UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

October 29, 2004

EA-04-196

Mr. M. R. Blevins, Senior Vice President
and Chief Nuclear Officer
TXU Energy
ATTN: Regulatory Affairs
Comanche Peak Steam Electric Station
P.O. Box 1002
Glen Rose, Texas 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION - NRC INTEGRATED INSPECTION REPORT 05000445/2004004 AND 05000446/2004004 AND EXERCISE OF ENFORCEMENT DISCRETION.

Dear Mr. Blevins:

On September 23, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Comanche Peak Steam Electric Station, Units 1 and 2, facility. The enclosed integrated inspection report documents the inspection findings which were discussed on September 28, 2004, with you and members of your staff.

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

The enclosed report documents a self-revealing finding of very low safety significance related to a random electronic component failure which was not avoidable by reasonable quality assurance measures or management controls. Although this issue constitutes a violation of NRC requirements, we have concluded that TXU's actions did not contribute to the degraded condition and, thus, no performance deficiency was identified. Based on these facts, I have been authorized, after consultation with the Director, Office of Enforcement, to exercise enforcement discretion in accordance with Section VII.B.6 of the NRC Enforcement Policy and refrain from issuing enforcement action for the violation. An evaluation was performed and we have determined that this was an issue of very low safety significance.

The enclosed report also documents a second self-revealing finding of very low safety significance (Green). The NRC has also determined that a violation was associated with this finding. However, because this finding had very low safety significance and because you entered the finding into your corrective action program, the NRC is treating the finding as a noncited violation (NCV) consistent with Section VI.A of the NRC Enforcement Policy. If you

contest any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis of your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; 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.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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/reading-rm/adams.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/

William D. Johnson, Chief
Project Branch A
Division of Reactor Projects

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

Enclosure:
NRC Inspection Report 05000445/2004004 and 05000446/2004004
w/attachment: Supplemental Information

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ADAMS: X Yes ☐ No Initials: _wdj__
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RIV:RI:DRP/A	PE:DRP/D	RI:DRP/A	PE:DRP/A	SPE:DRP/A	SRI:DRP/A
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JAClark	ATGody	LJSmith	MPShannon	GFSanborn	WDJohnson
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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Dockets:	50-445, 50-446
Licenses:	NPF-87, NPF-89
Report:	05000445/2004004 and 05000446/2004004
Licensee:	TXU Generation Company LP
Facility:	Comanche Peak Steam Electric Station, Units 1 and 2
Location:	FM-56, Glen Rose, Texas
Dates:	June 24 through September 23, 2004
Inspectors:	D. B. Allen, Senior Resident Inspector A. A. Sanchez, Resident Inspector T. R. Farnholtz, Senior Project Engineer G. L. Guerra, Resident Inspector, South Texas Project R. E. Lantz, Senior Emergency Preparedness Inspector A. J. Barrett, Project Engineer N. H. Taylor, Project Engineer, Branch D
Approved by:	W. D. Johnson, Chief, Project Branch A Division of Reactor Projects
Attachment:	Supplemental Information

SUMMARY OF FINDINGS

Comanche Peak Steam Electric Station, Units 1 and 2
NRC Inspection Report 05000445/2004004, 05000446/2004004

IR 05000445/2004004, 05000446/2004004; 06/24/2004-09/23/2004; Comanche Peak Steam Electric Station, Units 1 & 2; Event Followup.

This report covered a three-month period of inspection by three resident inspectors, three regional project engineers and included an announced inspection by a regional emergency preparedness inspector. One Green noncited violation was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, “Significance Determination Process.” Findings for which the Significance Determination Process does not apply may be Green or may be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, “Reactor Oversight Process,” Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Barrier Integrity

- Green. A self-revealing NCV was identified for storing a fuel assembly in an unacceptable location in Region II racks in the spent fuel pool in violation of Technical Specification 3.7.17. On March 3, 2004, the licensee discovered that Fuel Assembly C45 was stored in an unacceptable four-out-of-four configuration. Based on the enrichment and correct burnup value, Assembly C45 should have been restricted to a three-out-of-four configuration. During the transition to the new computer code to track fuel enrichment and burnup, prior burnup data was not correctly entered into the data files. As a result of this error, Assembly C45 had been in an unacceptable four-out-of-four configuration since June 25, 2001. Upon discovery, the fuel assembly was moved to a Region I rack location where Technical Specification 3.7.17 does not apply.

  This finding is more than minor, because it is similar to Example 2.a in Appendix E of Manual Chapter 0612 in that it was not only a violation of administrative requirements but also resulted in exceeding a Technical Specification limitation (Figure 3.7.17-1.). This finding cannot be evaluated by the significance determination process, because Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," and Appendix G, "Shutdown Operations Significance Determination Process," do not apply to the spent fuel pool. This finding is determined to be of very low safety significance by management review, because the bounding analyzed accident scenario of a single fresh assembly at the maximum allowable enrichment misloaded into the spent fuel pool would be sufficiently subcritical with 1900 ppm soluble boron. The spent fuel pool boron concentration remained above 2370 ppm soluble boron during the entire time that Assembly C45 was in an unacceptable location.

Because this violation was of very low safety significance and it was entered into the corrective action program as SMF-2004-0797-00, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy. (Section 4OA3.2)

B. Licensee Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Comanche Peak Steam Electric Station (CPSES) Unit 1 operated at essentially 100 power for the entire report period.

CPSES Unit 2 operated at essentially 100 percent power for the entire report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment (71111.04)

.1 Partial System Walkdown

a. Inspection Scope

The inspectors conducted partial walkdowns of the following three risk-significant systems to verify that they were in their proper standby alignment as defined by system operating procedures and system drawings. During the walkdowns, inspectors examined system components for materiel conditions that could degrade system performance. In addition, the inspectors evaluated the effectiveness of the licensee's problem identification and resolution program in resolving issues which could increase event initiation frequency or impact mitigating system availability.

- Unit 1 Train A containment spray system in accordance with System Operating Procedure (SOP) SOP-204A, "Containment Spray System," Revision 13, while the Train B containment spray system was inoperable due to scheduled maintenance and surveillance testing, on July 13, 2004

- Unit 1 Train A motor driven auxiliary feedwater system in accordance with SOP-304A, "Auxiliary Feedwater System," Revision 15, while the Train B motor driven auxiliary feedwater system was inoperable due to scheduled maintenance and surveillance testing, on July 15, 2004

- Unit 2 Train B emergency diesel generator (EDG) in accordance with Operations Testing Procedure (OPT) OPT-214B, "Diesel Generator Operability Test," Revision 12, during Train A EDG maintenance work, on August 25, 2004

b. Findings

No findings of significance were identified.

