

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

December 31, 2001

EA-01-304

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, UNITS 1 AND 2 - NRC

INSPECTION REPORT NO. 50-445/01-07; 50-446/01-07; PRELIMINARY

WHITE FINDING

Dear Mr. Terry:

On November 8, 2001, the NRC completed an onsite inspection at your Comanche Peak Steam Electric Station, Units 1 and 2. The enclosed report documents the inspection findings, which were discussed on November 8, 2001, with Mr. J. Kelley, Vice President, Nuclear Engineering and Support, and other members of your staff on the preliminary results of the onsite inspection. On December 6, 2001, a telephonic exit meeting was held with Mr. Roger Walker, Regulatory Affairs Manager, and other members of your staff during which the team leader characterized the results of the in-office review of the significance of the inspection findings.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations, and with the conditions of your operating license. Within these areas, the inspection involved a selected examination of procedures, representative records, observations of activities, and interviews with personnel.

Based on the results of the inspection, the team concluded that, in general, your program effectively identified and resolved conditions adverse to quality. However, this report discusses a finding that appears to have low to moderate safety significance when evaluated under the significance determination process. As described in Section 4OA2.c2 of this report, the failure to perform proper radiological surveys to detect radioactivity was not in accordance with technical specification required procedures. This finding was assessed using the public radiation safety significance determination process as a potentially safety significant finding that was preliminarily determined to be White, a finding with some increased importance to safety which may require additional NRC inspection. We note that none of the material was released from the owner controlled property and that the potential public exposure associated with these items was less than 5 millirem, a small fraction of NRC limits. However, the finding has low to moderate safety significance because there were more than five events, as defined by the NRC's significance

determination process, which is discussed in NRC Inspection Manual Chapter 0609, "Significance Determination Process."

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The finding also appears to be a violation of NRC requirements and is being considered for escalated enforcement action (EA-01-304) in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), NUREG-1600.

Before the NRC makes a final decision on this matter, we provided you an opportunity to request a regulatory conference where you would be able to provide your perspectives on the significance of the finding, the bases for your position, and whether you agree with the apparent violation. During a telephone conversation with Mr. Anthony T. Gody on December 12, 2001, Mr. Walker of your staff requested that we conduct a regulatory conference. Accordingly, this conference has been scheduled on January 23, 2002. We encourage you to submit your evaluation and any differences with the NRC evaluation at least one week prior to the conference in an effort to make the conference more efficient and effective. This regulatory conference will be open for public observation and will begin at 1:00 p.m CST in the NRC Region IV Office in Arlington, Texas. The NRC will also issue a press release to announce the Regulatory Conference.

Since the NRC has not made a final determination in this matter, no Notice of Violation is being issued for this inspection finding at this time. In addition, please be advised that the number of examples and/or characterization of the apparent violation described in the enclosed inspection report may change as a result of further NRC review.

Additionally, the team identified, as described in Section 4OA2.c2 of this report, an issue that was evaluated under the risk significance determination process as having very low safety significance (Green). The NRC has also determined that a violation is associated with this issue. This violation is being treated as a noncited violation, consistent with Section VI.A of the Enforcement Policy. If you contest this noncited violation or significance of it, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, 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, Units 1 and 2 facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be 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 <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

Sincerely,

TXU Electric -3-

# Division of Reactor Safety

Docket Nos.: 50-445; 50-446 License Nos.: NPF-87; NPF-89

Enclosure:

NRC Inspection Report No. 50-445/01-07; 50-446/01-07

cc w/enclosure: Roger D. Walker TXU Electric Regulatory Affairs Manager P.O. Box 1002 Glen Rose, Texas 76043

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SHP:PSB	SOE:OB	RI:PBA	C:OB	C:PBA	RIV:ACES	C:OB	D:DRS
MPShannon/Imb	GWJohnston	SCSchwind	ATGody	CEJohnson	GMVasquez	ATGody	ATHowell III
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12/03/01	12/04/01	12/05/01	12/17/01	12/17/01	12/18/01	12/19/01	12/31/01

# **ENCLOSURE**

### U.S. NUCLEAR REGULATORY COMMISSION

# **REGION IV**

Docket No.: 50-445; 50-446

License No.: NPF-87; NPF-89

EA No. 01-304

Report No: 01-07

Licensee: TXU Electric

Facility: Comanche Peak Steam Electric Station, Unit 1 and 2

Location: Glen Rose, Texas

Dates: October 29 through November 8, 2001

Inspectors: Michael P. Shannon, Senior Health Physicist, Plant Support Branch

Gary W. Johnston, Senior Operations Engineer, Operations Branch

Scott C. Schwind, Resident Inspector, Projects Branch A

Approved By: Anthony T. Gody, Chief, Operations Branch

Division of Reactor Safety

### **SUMMARY OF FINDINGS**

IR 05000445-01-07; 05000446-01-07; on 10/29-12/6/2001; TXU Electric; Comanche Peak Steam Electric Station, Units 1 and 2; Annual Baseline Inspection of the Identification and Resolution of Problems.

