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

April 17, 2006

Mike Blevins, Senior Vice President
and Chief Nuclear Officer
TXU Power
ATTN: Regulatory Affairs
Comanche Peak Steam Electric Station
P.O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION - NRC RADIATION SAFETY TEAM INSPECTION REPORT 05000445/2006008 AND 05000446/2006008

Dear Mr. Blevins:

On March 17, 2006, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Comanche Peak Steam Electric Station, Units 1 and 2, facility. The enclosed report documents the inspection findings, which were discussed at the conclusion of the inspection with Mr. P. Polefrone, Plant Manager, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The team reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, the team evaluated the inspection areas within the Radiation Protection Strategic Performance Area that are scheduled for review every two years. These areas are:

- Radiation Monitoring Instrumentation
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
- Radioactive Material Processing and Transportation
- Radiological Environmental Monitoring Program and Radioactive Material Control Program

This inspection report documents one NRC-identified and one self-revealing violation of very low safety significance (Green). However, because the findings were of very low safety significance and they were entered into your corrective action program, the NRC is treating these findings as non-cited violations, consistent with Section VI.A of the NRC Enforcement Policy. Additionally, a licensee-identified violation which was determined to be of very low safety significance is listed in this report. If you contest any non-cited violation in this report, 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 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington

DC 20555-001; and the NRC Resident Inspector at the 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, its enclosure, and your response (if any) 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).

Sincerely,

/RA/

Michael P. Shannon, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: NRC Inspection Report 05000445/2006008 and 05000446/2006008
w/attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets:	50-445; 50-446
Licenses:	NPF-87; NPF-89
Report:	05000445/2006008; 05000446/2006008
Licensee:	TXU Generation Company LP
Facility:	Comanche Peak Steam Electric Station, Units 1 and 2
Location:	FM-56 Glen Rose, Texas
Dates:	March 13 - 17, 2006
Inspectors:	Larry Ricketson, P.E., Senior Health Physicist, Plant Support Branch Bernadette Baca, Health Physicist, Plant Support Branch Donald Stearns, Health Physicist, Plant Support Branch Binesh Tharakan, Health Physicist, Plant Support Branch
Accompanied By:	Paul Knapp, Senior Health Physicist, Technical Training Center
Approved By:	Michael P. Shannon, Chief, Plant Support Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000445/2006008, 05000446/2006008; 03/13/06-03/17/06; Comanche Peak Steam Electric Station, Units 1 and 2; Radioactive Material Processing and Transportation, Radioactive Material Control Program

The report covered a five-day period of inspection on site by a team of four region-based health physics inspectors. Two findings of very low safety significance (Green) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process." Findings for which the Significance Determination Process does not apply may be "Green" or 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: Public Radiation Safety

- Green. The team identified a non-cited violation of 49 CFR 172.704(a) because the licensee failed to provide required training to hazmat employees involved in the shipment of radioactive material. The licensee did not provide general awareness training of the requirements of shipping regulations, and did not provide function-specific training of applicable sections of the shipping regulations to crane operators and riggers.

  The finding is greater than minor because it is associated with the Public Radiation Safety Cornerstone attribute of program and process and affects the cornerstone objective. The finding involved the potential to impact the licensee's ability to safely package and transport radioactive material on public roadways. When processed through the Public Radiation Safety Significance Determination Process, the finding was determined to be of very low safety significance because it: (1) was associated with radioactive material control, (2) involved the licensee's program for radioactive material packaging and transportation, (3) did not cause radiation limits to be exceeded, (4) did not result in a breach of package during transit, (5) did not involve a certificate of compliance issue, (6) did not involve a low level burial ground nonconformance, and (7) did not involve a failure to make notifications or to provide emergency information. Corrective action is still being evaluated. Additionally, this finding had cross-cutting aspects associated with problem identification and resolution because the issue had been identified in an audit conducted by the licensee's Nuclear Overview Department, but had not been adequately evaluated and corrected. (Section 2PS2)

- Green. The team reviewed a self-revealing, non-cited violation of Technical Specification 5.4.1, resulting from the licensee's failure to prevent radioactive material from being unconditionally released from a radiologically controlled area. On April 18, 2005, the licensee released a contaminated transmitter from the RCA and in August 2005, shipped it to a facility Minnesota. The recipient surveyed the transmitter upon arrival and detected the radioactive material. The licensee's immediate corrective action was to have the transmitter returned. This finding did not have aspects

associated with the transportation of hazardous material due to the low levels of radioactivity.

This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective in that the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because it: (1) was a radioactive material control finding, (2) was not a transportation finding, (3) did not result in public dose greater than 0.005 rem, and (4) did not result in radioactive material being released from the protected area more than five times during the biennial inspection period. Additionally, this finding had cross-cutting aspects associated with human performance because a technician's failure to perform an adequate survey directly contributed to the finding. (Section 2PS3)

B. Licensee Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

2. RADIATION SAFETY
Cornerstones: Occupational Radiation Safety [OS] and Public Radiation Safety [PS]

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

a. Inspection Scope

This area was inspected to determine the accuracy and operability of radiation monitoring instruments that are used for the protection of occupational workers and the adequacy of the program to provide self-contained breathing apparatus (SCBA) to workers. The team used the requirements in 10 CFR Part 20 and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- Calibration of area radiation monitors associated with transient high and very high radiation areas and post-accident monitors used for remote emergency assessment
- Calibration of portable radiation detection instrumentation, electronic alarming dosimetry, and continuous air monitors used for job coverage
- Calibration of whole body counting equipment and radiation detection instruments utilized for personnel and material release from the radiologically controlled area
- Self-assessments, audits, and Licensee Event Reports
- Corrective action program reports since the last inspection
- Licensee action in cases of repetitive deficiencies or significant individual deficiencies
- Calibration expiration and source response check currency on radiation detection instruments staged for use
- The licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions, status of SCBA staged and ready for use in the plant and associated surveillance records, and personnel qualification and training
- Qualification documentation for onsite personnel designated to perform maintenance on the vendor-designated vital components, and the vital component maintenance records for SCBA units

The inspector completed 9 of the required 9 samples.