.2 Detailed Semiannual Walkdown

a. Inspection Scope

The inspectors conducted a detailed semiannual inspection of the Unit 1 auxiliary feedwater system using SOP-304A, "Auxiliary Feedwater System," Revision 15, and system drawings 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. The system engineer was interviewed concerning the system's maintenance history and current and long range plans to modify and update all system components. A walkdown of the mechanical and electrical subsystems was performed on August 31 through September 3, 2004.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors assessed the licensee's control of transient combustible materials, the materiel condition and lineup of fire detection and suppression systems, and the materiel condition of manual fire equipment and passive fire barriers during tours of the following nine risk-significant areas. The licensee's fire preplans and Fire Hazards Analysis Report were used to identify important plant equipment, fire loading, detection and suppression equipment locations, and planned actions to respond to a fire in each of the plant areas selected. Compensatory measures for degraded equipment were evaluated for effectiveness.

- Fire Zone EA057 - Unit 1 inverter and battery room corridor on July 13, 2004
- Fire Zone EA054 - Unit 2 inverter and battery room corridor on July 13, 2004
- Fire Zone EM063 - Unit 2 cable spreading room on July 13, 2004
- Fire Zone EN064 - Unit 1 cable spreading room on July 13, 2004
- Fire Zone 1-SB008 - Unit 1 Safeguards Corridor 810 foot elevation rooms 78, 79, and 82 on August 3, 2004
- Fire Zone 2-SB008 - Unit 2 Safeguards Corridor 810 foot elevation rooms 78, 79, and 82 on August 3, 2004
- Fire Zone AA21B - Auxiliary Building 810 foot elevation on August 5, 2004

- Fire Zone AA21A - Auxiliary Building 790 foot elevation on August 5, 2004
- Fire Zone 2-SG10 - Unit 2 Train A EDG Room 2-084 on August 25, 2004

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

Quarterly Licensed Operator Requalification Activities Review

a. Inspection Scope

The inspectors observed a licensed operator training session in the control room simulator on July 22, 2004. The scenario included: a failure of one of the reactor coolant system cold leg temperature instruments, a bomb threat, feedwater regulating valve failure, failure of all steam dumps, a bomb explosion that causes a loss of the condensate storage tank, and a site evacuation. Simulator observations included formality and clarity of communications, group dynamics, the conduct of operations, procedure usage, command and control, and activities associated with the emergency plan.

The inspectors also attended and reviewed a classroom training session concerning the expectations and guidance for operations security event response, and protective action recommendations.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

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

- Unit 1 Steam Generator Atmospheric Relief Valve 1-PV-2325 opened with pressure indicating normal, documented in SmartForm (SMF) SMF-2004-002903-00.
- The Units 1 and 2 main generators and exciters were placed in Maintenance Rule (a)(1) status due to three maintenance preventable functional failures since November 2002. The corrective actions and established goals are documented in SMF-2004-000549-00.

The inspectors reviewed whether the structures, systems, or components (SSCs) that experienced problems were properly characterized in the scope of the Maintenance Rule Program and whether the SSC failure or performance problem was properly characterized. The inspectors assessed the appropriateness of the performance criteria established for the SSCs where applicable. The inspectors also independently verified that the corrective actions and responses were appropriate and adequate.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed five selected activities regarding risk evaluations and overall plant configuration control. The inspectors discussed emergent work issues with work control personnel and reviewed the potential risk impact of these activities to verify that the work was adequately planned, controlled, and executed. The activities reviewed were associated with:

- Emergent work to troubleshoot spurious operation of Unit 1 Steam Generator 1-01 Atmospheric Relief Valve 1-PV-2325 and temporarily block the atmospheric relief valve concurrent with scheduled work in the 138 KV switchyard on August 22 and 23, 2004

- Emergent work to install a new panel in the 345 KV switchyard relay building concurrent with scheduled work in the 138 KV switchyard on August 26, 2004

- Emergent work to add sulfur hexafluoride (SF6) gas to 345 KV Breakers 8000 and 8010 concurrent with scheduled maintenance on the Unit 1 turbine driven auxiliary feedwater system on September 9, 2004, and work in the 138 KV switchyard on September 10, 2004

- Emergent expansion of scope to calibrate Pressure Loop 1-P-2453 in accordance with Instrument and Control Procedure (INC) INC-4400A, “Channel Calibration Motor Driven Auxiliary Feedwater Pump 01 Discharge Pressure Control Channel 2453,” Revision 4, concurrent with EDG 1-01 maintenance and surveillance test on September 15, 2004

- Emergent repair of Unit 2 Containment Pressure Loop 2-P-0935 with planned surveillance testing of solid state protection system in accordance with OPT-447B, “Mode 1, 3, and 4 Train A SSPS Actuation Logic Test,” Revision 8, on September 20, 2004

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors selected five operability evaluations conducted by CPSES personnel involving risk-significant systems or components. The inspectors evaluated the technical adequacy of the licensee's operability determination, determined whether appropriate compensatory measures were implemented, and determined whether or not other pre-existing conditions were considered as applicable. Additionally, the inspectors evaluated the adequacy of the CPSES problem identification and resolution program as it applied to operability evaluations. Specific operability evaluations reviewed are listed below:

- Quick Technical Evaluation (QTE) QTE-2003-003039-01-00, determine operability of Units 1 and 2 centrifugal charging pumps with excessive gaps between the motor shafts to speed increaser shafts, resulting in the motors running off magnetic center, reviewed on September 8, 2004

- QTE-2003-003816-01-01, determine the operability of the emergency core cooling systems (ECCS) with a potential restart of the safety injection sequencer due to low grid under-voltage relays and their associated 60-second time delays, reviewed on September 9, 2004

- QTE-2003-002991-01-01, determine operability of Units 1 and 2 station service water pumps with the motor terminations lacking the glass cloth tape specified in the design, reviewed on September 10, 2004

- QTE-2004-000170-01-00, determine operability of EDG air dryer discharge check valves and associated EDGs with the failure of check valves 1DO-0065, 2DO-0074, and 2DO-0077, reviewed on September 13, 2004

- QTE-2003-002979-01-00, determine the operability of Unit 1 Component Cooling Water Valve 1-HV-4700 with potentially degraded valve actuator adaptor to valve yoke connection, reviewed on September 14, 2004

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

On September 14, 2004, the inspector reviewed the long-term evaluated workarounds listed in the Operations Standing Order number OSO-003 Revision 0. The single workaround listed was the excessive post-trip auxiliary feedwater flow and resultant reactor coolant system cool down that may lead to an unnecessary safety injection. This item was previously listed in the plan of the day document as Operations Work Around List item 04-05. This item was reviewed to determine if the mitigating system function was affected or the operator's ability to implement abnormal and emergency procedures was affected.