The inspection was conducted by a regional senior health physicist, a regional senior operations engineer, and a resident inspector. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609.

### **Identification and Resolution of Problems**

The licensee was effective at identifying problems and entering them into the corrective action program for resolution. Safety significance was appropriately considered in prioritizing the extent to which individual problems would be evaluated and in establishing schedules for implementation of corrective actions. Licensee evaluations and department self-assessments were comprehensive and self-critical. Based on interviews conducted during this inspection, individuals at the site felt free to input safety issues into the corrective action program and felt that the program effectively addressed safety issues documented. Overall, the licensee implemented corrective actions that were timely and effective. However, the team found that the licensee's process for identifying performance trends relied heavily on each department manager recognizing when adverse trends existed. In one instance, an adverse performance trend involving the inadvertent release of radioactive material from the radiologically controlled area had not been identified and corrected by the department manager. Two violations of NRC requirements were identified where corrective actions were either not effective or timely to prevent a similar occurrence (Sections 4OA2.a2;b2;c2;d2).

# **Cornerstone: Public Radiation Safety**

• TBD. Between January 24, 2000, and May 24, 2001, the licensee identified 11 examples in which radioactive material was inadvertently released from the radiologically controlled area because the licensee failed to properly perform surveys. Two of these examples have been dispositioned as a noncited violation of very low safety significance (Green) in NRC Inspection Report 50-445;446/01-04.

The failure to perform proper radiological surveys are nine examples of a Technical Specification 5.4.1.a violation. This violation is being treated as an apparent violation consistent with the NRC Enforcement Policy. These events are described in the licensee's corrective action program, reference Smart Forms 2000-000187, 2000-001080, 2000-002380, 2000-002445, 2000-002458, 2000-002740, 2000-003122, 2001-000850, and 2001-000968.

Using the public radiation safety significance determination process, the NRC preliminarily determined that the finding was of low-to-moderate risk significance (white) because the public exposure associated with each item was less than 5 millirem; however, there were more than five events. The events were more than minor, because the failure to properly survey radioactive material has a credible impact on safety, and the issues involved occurrences in the licensee's radioactive material control program that were contrary to NRC requirements or licensee procedures (Section 4OA2.c2).

# **Cornerstone: Physical Protection**

• Green. On April 2, 1999, and October 16, 2000, the licensee identified that a vital area barrier associated with Unit 2 main steam safety tail pipe work was found in a degraded condition and not continuously observed. 10 CFR 73.40 requires, in part, that a licensee establish and maintain physical security in accordance with security plans. Section 10.4.5 of the licensee's physical security plan requires continuous observations of vital area barriers that are found in a degraded condition. The failure to maintain continuous observation of degraded vital area barriers were two examples of a physical security plan violation. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Smart Forms 1999-000830 and 2000-002864.

The safety significance of this finding was determined to be very low (Green) by the physical protection significance determination process because there were no malevolent acts and there were not more than two similar findings in four quarters. The issues were more than minor because the failure to properly control vital area boundaries has a credible impact on safety (Section 4OA2.c2).

### **Report Details**

# 4. OTHER ACTIVITIES (OA)

### 4OA2 Identification and Resolution of Problems

### a. Effectiveness of Problem Identification

# (1) <u>Inspection Scope</u>

The team reviewed items selected across the seven cornerstones of safety to determine if problems were being properly identified, characterized, and entered into the corrective action program for evaluation and resolution. Specifically, the team's review included a selection of approximately 160 risk significant corrective action documents (Smart Forms) that had been issued between August 4, 2000, and October 29, 2001. The team also reviewed 10 nuclear overview department evaluations, 19 department self-assessments, and various trending reports, system health reports and documents related to the problem identification and resolution program for the same assessment period. The team compared the evaluation and self-assessment results with self-revealing and NRC-identified issues to determine the effectiveness of the program documents.

The team evaluated the Smart Forms to determine the licensee's threshold for identifying problems and entering them into the corrective action program. Also, the licensee's efforts in establishing the scope of problems were evaluated by reviewing pertinent work orders, engineering requests, self-assessment results, and action plans. The documents listed in the attachment to this report were used to facilitate the review.

