMBER	TITLE	REVISION
DM 98-061	Convert TM 2-96-008 to a permanent installation (SI relief system)	0
FDA-00-2822-01	Replace diesel Generator 2EG2 exciter control Relay K1	1 CCN 3
MCA-00-0021-00	Decrease the flow noise and pipe vibration of the Unit 1 and Unit 2 motor driven auxiliary feedwater pumps	1
MCA-00-0570-01	Auxiliary feedwater system - pipe strain	1
MCA-1999-1040-01	Removal of rusted silencer plates within the emergency diesel generator mufflers	1
FDA-2000-1727-01	Component cooling water rerouted to cool overheating instrument air compressor	1

Procedures

NUMBER	TITLE	REVISION
STA-422	Processing Smart Forms	16
STA-606	Control of Maintenance and Work Activities	25
STA-707	10CFR50.59 Reviews	15
STA-716	Modification Process	15
SOP-201B	Safety Injection System Operating Procedure	4
EPP-201	Assessment of Emergency Action Levels, Emergency Classification and Plan Activation	11
EPP-204	Activation and Operation of the Technical Support Center	14
EPP-205	Activation and Operation of the Operations Support Center	11
EPP-206	Activation and Operation of the Emergency Operations Facility	14
EPP-303	Operation of Computer-Based Emergency Dose Assessment System	12
EPP-304	Protective Action Recommendations	16

Other Documents

PM 327470 Preventive maintenance for rusting of diesel generator mufflers

Comanche Peak Steam Electric Station Emergency Plan, Revision 29

2001 Comanche Peak Steam Electric Station Dress Rehearsal Exercise Scenario and Report
Drill and Exercise Reports from July 1999 through August 2001