On September 15, 2004, the inspector reviewed the individual and cumulative effects of the Unit 1 main control room deficiencies and Unit 2 main control room deficiencies listed in the September 13, 2004 plan of the day document. Each deficiency was evaluated for burden on the operators during normal, abnormal (e.g. plant transients), and emergency operations. Each deficiency was evaluated for potential to degrade mitigating systems.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

a. Inspection Scope

For the following two permanent plant modifications described below, the inspectors reviewed the Final Design Authorizations (FDA), 10 CFR 50.59 screenings, implementing work orders, installation and post-installation testing procedures, and SmartForms, conducted interviews with the system engineers, and performed walkdowns of the modifications to verify that design bases, license bases, and performance capability had not been degraded through these modifications.

- The digital exciter/voltage regulator upgrade for the Unit 1 EDG that occurred during the 1RF10 outage under FDA-2001-001255-03 was reviewed. This modification resolved obsolescence issues with the EDG exciter/voltage regulator, expanded the capability for fault recording to aid in diagnostics, and increased EDG reliability. This modification only affected Unit 1 and did not require a license amendment.

- The replacement of the Unit 1 charging system suction vent valves that occurred during the 1RF10 outage under FDA-2002-004242-01-5 was reviewed. This modification involved re-sloping the charging suction vent lines and installing improved valves to prevent gas accumulation and gas binding the charging pumps. This modification only affected Unit 1 and did not require a license amendment.

b. Findings

No findings of significance were identified.

1R19 Postmaintenance Testing (71111.19)

a. Inspection Scope

The inspectors witnessed or reviewed the results of the postmaintenance tests for the following five maintenance activities:

- Unit 2 Main Steam Line 2-04 to turbine driven auxiliary feedwater pump steam supply valve maintenance and associated pressure regulator diaphragm and elastomer replacement in accordance with work orders (WO) WO-3-02-341936-02, and WO-3-02-332705-01, respectively, on July 22, 2004

- Unit 1 turbine driven auxiliary feedwater pump discharge isolation Valves 1-HV-2491A, 1-HV-2492A, 1-HV-2493B, and 1-HV-2494B inspection and maintenance in accordance with OPT-206A, "AFW System," Revision 24, on September 9, 2004

- Unit 1 Train B Channel IV Containment Spray (HI-3) Test Input Relay 1-K456-B replacement in accordance with WO-4-04-156580-00 and OPT-448A, "Mode 1, 3 and 4 Train B SSPS Actuation Logic Test," Revision 6, and One Time Procedure Change Notice OPT-448A-R6-OT01 on September 10, 2004

- Unit 1 Safety Injection Pump 1-01 Suction Valve 1-8923A inspection and maintenance in accordance with WO 3-02339545-01 and OPT-510A, "SI Section XI Valves," Revision 8, on September 20, 2004

- Unit 2 Containment Pressure Loop 2-P-0935 repair due to erratic indication in accordance with WO 4-04-157611-00, INC-7856B, "Analog Channel Operational Test and Channel Calibration, Containment Pressure Channel 0935, Protection Set III," Revision 2, and INC-7533B, "Sensor Response Time Test, Containment Pressure, Channel 0935," Revision 2, on September 21, 2004

In each case, the associated work orders and test procedures were reviewed in accordance with the inspection procedure to determine the scope of the maintenance activity and to determine if the testing was adequate to verify equipment operability.

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 important nuclear plant equipment, including aspects such as preconditioning, the impact of testing during plant operations, and the adequacy of acceptance criteria. Other aspects evaluated included test frequency and test equipment accuracy, range, and calibration; procedure adherence; record keeping; the restoration of standby equipment; test failure evaluations; and the effectiveness of the licensee's problem identification and correction program. The following five surveillance test activities were observed and/or reviewed by the inspectors:

- Unit 2 turbine driven auxiliary feedwater pump in accordance with OPT-206B, "AFW System," Revision 16, on July 22, 2004

- Unit 2 Train B Safety Injection Pump 2-02 operability test in accordance with OPT-204B, "SI System," Revision 10, section 8.8.2, on August 5, 2004

- Unit 1 Train B Residual Heat Removal (RHR) Pump 1-02 operability test in accordance with OPT- 203A, "Residual Heat Removal," Revision 14, on August 12, 2004

- Local leak rate test of Unit 2 Containment Air Purge Exhaust Dampers 2-HV-5538 and 2-HV-5539 in accordance with OPT-844B, " Appendix J Leak Rate Test of Penetration 2-MV-0002 (Containment Purge Exhaust)," Revision 1, on August 13, 2004

- Unit 2 EDG 2-01 in accordance with OPT-214B, "Diesel Generator Operability Test," Revision 12, on August 25, 2004

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the following two temporary modifications and associated documentation. The temporary modifications were verified to be installed and administratively controlled in accordance with plant documentation and procedures.

- Temporary instrumentation and data collection equipment to monitor the performance of Unit 2 Containment Pressure Loop 2-P-0935, on September 20, 2004

- Installation and operation of the temporary cooling routed to the compressor air intakes and compressor oil sumps of the Unit 2 Instrument Air Compressors 2-01 and 2-02 in accordance with WO 2-04-155484-00, on September 21, 2004

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert Notification System Testing (71114.02)

a. Inspection Scope

The inspector evaluated the adequacy of licensee methods for testing the alert and notification system in accordance with 10 CFR Part 50, Appendix E. The alert and notification system testing program was evaluated against the criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, Federal Emergency Management Agency Report REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants," and the licensee's current Federal Emergency Management Agency-approved alert and notification system design report. The inspector also reviewed the documents described in the attachment to this report. The inspector completed one sample during this inspection.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization Augmentation Testing (71114.03)

a. Inspection Scope

The inspector reviewed the results of ten quarterly augmentation drills. The inspector also interviewed members of the emergency planning staff responsible for training and testing of the emergency response organization. The inspector evaluated drill performance and training implementation against emergency plan implementation procedures and other documents related to the emergency response organization augmentation system to determine the licensee personnel's ability to staff emergency response facilities in accordance with their emergency plan and the requirements of 10 CFR Part 50, Appendix E. The inspector completed one sample during this inspection.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspector reviewed a summary of all corrective action program documents (SmartForms) associated with emergency preparedness generated between February 2002 and July 2004, to determine the licensee's ability to identify and correct problems in accordance with the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E. The inspector also reviewed six exercise reports, nine self-assessments, three quality assurance audits, 33 specific SmartForms, and other documents listed in the attachment to this report. Corrective actions were evaluated against the requirements of Station Administrative Procedures (STA) STA-421, "Initiation of SmartForms," Revision 10, and STA-422, "Processing SmartForms," Revision 18. The inspector completed one sample during this inspection.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

The inspectors observed a control room simulator emergency preparedness mini-drill on July 22, 2004. Observations in the control room simulator included opportunities for emergency classifications and offsite notifications and were to be included in the licensees' Drill/Exercise Performance (DEP) performance indicator. The inspectors also reviewed the scenario and drill objectives, observed the licensee's critique, and discussed observations with the drill evaluators. The inspection verified that the licensee was adequately conducting drills and critiquing drill performance. The inspection also verified the proper accounting of the DEP opportunities.