### (2) Issues and Findings

The team determined that the licensee was effective at identifying problems and entering them into the corrective action program. This was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee during the inspection period. Licensee evaluations and self-assessments were comprehensive, self-critical, and identified issues similar to those that were self-revealing or raised during NRC inspections. The team identified no instances where conditions adverse to quality were being handled outside the corrective action program.

The team found that the licensee's process for identifying performance trends relied heavily on each department manager recognizing when advise trends existed. The team identified one isolated example associated with inadvertent releases of radioactive material from the radiologically controlled area where an adverse performance trend had not been identified and corrected by the department manager. This issue is discussed in Section 4OA2c.(2) below.

No findings of significance were identified.

### b. Prioritization and Evaluation of Issues

### (1) Inspection Scope

The team reviewed approximately 160 Smart Forms and supporting documentation, including analyses of the problem causes, to ascertain whether the licensee's evaluation of the problems identified considered the full extent of conditions, generic implications, common causes, and previous occurrences. In addition, the team reviewed the licensee's evaluation of selected industry experience information, including operating event reports, and NRC and vendor generic notices, to assess if issues applicable to Comanche Peak were appropriately identified and addressed.

### (2) Issues and Findings

Based on a review of the licensee's records, the team concluded that for the more risk significant Smart Forms the evaluations were of sufficient depth. The root cause determinations were accurate, risk aspects of the conditions had been appropriately considered, and documentation was sufficient to support independent review of the corrective action response. The team also noted that the licensee effectively evaluated and prioritized Smart Form issues in accordance with station procedural requirements.

The licensee appropriately characterized and evaluated issues that were significant conditions adverse to quality. The team identified no findings related to the prioritization and evaluation of issues.

### c. <u>Effectiveness of Corrective Actions</u>

# (1) <u>Inspection Scope</u>

The team reviewed the Smart Form reports and other supporting documentation related to problem identification and resolution described in Section 4OA2.a.(1) above, to verify that corrective actions were effective and implemented in a timely manner commensurate with safety, including corrective actions to address common cause or generic concerns. The team also conducted limited plant walkdowns and interviewed plant personnel to independently verify and assess the completion and effectiveness of corrective actions implemented by the licensee.

# (2) <u>Issues and Findings</u>

Based on a review of the licensee's problem identification and resolution reports, the team concluded that, in general, corrective actions were timely and effective. Evaluations for assignment of corrective actions for significant conditions adverse to quality were completed within procedural expectations. However, the team also determined that corrective actions associated with some less safety significant Smart Forms were not always timely and/or effective to prevent a similar occurrence.

Similar corrective action issues were identified in both the physical protection and public radiation safety cornerstone areas. The team found that corrective actions, associated with 2 examples of a physical security violation and 11 examples of a radiation protection violation, described below, were not adequate or timely to prevent a similar occurrence. While the safety significance of the physical security violation was determined to be very low and the radiation protection violation was determined to be low-to-moderate, the number of occurrences indicated a negative performance trend.

### Control of radioactive material

Over the past two years, the team noted that the licensee had identified 11 examples in which radioactive material was inadvertently released from the radiologically controlled area. Two of these examples had been discussed previously in NRC inspection reports and are summarized below. During this inspection a finding with low-to-moderate safety significance (White) was identified for an additional nine examples of an apparent violation associated with a failure to properly survey radioactive material to detect radioactively.

The following Smart Forms (SMF) were written to document that radioactive material was found outside the radiologically controlled area.

- SMF 2000-000187 written on January 24, 2000, documented that a reusable cotton liner with contamination levels of 4646 disintegrations per minute was found inside a bag of dirty modesty clothes. The corrective action was to "trend."
- SMF 2000-001080 written on March 11, 2000, determined that a safety harness was inappropriately surveyed and released from Warehouse C. Warehouse C was located outside the protected area. Contamination levels were 1000 counts per minute. Corrective actions consisted of surveying other areas outside the radiologically controlled area where safety harnesses were stored and "trend."
- SMF 2000-002380 written on September 25, 2000, documented that an electrical extension cord, labeled as radioactive material, was found in the cold tool room. Contamination levels were not recorded, except to say barely detectable. The corrective action was to "trend."
- SMF 2000-002445 written on September 30, 2000, documented that a reusable cotton liner with contamination levels of 16,200 disintegrations per minute was found in the clean mens locker room. The corrective action was to "trend."
- SMF 2000-002458 written on September 30, 2000, documented that a temporary electrical power pack with contamination levels of 100 counts per minute was discovered on the south side of the megawatt support center. The corrective action was to "trend."
- SMF 2000-002740 written on October 11, 2000, documented that a paper towel commonly used in the radiologically controlled area was found inside a trash

dumpster. Contamination levels were not recorded except to say that the item was greater than background. Corrective actions consisted of a complete survey of the trash dumpster, in which an additional radioactive item (a contaminated rag) was found, and "trend."

- SMF 2000-003122 written on November 3, 2000, documented that a reusable cotton liner was found in a gas bottle rack. Contamination levels were not recorded, except to say that the small article monitor alarmed. The corrective action was to "trend."
- SMF 2001-000850 written on April 6, 2001, documented that velcro straps and a yellow cloth with contamination levels of 11,000 disintegrations per minute was found inside a bag of dirty modesty clothes. The corrective action was to "trend."
- SMF 2001-000968 written on April 11, 2001, determined that a worker wearing contaminated velcro leg bands, exited the radiologically controlled area through the contamination monitoring equipment multiple times that day without alarming the monitoring equipment. Contamination levels were 160 counts per minute. The leg bands had the potential to be released from the protected area without being surveyed because the licensee failed to determine if the items would have been detected by the radiation monitoring equipment at the protected area egress point. Monitoring equipment at the protected area egress point was similar to the detection equipment at the radiologically controlled area. The corrective action was to "trend."

Additionally, Smart Forms 2001-000630 and 2001-001352 were written on March 3, 2001, and May 24, 2001, respectively, to document that radioactive material was found outside the radiologically controlled area. Contamination levels were 2000 and 7000 counts per minute, respectively. Corrective actions associated with Smart Form 2001-000630 were in the planning stage as of November 8, 2001. Corrective actions associated with Smart Form 2001-001352 consisted of closing this Smart Form to Smart Form 2001-000630 and "trend." These events have been dispositioned as a noncited violation of very low safety significance (Green), in NRC Inspection Report 50-445; 446/01-04.

The events were more than minor because the failure to properly survey radioactive material has a credible impact on safety, in that, an inadvertent release of radioactive material and an unplanned exposure could occur to occupational workers and members of the public. Additionally, these issues involved occurrences in the licensee's radioactive material control program that were contrary to licensee procedures. Using the public radiation safety significance determination process, the NRC preliminarily determined that the finding was of low to moderate risk significance (White) because, although none of the material was released from the owner controlled area and the potential public exposure associated with each item was less than 5 millirem, there were more than five events.

Technical Specification 5.4.1.a states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, February 1978, Appendix A. Regulatory Guide 1.33, Appendix A, Section 7.e.(4), recommends procedures for contamination control.

Section 4.2 of Procedure RPI-213, "Survey and Release of Material and Personnel," Revision 8, states, in part, the criteria for unconditional release from the radiologically controlled area is no detectable radioactive activity. The failure to perform proper radiological surveys to detect radioactivity constitute nine examples of a Technical Specification 5.4.1.a violation. This apparent violation is being considered for escalated enforcement consistent with the NRC Enforcement Policy. These events are described in the licensee's corrective action program, reference Smart Forms 2000-000187, 2000-001080, 2000-002380, 2000-002445, 2000-002458, 2000-002740, 2000-003122, 2001-000850, and 2001-000968 (50-445/446/2001-07-01).

Additionally, the team determined that for some the above examples, the licensee did not always evaluate all the possible causes of the release of radioactive material. For example, Smart Form 2001-000968 noted that a worker, wearing contaminated (160 counts per minute) velcro leg bands, exited the radiologically controlled area through the contamination monitoring equipment multiple times on April 11, 2001, without alarming the monitoring equipment. However, the licensee did not take any action to determine whether the contamination monitoring equipment was functioning properly. The team concluded from interviews held with radiation protection supervision, that the monitoring equipment was never checked to determine why this item did not alarm the monitor.