The inspectors also observed the emergency exercise performed on August 18, 2004. The exercise included a demonstration of the ability to evacuate by evacuating personnel from the exclusion area with the exception of those specifically designated individuals required to maintain safe plant operations. Areas observed included the control room simulator, the emergency operations facility, and the access road during the evacuation.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 Barrier Integrity Cornerstone

a. Inspection Scope

The inspector reviewed a sample of the performance indicator (PI) data submitted by the licensee regarding the barrier integrity cornerstone to verify that the licensee's data was reported in accordance with the requirements contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Indicator Guideline," Revision 2. The sample included data taken from reactor coolant system water inventory Forms OPT-303-3 and the dose equivalent Iodine-131 data from the reactor coolant system control, technical specification, and fuel performance, Mode 1-3 Forms CHM-506-1 for the period April 2003 to June 2004 for both Units 1 and 2. The inspectors interviewed licensee personnel accountable for collecting and evaluating the PI data. The inspector compared this to the information available on the NRC web page for April 2003 to June 2004 for both Units 1 and 2 for the following PIs:

- Reactor Coolant System Activity
- Reactor Coolant System Leakage

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness Cornerstone:

a. Inspection Scope

The inspector sampled submittals for the PIs listed below for the period from October 1, 2003 through June 30, 2004. The definitions and guidance of Nuclear Engineering Institute 99-02, "Regulatory Assessment Indicator Guideline," were used to verify the licensee's basis for reporting each data element in order to verify the accuracy of PI data reported during the assessment period.

- Drill and exercise performance
- Emergency response organization participation
- Alert and notification system reliability

The inspector reviewed a 100 percent sample of drill and exercise scenarios, licensed operator simulator training sessions, notification forms, and attendance and critique records associated with training sessions, drills, and exercises conducted during the verification period. The inspector reviewed the qualification, training, and drill participation records for a sample of ten emergency responders. The inspector

reviewed alert and notification system maintenance records and procedures, and a 100 percent sample of siren test results. The inspector also interviewed licensee personnel that were responsible for collecting and evaluating the PI data. The inspector completed three samples during this inspection.

b. Observations

The inspector reviewed the exercise drill records for an emergency preparedness exercise conducted on February 12, 2004. The exercise was conducted during normal plant working hours as a training and evaluation exercise for the blue emergency response organization team of emergency responders. The exercise was evaluated for contribution to the drill and exercise performance and the emergency response organization emergency preparedness PI. The exercise resulted in emergency action level classifications at all four emergency levels.

For the Alert classification, the emergency coordinator failed to recognize that plant conditions, due to spent fuel pool area radiation alarms, met the conditions for an Alert. The emergency coordinator later declared an Alert based on a security threat to the plant; however, conditions for that emergency action level had not been met. The facility evaluators appropriately characterized the Alert classification as a missed opportunity. However, the facility evaluators declared the subsequent notification to be a non-opportunity since the correct Alert emergency action level was never declared.

The inspector discussed, with the facility emergency preparedness staff, the guidance contained in Nuclear Engineering Institute NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revision 2, Section 2.4, page 86, lines 34-36. The NEI guidance states that the notification following the Alert declaration should be evaluated on its own merits based on the classification that was declared. The facility evaluators had misinterpreted the NEI guidance, and agreed with the inspector, following discussion, that the notification made after the Alert declaration should be evaluated. The licensee evaluated the notification as a successful opportunity. The licensee also reviewed the last eight quarters of PIs and did not identify another example where a valid notification opportunity was not evaluated. The inspector characterized this as an area for improvement in the PI program at the Comanche Peak Steam Electric Station. The licensee wrote SMF-2004-002569-00, "First Quarter DEP PI revision required," to address this observation. The licensee also verified and the inspector agreed that the reported emergency response organization PI would not have been affected.

4OA2 Problem Identification and Resolution (71152)

.1 Annual Sample Review

a. Inspection Scope

The inspector selected SMF 2003-3599 for detailed review, because it documented a

failure of the Unit 2 Containment Pressure Loop 2-P-0935 on November 5, 2003, which resulted in a reportable condition and formal root cause analysis. The root cause of the failure was attributed to a degraded power supply card which displayed obvious indications of overheating. The failure was determined to be reportable, because it caused the channel to be inoperable for longer than that allowed by Technical Specification. The failure of the channel was not immediately recognized, because the deviation of this channel from the other channels, on the order of several tenths of a pound per square inch, was much less than the smallest division on the control board indicator. See Section 4OA3.3 of this report for the associated LER closure. The inspectors reviewed the licensee's cause analysis to ensure that the full extent of the condition was identified, appropriate evaluations were performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the SmartForm against the requirements of the licensee's corrective action program as delineated in Station Administrative Procedures STA-421, "Initiation of SmartForms," Revision 10, and STA-422, "Processing of SmartForms," Revision 19, and 10 CFR Part 50, Appendix B.

b. Findings and Observations

No findings of significance were identified.

.2 Emergence Preparedness Annual Sample Review

a. Inspection Scope

The inspector selected 33 SmartForms (corrective action program inputs) for detailed review based on their linkage with event classification, notification of offsite authorities, and processes for providing protective action recommendations. The reports were reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspector evaluated the SmartForms against the requirements of Station Administrative Procedures STA-421, “Initiation of SmartForms,” Revision 10, and STA-422, “Processing SmartForms,” Revision 18.

b. Findings and Observations

No findings of significance were identified.

.3 Daily Condition Report Review

a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems,” and in order to help identify repetitive equipment failures or specific human performance issues for followup, the inspectors performed a daily screening of items entered into the licensee’s corrective action program. This review was accomplished by reviewing the

licensee's computerized corrective action program database (SmartForms), reviewing hard copies of selected SmartForms and attending related meetings such as Plant Event Review Committee (PERC) meetings.

b. Findings and Observations

No findings of significance were identified.

4OA3 Event Followup(71153)

.1 (Closed) Licensee Event Report (LER) 50-446/03-001-00, Actuation of Reactor Protection System

On July 9, 2003, with Unit 2 operating in Mode 1 at 100% power, the Reactor Coolant Pump 2-04 motor breaker opened, resulting in an automatic reactor trip. All safety systems performed as designed. The event and its causes and corrective actions were documented in SMF-2003-001992 and the event was discussed in NRC Inspection Report 50-445;446/2003-03. The LER was reviewed and no findings of significance were identified. This event did not constitute a violation of NRC requirements. This LER is closed.