### Control of a vital area security boundary

Two examples of a noncited violation with very low safety significance (Green) were identified for the failure to properly control a vital area barrier. On April 2, 1999, Smart Form 1999-000830 was written to document that a vital area barrier associated with Unit 2 Main Steam Safety Tail Pipe work was found in a degraded condition and not continuously observed. Corrective actions consisted of immediately posting a security watch and ensuring that valve team planners were aware of the need to have security present prior to removing the main steam safety tail pipe and breaching a vital area. On October 16, 2000, Smart Form 2000-002864 was written to document that, again, a vital area barrier associated with Unit 2 Main Steam Safety Tail Pipe work was found in a degraded condition and not continuously observed. The corrective actions consisted of again, immediately posting a security watch and ensuring that the valve team planners put a statement in any open or currently planned work order associated with the above work, stating that security needed to be present prior to breaching a vital area. No other work packages were open or planned at that time. The team noted that no other corrective actions were documented in the above two Smart Forms. After discussions with the valve team manager, the team concluded that long term corrective actions were not developed or added to the Standard Work Step package associated with the above work until questioned by the NRC Team on November 7, 2001. Additionally, the corrective actions

for the April 1999 event were not sufficient to prevent a recurrence. The team determined that the subsequently proposed long term corrective action should prevent a similar occurrence.

The issues were more than minor, because the failure to properly control vital area boundary has a credible impact on safety, in that, an unauthorized entry into a vital area could have occurred. The safety significance of this finding was determined to be very low (Green) by the Physical Protection Significance Determination Process because there were no malevolent acts and there were not more than two similar findings in four quarters.

10 CFR 73.40 requires, in part, that a licensee establish and maintain physical security in accordance with security plans. Section 10.4.5 of the licensee's Physical Security Plan requires continuous observation of vital area barriers that are found in a degraded condition. The failure to maintain continuous observation of degraded vital area barriers are two examples of a Physical Security Plan violation. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. These events are documented in the licensee's corrective action program by Smart Forms 1999-000830 and 2000-002864 (NCV 50-446/0107-02).

# d. Assessment of Safety-Conscious Work Environment

### (1) Inspection Scope

During interviews with approximately 30 individuals from the licensee's staff, representing a cross-section of functional organizations, and supervisory and non-supervisory personnel, the team assessed the individual's willingness to identify safety issues and enter those issues in the Smart Form process. These interviews assessed whether, or not, conditions existed that would challenge the establishment of a safety-conscious work environment.

# (2) <u>Issues and Findings</u>

The team concluded, based on information collected from these interviews, that employees were willing to identify issues and accepted the responsibility to enter safety issues into the corrective action program. Personnel interviewed demonstrated a working knowledge of the Smart Form process, and indicated that, in general, the corrective action program was effective in resolving issues.

No specific findings were identified in the area of assessment of safety-conscious work environment.

# 4OA6 Management Meetings

### Exit Meeting Summary

The inspector presented the preliminary inspection results to Mr. J. Kelley, Vice President, Nuclear Engineering and Support, and other members of licensee management at the conclusion of the onsite inspection on November 8, 2001. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

A telephonic exit meeting was held on December 6, 2001, with Mr. Roger Walker, Regulatory Affairs Manager, and other licensee staff members during which the team leader characterized the results of the in-office review following the team's departure from the site. The licensee's management acknowledged the findings presented.

### **ATTACHMENT**

### PARTIAL LIST OF PERSONS CONTACTED

# Licensee

- D. Alps, Security Manager
- J. Barker, Engineering Overview Manager
- C. Beerck, Senior Nuclear Specialist
- D. Bozeman, Emergency Planning Manager
- R. Calder, Executive Assistant
- C. Cotton, Day Shift Manager
- J. Curtis, Radiation Protection Manager
- S. Ellis, Operations Manager
- R. Flores, Deputy to Vice President Nuclear Engineering and Support
- T. Gilder, Joint Engineering Team Manager
- A. Hall, Operations Overview Manager
- S. Harvey, Prompt Team Manager
- T. Hope, Regulatory Compliance Manager
- J. Kelley, Nuclear Engineering and Support Vice-President
- D. Kross, Outage Manager
- M. Lucas, Nuclear Overview Department Manager
- D. McAfee, Programs Overview Manager
- D. Moore, Plant Manager
- D. Rencher, Engineering Project Manager
- D. Snow, Senior Regulatory Compliance Specialist
- M. Sunseri, System Engineering Manager
- T. Tigner, Program Supervisor
- R. Walker, Regulatory Affairs Manager
- D. Wider, Radiation and Industrial Safety Manager

### ITEMS OPENED AND CLOSED

### Opened

50-445;446/0107-01 AV Failure to survey (Section 4OA2.c)

### Opened and Closed During this Inspection

50-446/0107-02 NCV Failure to control a vital area boundary (Section 4OA2.c)

# **DOCUMENTS REVIEWED**

The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings:

# **Procedures**

CHM-513, "Operation of the Unit 1 Process Sampling System," Revision 6

NTP-102, "Analysis," Revision 7

NTP-106, "Evaluation," Revision 7

RPI-213, "Survey and Release of Material and Personnel," Revision 8

STA-421, "Initiation of Smart Forms," Revision 9

STA-422, "Processing Smart Forms," Revisions 16 and 17

# **Corrective Action Documents**

1998-000980	2000-002210	2000-003230	2001-000850	2001-001704
1999-000830	2000-002218-01	2000-003332	2001-000907	2001-001713
1999-001092	2000-002266	2000-003340	2001-000968	2001-001797
1999-001720	2000-002274	2000-003400	2001-001026	2001-001798
1999-002162	2000-002281	2000-003407	2001-001137	2001-001836
1999-002168	2000-002286	2001-000011	2001-001180	2001-001851
1999-002840	2000-002369	2001-000030	2001-001189	2001-001872
1999-002891	2000-002380	2001-000078	2001-001219	2001-001902
1999-003100	2000-002439	2001-000102	2001-001257	2001-001959
1999-003168	2000-002445	2001-000110	2001-001277	2001-002126
1999-003312	2000-002458	2001-000145	2001-001278	2001-002147
1999-003418	2000-002494	2001-000221	2001-001302	2001-002163
2000-000103	2000-002522	2001-000245	2001-001324	2001-002178
2000-000187	2000-002556	2001-000261	2001-001334	2001-002182
2000-000343	2000-002559	2001-000262	2001-001352	2001-002186
2000-000409	2000-002559	2001-000282	2001-001365	2001-002241
2000-000940	2000-002628	2001-000283	2001-001433	2001-002258
2000-000998	2000-002704	2001-000284	2001-001457	2001-002262
2000-001080	2000-002739	2001-000452	2001-001504	2001-002271
2000-001412	2000-002740	2001-000459	2001-001548	2001-002271
2000-001481	2000-002780	2001-000509	2001-001568	2001-002326
2000-001536	2000-002863	2001-000512	2001-001605	2001-002327
2000-001548	2000-002864	2001-000558	2001-001607	2001-002329
2000-001693	2000-002864	2001-000619	2001-001615	2001-002330
2000-001779	2000-002886	2001-000630	2001-001619	2001-002331
2000-001858	2000-002905	2001-000700	2001-001621	2001-002350
2000-001968	2000-002920	2001-000772	2001-001626	2001-002403
2000-001969	2000-002995	2001-000776	2001-001627	2001-002445
2000-002032	2000-003053	2001-000780	2001-001634	2001-002983
2000-002073	2000-003122	2001-000805	2001-001687	
2000-002099	2000-003185			

### **Evaluations**

EVAL-2000-010, "Corrective Action," 11/01/00 - 11/29/00

EVAL-2000-017, "Conduct of Operations," 05/18/00

EVAL-2000-020, "Trend Analysis of Overdue Smart Forms and Activities," 05/19/00

EVAL-2000-041, "Radiation Protection Program," 08/31/00 - 0915/00

EVAL-2000-043, "Follow-up Self Assessment/NOD evaluation of radworker practices and area contamination controls during 2FRO5," 09/26/00 - 11/03/00

EVAL-2001-013, "1RFO8 Follow-up to Radworker Practices Corrective Actions," 03/26/01 - 04/20/01

EVAL-2001-016, "Corrective Action," 03/05/01 - 03/14/01

EVAL-2001-024, "Corrective Action," 05/01/01 - 05/24/01

EVAL-2001-039, "Annual Radiation Protection Program Evaluation," 08/29/01 - 9/17/01

### Self-Assessments

SA-2000-004, "Fitness for Duty Program," 10/16/00 - 11/02/00

SA-2000-006, "Stations Operations Review Committee Self-Assessment of Performance," 11/27/00 - 11/29/00

SA-2000-007, "Follow-up Self-Assessment/NOD evaluation of Radworker Practices and area contamination controls during 2RF05," 09/26/00 - 11/03/00

SA-2000-008, "Radiation Exposure Records," 01/15/01 - 09/22/01

SA-2001-003, "Radiation Detection Instrumentation," 02/05/01 - 02/09/01

SA-2001-010, "Verification of NRC Performance Indicators," 05/16/01 -08/13/01

SA-2001-011, "1RF08 Outage Readiness Review," 02/12/01 - 02/14/01

SA-2001-012, "Implementation of the Heavy Load Handling Program"

SA-2001-015, "Maintenance Rule Periodic Assessment # 44"

SA-2001-016, "Analysis of Personnel Contaminations During 1RFO8," 03/24/01 - 04/22/01