.2 (Closed) LER 50-445; 446/04-001-00, Fuel Assembly Placed in Incorrect Storage Location

a. Inspection Scope

The inspector reviewed the LER and the associated SMF-2004-0797-00 to verify that the causes of the violation of Technical Specification 3.7.17 by storage of Fuel Assembly C45 in an unacceptable location in the spent fuel pool were identified and that corrective actions were reasonable. The unacceptable storage of Fuel Assembly C45 was caused by calculating an incorrect burnup value during the transition to a new computer code for tracking fuel enrichment, burnup, and decay. The inspector reviewed the root cause analysis, conclusions, and corrective actions to determine if the analysis was thorough and the corrective actions addressed the root and contributing causes.

b. Findings

Introduction. A Green self-revealing NCV was identified for storing a fuel assembly in an unacceptable location in Region II racks in the spent fuel pool in violation of Technical Specification 3.7.17.

Description. During a review of spent fuel data (enrichment and burnup) to identify candidate fuel assemblies for future core designs, TXU noted that several assembly burnup values appeared to be larger than expected. On March 3, 2004, Core Performance Engineering performed a complete verification of fuel assembly configurations in the spent fuel pool. It was discovered that Fuel Assembly C45 was

stored in an unacceptable four-out-of-four configuration which violated Technical Specification 3.7.17. Based on the enrichment and correct burnup value, Assembly C45 should have been restricted to a three-out-of-four configuration. The fuel assembly was moved to a Region I rack location where Technical Specification 3.7.17 does not apply.

In 1998, CPSES procured a new computer code to track fuel and other special nuclear materials components, including enrichment and burnup information. During the transition to the new code, prior burnup data was not correctly entered into the data files. A review by Core Performance identified five fuel assemblies which did not have correct burnup data entered. The errors for the five assemblies have been corrected and only Assembly C45 was determined to be in an unacceptable location. A review of the records indicated that on June 25, 2001, Assembly C45 was moved from an acceptable two-out-of-four configuration to a four-out-of-four configuration, in violation of Technical Specification 3.7.17.

CPSES has two spent fuel pools, each with Region I and Region II racks. The Region I racks were designed to accommodate new or burned fuel without restrictions on storage pattern configuration and without credit for soluble boron. The Region II racks (i.e. high density racks) were designed to accommodate burned fuel in one-out-of-four, two-out-of-four, three-out-of-four, and four-out-of-four configurations. The last two configurations required credit for soluble boron. An accident scenario of a single fresh assembly with the maximum enrichment misloaded into a cell with restrictions has been analyzed. The analysis determined that a 1900 ppm soluble boron concentration was sufficient to meet the licensing limit of K_{eff} less than 0.95. The lowest boron concentration in the spent fuel pools while Assembly C45 was in the unacceptable location was 2370 ppm. CPSES concluded this condition was bounded by the accident analysis.

Analysis. The inspectors determined that failing to verify that correct burnup data was used during the transition to the new fuel tracking computer code was a performance deficiency. This finding is more than minor, because it is similar to Example 2.a in Appendix E of Manual Chapter 0612 in that it was not only a violation of CPSES administrative requirements but also resulted in exceeding a Technical Specification limitation (Figure 3.7.17-1.). This finding cannot be evaluated by the significance determination process, because Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations," and Appendix G, "Shutdown Operations Significance Determination Process," do not apply to the spent fuel pool. This finding is determined to be of very low safety significance by management review, because the bounding analyzed accident scenario of a single fresh assembly at the maximum allowable enrichment misloaded into the spent fuel pool would be sufficiently subcritical with 1900 ppm soluble boron. The spent fuel pool boron concentration remained above 2370 ppm soluble boron during the entire time that Assembly C45 was in an unacceptable location.

Enforcement. Technical Specification 3.7.17 required that the combination of initial enrichment, burnup and decay time of each spent fuel assembly stored in Region II racks shall be within either (1) the "acceptable" domain of Figure 3.7.17-1 in a 4 out of 4 configuration, (2) the "acceptable" domain of figure 3.7.17-2 in a 3 out of 4 configuration, (3) the "acceptable" domain of Figure 3.7.17-3 in a 2 out of 4 configuration, or (4) shall be stored in a 1 out of 4 configuration. The acceptable storage configurations are shown in Figure 3.7.17-4. The initial enrichment and burnup of Assembly C45 made it unacceptable to be placed it in a 4 out of 4 configuration. TXU stored Assembly C45 in an unacceptable location from June 25, 2001, until March 3, 2004. TXU failed to correctly perform the required surveillance SR 3.7.17.1, which required they verify by administrative means the initial enrichment, burnup and decay time of the fuel assembly is in accordance with the Technical Specifications prior to storing the fuel assembly in the Region II racks. After the issue was identified, TXU immediately moved Assembly C45 to a Region I storage location. Because this violation was of very low safety significance and it was entered into the corrective action program as SMF-2004-0797-00, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-445:446/2004004-01). This LER is closed.

3. (Closed) LER 50-446/03-004-00, Containment Pressure Channel Inoperable Due to Random Electronic Failure

Introduction. A self-revealing violation of Technical Specifications 3.3.2 was identified when control room operators discovered that a Unit 2 containment pressure channel was deviating from the other channels, and had been inoperable for more than 53 hours, greater than the time allowed by Technical Specifications to perform the required actions. TXU's actions did not contribute to this degraded condition and, thus, no performance deficiency was identified. Enforcement discretion is being exercised to refrain from issuing enforcement action for this violation.

Description. On November 5, 2003, the licensee discovered that one of four intermediate range containment pressure channels had been inoperable for a period longer than allowed by Technical Specification 3.3.2. Specifically, at 9:50 a.m., control room operators discovered that Unit 2 Containment Pressure Channel 2-P-0935 was indicating 0.7 psig low with respect to the other channels. The operators reviewed the plant computer archive data and found that the channel had been reading low since 5:40 a.m. on November 3, 2003. Technical Specification 3.3.2 required that, with this channel inoperable, the safety injection and steam line isolation functions be placed in trip within 6 hours and the containment spray and Phase B containment isolation functions be placed in bypass within 6 hours, or be in Mode 3 within 12 hours, and in Mode 4 within 18 hours. Because the channel had been inoperable for greater than the Technical Specifications completion time and the required actions were not taken, the event was a violation of Technical Specifications and reportable in accordance with 10 CFR 50.73. Upon discovery, operators declared the channel inoperable and placed the channel functions in trip or bypass.