SA-2001-017, "Review of Radioactive Material Posting and Labeling," 05/02/01 - 05/04/01

SA-2001-019, "Spent Fuel Pool Re-Rack Planning," 05/14/01 - 05/17/01

SA-2001-023, "Review of ALARA Program, with Emphasis on Power Operations," 06/11/01 - 06/14/01

SA-2001-027, "Frisker Use and Operation," 06/27/01 - 06/28/01

SA-2001-038, "Review of Emergency Planning Surveillance Methodology for the Alert and Notification System Reliability," 02/09/01 - 08/17/01

SA-2001-040, "Use of Lessons Learned from Industry Experience," 08/23/01

### Other Documents

Unit 2 Operator Logs, 07/07/01

Unit 2 LCOAR Log for 07/07/01

Open Operation's Work Around List Items, 11/01/01

Operations Standing Order, "Human Performance Improvement Course of Action," 04/19/01

"PMG Corrective Action Program Review" Agenda 11/07/01

Operating Experience Summary Report for the Month of 09/01

Open Industry Operating Experience Recommendations for the Month of 09/01

INPO SOER 99-01 "Loss of Grid"

Activity Assessment Worksheet Revision F Draft 10/10/01

"PRA Evaluation of the Consequences of Missing Backwater Check Valves In the AFW Pump Room Floor Drains" 06/11/01

"Maintenance Rule Review Panel Meeting" 09/25/98

"Maintenance Rule Review Panel Meeting" 09/21/00

"Key Focus System Health Status" Second Quarter 2001

"Management Performance Indicators Package" 09/01

"Security Manager's Trend Information Report" 08/01/01

"Managers Trend Analysis of Operations Department Smart Forms," 04/18/01

"Managers Trend Analysis of Operations Department Smart Forms," 08/25/01

"Radiation Protection Manager's Trend Information Report" 09/06/01

### DOCUMENTS REQUESTED

(This request list was E-Mailed to the licensee on August 22, 2001)

1. A summary list of all currently open/active items for:

smart forms of significant conditions adverse to quality operator work-arounds engineering review requests temporary modifications procedure change requests training needs request/evaluation control room and safety system deficiencies human performance issues

2. A summary list of all items completed/resolved/closed since August 4, 2000 for:

smart forms of significant conditions adverse to quality operator work-arounds engineering review requests temporary modifications procedure change requests training needs request/evaluation control room and safety system deficiencies human performance issues

3. Summary list of all smart forms generated during the specified period and sorted by:

chronology initiating organization responsible organization

- 4. All quality assurance audits and surveillances of corrective action activities since August 4, 2000.
- 5. All corrective action activity resulting from functional area self-assessments and Non-NRC third party assessments since August 4, 2000.
- 6. Corrective action performance trending/tracking reports generated since August 4, 2000.
- 7. Current revision of the following procedures: "Initiation and Processing of Smart Forms," "Disposition of Smart Forms Identifying Potential Adverse Conditions," and "Root Cause Analysis."
- 8. Any additional governing procedures/policies/guidelines for:

Condition Reporting Corrective Action Program Root Cause Evaluation/Determination Operator Work-Arounds Work Requests **Engineering Requests Temporary Modifications Procedure Change Requests** Deficiency Reporting and Resolution Training Needs Request/Evaluation

- 9. For each of the items applicable to Comanche Peak listed below please provide the following:
  - Full text of the smart form (please indicate any findings that did not result in a smart-form or corrective actions)
  - Any "Roll-up" or "Aggregating" smart forms related to the generic communication or condition report.
  - Root Cause analysis report (if applicable)
  - Risk significance assessments
  - Probable Cause evaluation (if applicable)
  - Approved corrective actions
  - Basis for extending originally approved due dates
  - Evidence of corrective action completion for those items deemed to be closed (work packages, design change documentation, temporary modifications, training lesson plans/material, training attendance records, procedure revisions, etc.)
  - Part 21 Reports: a.
    - 2000-08-7: 10/18/00 ANSYS Class 3 error reports
    - 2000-14-1: 12/21/00 Safety Relief Valve Bonnet Casting
    - 2000-18-0: 08/02/00 Epoxy Seal on Siemens Output interface Relay
    - 2000-19-0: 08/30/00 Inadvertent Trip of Westinghouse Circuit Breakers
    - 2000-20-0: 09/20/00 "delta" T time domain module
    - 2000-21-0: 10/16/00 Transducer Bonding
    - 2000-23-0: 10/19/00 Pump Model computer code COTRANSA2 error
    - 2000-24-0: 10/18/00 Insufficient zero-period acceleration rating
    - 2000-25-0: 10/31/00 YUASA 125 volt battery failed
    - 2000-26-0: 11/06/00 Safety related video graph recorders need additional