The channel had failed low due to a random electronic component failure on the power supply circuit card. The failure of the channel was not immediately recognized, because the deviation of this channel from the other channels, on the order of several tenths of a psig, was much less than the smallest increment on the control board indicator, until November 5, 2003, when the deviation grew to 0.7 psig and was identified. The failed power supply circuit card was replaced and a computer alarm was created that indicates when one of the four containment pressure intermediate channels deviates from the average.

Analysis. The inspector determined that, although this issue was a violation of NRC requirements, there was no performance deficiency associated with the violation. The cause of the failure was random electronic component failure. Required maintenance, calibrations and surveillance of the channel had been properly performed. The operators recognized the failure as early as could be expected and could not have detected the failure until the channel deviated from the other channels by more than half the smallest increment on the indicator. The risk significance of this failure was very low in that the failure of this channel would not prevent or cause the actuation of a safety function. For the containment spray and Phase B isolation functions, three channels remained operable, providing for 2 out of 3 actuation logic. For the remaining safety functions of safety injection and steam line isolation, redundant and diverse channels remained operable.

Enforcement. Because this self-revealing violation had very low safety significance and resulted from the random failure of equipment and was not within the control of the licensee, the NRC is exercising enforcement discretion and refrains from issuing enforcement action (EA-04-196). This LER is closed.

4OA5 Other Activities

.1 Review of INPO January 2004 Evaluation

The inspector reviewed the Final Report of the Institute of Nuclear Power Operations (INPO) January 2004 Evaluation of TXU Power's Comanche Peak Steam Electric Station. No safety significant issues were identified.

.2 Reactor Containment Sump Blockage (NRC Bulletin 2003-01) (Temporary Instruction 2515/153)

This Temporary Instruction was initially addressed by the resident inspectors in late 2003, prior to, during and following the Unit 2 refueling outage 2RF07. The primary purpose of the earlier effort was to ensure CPSES implemented near-term compensatory measures to reduce the risk associated with sump failure. The results of these efforts were documented in NRC Inspection Report 05000445;446/2003004. This current inspection addressed those additional actions that have been completed and the plans for future actions.

This Temporary Instruction provided guidelines to assess adequacy and completion of licensee commitments to NRC Bulletin 2003-01, "Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors." The bulletin requests information from addressees via two options. For CPSES, TXU chose Option 2 which requested they describe any interim compensatory measures that have been implemented or that will be implemented to reduce the potential risk associated with potentially degraded or nonconforming ECCS and containment spray system recirculation functions while evaluations to determine compliance with all existing applicable regulatory requirements proceed. Accordingly, the inspectors used the criteria for evaluating responses describing interim compensatory measures.

b. Inspection Scope

The inspectors verified that the licensee's response established interim compensatory measures to reduce the risk associated with degraded recirculation performance. The inspectors verified that the implementation was consistent with the licensee's response. The inspectors performed inspections of the containment recirculation sumps and debris assessment inspection of the containment building during the last refueling outage for each unit. The inspectors also accompanied engineering during inspections of both Units l and 2 containment buildings at power to assess the conditions that could adversely affect the recirculation sumps.

In addition, the inspectors (1) reviewed training records, (2) reviewed training material, (3) interviewed licensee staff, (4) reviewed applicable licensee procedures, and (5) reviewed applicable SmartForms.

The inspectors reviewed the following documents during this inspection:

- NRC Bulletin 2003-01, "Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors," dated June 9, 2003

- CPSES Response to NRC Bulletin 2003-01, "Response to NRC Bulletin 2003-01, 'Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors,'" TXX-03130, dated August 8, 2003

- CPSES computer based training related to Outage Contractor Training

- CPSES Emergency Response Guidelines ECA-1.1A, "Loss of Emergency Coolant Recirculation," Revision 7 with procedure change notice ECA-1.1A-R7-4

- CPSES Emergency Response Guidelines EOS-1.3A, "Transfer to Cold Leg Recirculation," Revision 7 with procedure change notice EOS-1.3A-R7-8

- SMF-2003-002008-00 response to NRC Bulletin 2003-01, and SMF-2001-002201-00 response to NRC Generic Safety Issue (GSI) -191, "Assessment of Debris Accumulation on PWR Sump Performance"

b. Findings

No findings of significance were identified. The inspectors concluded that TXU has completed those actions described in their response in letter TXX-03130, dated August 8, 2003. The underlying purpose of Bulletin 2003-01 was to ensure that the licensee implemented near-term compensatory measures that reduced the risk associated with sump blockage. The near-term actions have been completed; however, there are further actions under consideration which are described below. The following details are provided as required by Temporary Instruction 2515/153, "Reactor Containment Sump Blockage (NRC Bulletin 2003-01)."

.1 Commitments completed

Commitments 27289, 27291 and 27292 addressed training. Specifically, in Commitment 27289 the licensee committed to training shift operations and emergency response organization personnel on the technical nature of the bulletin and a discussion of the potential Emergency Response Guideline (ERG) procedure changes. The inspectors reviewed the self-study training materials and training records and have determined that this commitment has been completed on schedule.

In Commitment 27291, the licensee committed to training appropriate station personnel to emphasize Foreign Material Exclusion (FME) and good housekeeping practices and adding this training to the CPSES Contractor Administrative Training program. The inspectors reviewed the lesson plans and self-study training materials and training records and have determined that this commitment has been completed.

In Commitment 27292, the licensee committed to training permanent plant personnel to emphasize FME and good housekeeping practices. The inspectors reviewed the self-study training material and training records and have determined that this commitment has been completed.

In Commitment 27293, the licensee committed to reviewing site containment housekeeping expectations for possible enhancement. Through a review of the licensee documentation and interviews with licensee personnel, the inspectors determined that the licensee performed an adequate review of housekeeping procedures. As a result of the review of these procedures, the licensee determined that the wording in the procedures allowed for discretionary application of the procedure in that a reader could assume that minor amounts of dust, dirt, and particles smaller than the fine screen mesh on the sumps was not a significant concern. The licensee decided to not revise the procedures at this time, but has sampled latent debris from less accessible areas from 2RFO7 to determine if the debris could be a threat to sump integrity. The debris collected from Unit 2 was sent to Los Alamos National Laboratory for inclusion in an industry study.

The licensee conducted formal walkdowns of the Unit 1 containment during the Unit 1 refueling outage 1RF10 in accordance with the guidance in NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments," (September 2002). Walkdowns of Unit 2 in accordance with this guidance are planned for refueling outage, 2RF08, scheduled for the Spring 2005.

In Commitment 27290, the licensee committed to revising operations training and ERG procedure changes. The inspectors confirmed that the licensee revised the applicable ERG procedures and completed the training on these changes. However, Westinghouse Owner's Group was provided a Westinghouse Evaluation, WCAP-16204, Revision 2, "Evaluation of Potential ERG and EPG Changes to Address NRC Bulletin 2003-01 Recommendations." TXU reviewed the candidate operator actions and determined that several of these required additional review to determine the impact to the CPSES design and licensing bases. The remaining recommendations have already been implemented or were not applicable to CPSES.

In Commitment 27294, the licensee committed to evaluating enhanced instrumentation that may provide more definitive indication of sump performance. The inspectors confirmed that the licensee completed the evaluation. TXU concluded that, although the existing instrumentation is adequate, enhanced instrumentation to indicate the level inside the containment sump would be prudent. The enhanced instrumentation was considered a long-term action item and there was no scheduled date for implementation.

.2 Commitments not completed

None

.3 Units that entered refueling outages (RFO) and returned to power

Both Units 1 and 2 have entered a refueling outage and returned to power since the issuance of the Temporary Instruction. A containment walkdown in accordance with the NEI 02-01 guidance was performed for Unit 1. A walkdown for the Unit 2 containment was scheduled for the refueling outage in Spring 2005. The licensee performed procedure OPT-305 "Containment Close Out Inspection," for each unit prior to entry into Mode 4. The licensee verified that there was no loose debris inside containment that could be transported to the containment sump and cause restriction of the pump suction during loss of coolant accident conditions. The resident inspector was present for the containment close out inspection for each unit.

During each refueling outage, the licensee performed procedure OPT-306 "Containment Sump Inspection." This procedure satisfied Technical Specification SR 3.5.2.8 and SR 3.5.3.1 (for SR 3.5.2.8) and was used when restoring the

recirculation sumps to operation following a plant outage. The licensee verified that ECCS train containment sump and subsystem inlets (containment spray and RHR pump suction piping) were not restricted by debris, and the suction inlet trash racks and screens showed no evidence of structural distress or abnormal corrosion. The resident inspector accompanied the licensee during this inspection in each unit.

.4 Units currently in a RFO

There are no units currently in a RFO.

.5 Units that have not entered an RFO

There are no units that have not entered a RFO.

.6 Walkdowns Conducted

As part of procedure OPT-306 on each unit, the licensee verified that each ECCS train containment sump and subsystem inlets (containment spray and RHR pump suction piping) was not restricted by debris, and the suction inlet trash racks and screens showed no evidence of structural distress or abnormal corrosion. This inspection, along with repairs documented in Licensee Event Report 50-446/97-004-01, ensured that there were no openings through the sump enclosure boundaries. The containment close out inspection performed on each unit in accordance with OPT-305 verified there were no loose debris nor major obstructions that could restrict the flow to the containment sumps.

.7 Advance Preparations

The licensee was evaluating the need for enhanced instrumentation which could provide more definitive indication of sump performance. This was reflected in Commitment 27294. There are no other significant advance preparations at the present time to expedite the performance of potential sump-related modifications.

.8 Actions remaining beyond the near-term compensatory actions of NRC Bulletin 2003-01

Unit 2 containment walkdown during Spring 2005 refueling outage to assess debris sources inside containment.

Determine if additional candidate operator actions from WCAP-16204 are appropriate for CPSES, and implement those that are appropriate.

Implement design modification to provide level indication for inside the containment recirculation sumps, if appropriate.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The inspectors presented the integrated resident inspection results to Mr. M. Blevins, Senior Vice President and Chief Nuclear Officer, and other members of licensee management on September 28, 2004. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

The inspector presented the emergency preparedness program baseline inspection results to Mr. M. Blevins, Senior Vice President & Chief Nuclear Officer, and other members of licensee management at the conclusion of the inspection on July 22, 2004. The inspector verified that no proprietary information was discussed during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Barham, Emergency Planner
M. Blevins, Senior Vice President & Chief Nuclear Officer
M. Bozeman, Manager, Emergency Preparedness
C. Cotton, Emergency Planner
K. Faver, Emergency Planner
R. Flores, Vice President Operations
R. Kidwell, Licensing Engineer
T. Hope, Manager, Regulatory Performance
M. Lucas, Director of Nuclear Engineering
F. Madden, Regulatory Affairs Manager
T. Robison, Emergency Planner
R. Sanford, Emergency Planner
D. Weyandt, System Engineer
D. Wilder, Radiation and Industrial Safety Manager, Radiation and Industrial Safety
C. Wilkerson, Senior Engineer, Regulatory Affairs

Contractors

J. Hair, Authorized Nuclear Inservice Inspector
G. Morini, Project Manager, Wesdyne
V. Polizzi, System Engineer, Westinghouse

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

50-445:446/2004004-01	NCV	Fuel Assembly Placed in Incorrect Storage Location (Section 4OA3.2)

Closed

50-446/03-001-00	LER	Actuation of Reactor Protection System (Section 4OA3.1)
50-445; 446/04-001-00	LER	Fuel Assembly Placed in Incorrect Storage Location (Section 4OA3.2)

50-446/03-004-00	LER	Containment Pressure Channel Inoperable Due to Random Electronic Failure (Section 4OA3.3)

Discussed

NONE

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment (71111.04)

Procedures

SOP-304A, Auxiliary Feedwater System, Revision 15
OPT-206A, AFW System, Revision 24

Surveillance Records

Work Order 5-02-501262-AA INC-7414, CCAL AF FLW SG1

Work Order 5-04-504441-AGOPT-206A, TURBINE DRIVEN AUXILIARY FEEDWATER SYS VPV

Work Order 5-02-501012-AA TDAFWP PUMP ACTUATION TEST TRAIN A

Corrective Action Documents (SmartForms)

SMF-2004-000705-00
SMF-2004-002494-00
SMF-2004-002518-00

Miscellaneous

Flow diagram MI-206, “Auxiliary Feedwater System,” Revision CP-19

Section 1R12: Maintenance Effectiveness Review (71111.12)

SMF-2004-002903-00

Technical Evaluation TE-97-278-00-00

OPT-214B, “Diesel Generator Operability Test,” Revision 12

MSM-P0-3374, “Emergency Diesel Generator Monthly Run Related Inspections,” Revision 2

FPI-104B, “U-2, Train A Diesel Generator & Equipment Elev. 810' and Fuel Oil Day Tank Room Elev. 844',” Revision 1

Selections of Maintenance Rule documents related to the main steam system

SmartForms

4-2903	3-1206	2-2456
4-1910	3-0931	2-2390
4-1716	3-0604	2-1745
4-1353	3-0439	2-0561
4-0566	3-0018	2-0413
4-0565	2-4364	2-0292
4-0564	2-4008	2-0255
3-4075	2-3738	2-0120
3-4018	2-2967	4-2972
3-3862	2-2609	
3-3760	2-2493	
3-2278	2-2480	

Section 1R16: Operator Workarounds (71111.16)