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- 2000-27-0: 10/24/00 Wrong tube clamps
- 2000-28-0: 12/07/00 Cracks in packing nuts for 1inch UF-6 valves
- 2001-01-0: 12/12/00 710DUOCL calibration unit
- 2001-02-0: 12/15/00 Unrecognized capacitor orientation
- 2001-03-0: 12/18/00 Seismic qualification of electrically operated AK-15/25 circuit breakers
- 2001-04-0: 01/04/01 weights found in removed SFP storage racks
- 2001-05-0: 12/07/00 Defective weld in HL near vessel

- 2001-06-0: 12/20/00 GTSTRUDL dynamic analysis command
- 2001-07-0: 01/10/01 Potential EDG inoperability for Agastat relays
- 2001-08-0: 01/15/01 medium voltage circuit breaker failures
- 2001-09-0: 01/18/01 segration of ingredients in safety-related grout
- 2001-10-0: 01/31/01 broken cap screw in aux. feedwater pump
- 2001-11-0: 02/28/01 internal binding of terminal shaft in Woodward governors
- 2001-12-0: 02/28/01 relay label mismatch LER 50-293/2001-01
- 2001-13-0: 03/28/01 breaker cubicle mechanism out of spec.
- 2001-14-0: 03/29/01 inappropriate reference temperature used
- 2001-15-0: 04/16/01 replacement Foxboro differential pressure
- 2001-16-0: 04/10/01 broken bases in CV-7 relays
- 2001-17-0: 04/27/01 calculation of time to criticality
- 2001-18-0: 05/02/01 Failure of K-Line circuit breaker to close
- 2001-19-0: 05/11/01 R-11 radiation monitor spiking
- 2001-20-0: 05/23/01 low flow coefficients for ball check valves
- 2001-21-0: 06/19/01 electrolytic capacitors in Woodward 2301A control devices
- 2001-22-0: 06/21/01 leaking flow switch in containment gas analyzer
- 2001-24-0: 07/09/01 Woodward governor exhibits unstable oscillations

### b. NRC Information Notices:

- 2000-012: 09/21/00 Degradation of firefighter primary protective garments
- 2000-013: 09/27/00 Review of Refueling Outage Risk
- 2000-014: 09/27/00 Non-Vital Bus fault leads to fire and loss of offsite power
- 2000-015: 09/29/00 Recent events resulting in whole body exposures exceeding regulatory limits
- 2000-016: 10/05/00 Potential hazards due to volatilization of radionuclides
- 2000-017: 10/18/00 Crack in weld area of RCS hot-leg piping
- 2000-017 Sup-1: 11/16/00 Crack in weld area of RCS hot-leg piping
- 2000-017 Sup-2: 02/28/01 Crack in weld area of RCS hot-leg piping
- 2000-018: 11/29/00 Substandard material supplied by Chicago Bullet Proof System
- 2000-019: 12/05/00 Implementation of human use research protocols involving USNRC regulated materials
- 2000-020: 12/11/00 Potential loss of redundant safety-related equipment
- 2000-021: 12/15/00 Detached check valve disc not detected by use of acoustic and magnetic nonintrusive test techniques
- 2001-001: 03/26/01 Importance of accurate inventory controls to prevent the unauthorized possession of radioactive material
- 2001-002: 03/28/01 Summary of fitness-for-duty program performance reports for calendar years 1998 and 1999
- 2001-004: 04/11/01 Neglected fire extinguisher maintenance causes fatality

- 2001-005: 04/30/01 Thru-wall cracking of RPV head control rod drive mechanism penetration nozzles
- 2001-006: 05/11/01 Centrifugal charging pump thrust bearing damage not detected
- 2001-007: 05/11/01 Unescorted access granted on the basis of incomplete/inaccurate information
- 2001-009: 06/12/01 Main FW system degradation in safety-related ASME

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- 2001-010: 06/28/01 Failure of Central Sprinkler Co. Model GB Series fire sprinkler heads
- 2001-012: 07/13/01 Hydrogen fire at a Nuclear Power Station
- c. All NCVs and NOV's issued since August 4, 2000
- 10. Current System Health Reports or similar system information
- 11. Listing of plant safety issues generated through the employee concerns program since August 4, 2000
- 12. Listing of action items generated by the plant safety review committees since August 4, 2000
- 13. Current predictive performance summary reports