Operations Standing Order OSO-003, “Long-Term Evaluated Work-Arounds,” Revision 0

Operation Department Administrative procedure ODA-407, “Guidelines on Use of Procedures,” Revision 10

Unit 1 Main Control Room Deficiencies in Plan of the Day, dated September 13, 2004

Unit 2 Main Control Room Deficiencies in Plan of the Day, dated September 13, 2004

Operations Work Around List in Plan of the Day, dated August 30, 2004

Evaluation EVAL-2004-0373-01-00

SMF 2004-2630

ACTN-MAN-2000-1693-04

SMF-2002-0538

SMF-2001-0686

List of Documents Reviewed - Emergency Preparedness

Section 1EP2: Alert Notification System Testing (71114.02)

Comanche Peak Emergency Plan, Revision 31, Section 3.2

Staff Guideline SG-12, "Alert and Notification System Surveillance," Revision 8

Station Administrative Procedure STA-662, "Administrative Control of Siren System," Revision 0

Maintenance Procedure MSE-PO-9328, "Emergency Alerting System Inspection," Revision 4

Emergency Planning Procedures:

EPP-100, "Alert and Notification System Surveillance Reports," Revision 5

EPP-202, "Emergency Communication System and Equipment," Revision 6

Monthly Siren Test results from October 2003 through June 2004

Work Order WO# 3-02-308822-01

Comanche Peak Alert and Notification System Design Report, June 8, 1984

Comanche Peak letters to FEMA; 200203253 (September 9, 2002,) 200301387 (July 1, 2003,) 200400823 (March 18, 2004)

FEMA letter NRC, September 23, 2003

FEMA letter to Texas Department of Public Safety, April 9, 1985

SMF-2003-002743-00, "The Alert and Notification System (Sirens) Design Report Should be Updated," September 16, 2003

Section 1EP3: Emergency Response Organization Augmentation Testing (71114.03)

Staff Guidelines:

SG-05, "Quarterly Augmentation Verification of the ERO," Revision 10

SG-08, "ERO Roster Updates," Revision 9

SG-15, "Remedial Training," Revision 3

SG-17, "Conducting Monthly Communication Equipment Checks," Revision 2

SG-22, "Emergency Planning Staff Training," Revision 0

Results of Quarterly Augmentation Drills from first quarter, 2002, through second quarter, 2004

Monthly communication drill records for March 30, April 20, and May 27, 2004

SMF-2003-001892-00, “Two 60-minute ERO responders failed to respond to their emergency facilities during a 6/23/2003 augmentation test”

Emergency Procedures:

EP-100, “Maintaining Emergency Preparedness,” Revision 5

EP-201, “Assessment of Emergency Action Levels, Emergency Classification and Plan Activation,” Revision 11

Section 1EP5: Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

Emergency Planning Procedures:

EPP-203, “Notifications,” Revision 13

EPP-304, “Protective Action Recommendations,” Revisions 11, 12, and 16

Station Training Procedure TRA-105, “Emergency Preparedness Training,” Revision 19

Station Administrative Procedure STA-501, “Nonroutine Reporting,” Revision 11

SmartForms:

SMF-2002-00578-00, “Technical Specification change to allow fuel movement with the containment equipment hatch off appears not to have considered Emergency Planning Issues”

SMF-2002-00580-00, “FDA and license document change request have been approved for the FSAR that do not consider ... the Emergency Plan”

SMF-2002-00735-00, “Radio Communications continue to be strained with inadequate corrective actions”

SMF-2002-01698-00, “Less than two qualified shift RP technicians were scheduled for 12 hour day shift on Monday 4/29/02"

SMF-2002-01786-00, “ERDS unavailable for greater than 1 hour”

SMF-2002-01924-00, “Gaitronics, including “all page,” cannot be heard form the MSC Cafeteria”

SMF-2002-01989-00, “Personnel added to the CPSES ERO after completing the operations version of the SAMG training, but without completing the TSC version”

SMF-2002-02016-00, “Review the process for documenting callout response times”

SMF-2002-02361-00, “Not all areas within the exclusion area boundary have all page capability”

SMF-2002-02753-00, “Issues from Self-Assessment Report 2001-043"

SMF-2002-02769-00, “Gaitronics cannot be heard in the MSC Cafeteria”

SMF-2002-04331-00, “Issues from Self-Assessment Report 2002-078"

SMF-2003-02152-00, “Revision 31 of the Emergency Plan was not submitted to NRC within 30 days of implementation”

SMF-2003-02747-00, “Emergency News Center should not be an on site facility”

SMF-2003-03995-00, “Issues from Self-Assessment Report 2003-093"

SMF-2004-000209-00, “Some STA’s on shift not trained to the ERO training requirements”

SMF-2004-00550-00, “ERO Primary callout system failed to activate during February 12, 2004 exercise”

SMF-2004-01942-00, “Currently there is no continuing training curriculum for any of the ERO Positions”

SMF-2004-000722-00, “Evaluate adding Sheltering back to EPP-304, Protective Action Recommendations”

SMF-2004-002585, “8 hour Non-emergency notification due to scheduled loss of Communication/Assessment Capability”

SMF-2004-002589, “To track adding Sheltering back into the Emergency Plan”

Self-Assessment Reports

SA-2002-049, “Emergency Response Organization Augmentation"

SA-2002-078, “Assessment of Public Information and Coordination with Offsite Agencies"

SA-2003-019, “ Emergency Preparedness Off-site Focus"

SA-2003-047, “Impact of Ar-41 on off-site dose projection"

SA-2003-054, “Emergency Planning SmartForm Review, 1st Half 2003"

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LIST OF ACRONYMS

1RF10	Unit 1's tenth refueling outage
2RF07	Unit 2's seventh refueling outage
2RF08	Unit 2's eighth refueling outages
BRC	Texas Bureau of Radiation Control
CFR	*Code of Federal Regulations*
CHM	Chemistry procedure
CPSES	Comanche Peak Steam Electric Station
DEP	Drill/Exercise Performance (Performance Indicator)
ECCS	emergency core cooling system
EDG	emergency diesel generator
EPP	emergency plan procedure
EPZ	Emergency Planning Zone
ERG	emergency response guideline
FDA	Final Design Authorizations
FEMA	Federal Emergency Management Agency
FME	foreign material exclusion
GSI	Generic Safety Issue
INC	Instrument and Control Procedure
INPO	Institute of Nuclear Power Operations
LER	Licensee Event Report
NCV	noncited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OPT	operability test
PAR	protective action recommendations
PI	performance indicator
QTE	Quick Technical Evaluation

RFO	refueling outage
RHR	residual heat removal
SMF	SmartForm
SOP	system operating procedure
SSC	structures, systems, or components
SSPS	solid state protection system
STA	station administrative procedure
TBD	to be determined
WO	work order