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

a. Inspection Scope

This area was inspected to ensure that the gaseous and liquid effluent processing systems are maintained so that radiological releases are properly mitigated, monitored, and evaluated with respect to public exposure. The team used the requirements in 10 CFR Part 20, 10 CFR Part 50 Appendices A and I, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed:

- The most current radiological effluent release reports, changes to radiation monitor setpoint calculation methodology, anomalous sampling results, effluent radiological occurrence performance indicator incidents, self-assessments, audits, and licensee event reports
- Gaseous and liquid release system component configurations
- Routine processing, sample collection, sample analysis, and release of radioactive liquid and gaseous effluent
- Radioactive liquid and gaseous effluent release permits and dose projections to members of the public
- Changes made by the licensee to the Offsite Dose Calculation Manual, the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection
- Monthly, quarterly, and annual dose calculations
- Surveillance test results involving air cleaning systems and stack or vent flow rates
- Instrument calibrations of discharge effluent radiation monitors and flow measurement devices, effluent monitoring system modifications, effluent radiation monitor alarm setpoint values, and counting room instrumentation calibration and quality control
- Interlaboratory comparison program results
- Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

Either because the conditions did not exist or an event had not occurred, no opportunities were available to review the following item:

- Abnormal releases

The inspector completed 10 of the required 10 samples.

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

This area was inspected to verify that the licensee's radioactive material processing and transportation program complies with the requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation regulations contained in 49 CFR Parts 171-180. The team interviewed licensee personnel and reviewed:

- The radioactive waste system description, recent radiological effluent release reports, and the scope of the licensee's audit program
- Liquid and solid radioactive waste processing systems configurations, the status and control of any radioactive waste process equipment that is not operational or is abandoned in place, changes made to the radioactive waste processing systems since the last inspection, and current processes for transferring radioactive waste resin and sludge discharges
- Radio-chemical sample analysis results for radioactive waste streams and use of scaling factors and calculations to account for difficult-to-measure radionuclides
- Shipment packaging, surveying, labeling, marking, placarding, vehicle checking, driver instructing, and disposal manifesting
- Shipping records for non-excepted package shipments
- Licensee event reports, special reports, audits, state agency reports, self-assessments and corrective action reports performed since the last inspection

The inspector completed 6 of the required 6 samples.

b. Findings

Introduction. The team identified a Green non-cited violation (NCV) of 49 CFR 172.704(a) because the licensee failed to provide required training to hazmat employees involved in the shipment of radioactive material. The violation had very low safety significance.

Description. On March 15, 2006, the licensee prepared a shipment of radioactive material for delivery to a waste processor in Erwin, Tennessee. After observing the shipment preparation, the team asked the licensee to provide training records for the individuals involved. Radiation protection and quality control personnel had received the training required by 49 CFR 172.704(a) within the past three years. However, the crane operator and the rigger had received only radiation worker training and hazard communication training. The two individuals had not received general awareness/familiarization training or function-specific training. Activities for which the crane operator and rigger have either direct responsibility or which they may affect are addressed in a number of instructions and precautions included in the procedure for use of the shipping cask . These sections include the following:

Step No.	Instruction
5.9	Ensure cask lid alignment marks are painted on cask lid and cask body.
6.2	NOTE: The cask must be in a nearly perfect level position during lid removal to prevent the cask lid from binding.
6.2.5	Attach the lifting sling and crane hook to the 3 lid lifting shackles.
6.2.6	Ensure the marking stripe showing the position of the cask lid with respect to the cask body is present.
6.2.7	At the slowest possible rate, raise the cask lid to clear the cask and set the lid down on absorbent material or plastic sheeting, if required.
6.5.1.1	Attach the crane hook to the cables on the liner or the grapple ring on the liner.
6.5.1.2	Lower the liner straight into the cask.
6.5.1.4	Ensure the liner cables swing clear to allow proper installation of the cask lid.
6.6.2	Attach the 3-point sling to the 3 lid lifting shackles.
6.6.4	Attach the crane hook to the lifting sling.
6.6.5	Position the cask lid using the alignment marks on the lid and cask. Guide pins provide fine alignment of the lid on the cask.

The licensee's position was that radiation worker training and the hazard communication training were sufficient to meet the training requirements for the crane operator and the rigger. The team reviewed the contents of both radiation worker and hazard communication training plans and noted that neither training course contained information concerning hazardous material transportation requirements.

Analysis. After discussions with representatives from the Office of Nuclear Material Safety and Safeguards and the U. S. Department of Transportation, the team concluded the following: (1) The crane operator and rigger were hazmat employees because of the tasks for which they were responsible, and that they were required to be trained even though they were working under the supervision of other trained employees. (2) The radiation worker and hazmat communication training was not equivalent to general awareness/familiarization training because hazardous materials transportation requirements were not included. (3) No function-specific training was provided to prepare the employees to perform the instructions in the shipping cask use procedure.

The failure to provide required training is a performance deficiency. The finding is greater than minor because it is associated with the Public Radiation Safety Cornerstone attribute of program and process and affects the cornerstone objective in that it involved the potential to impact the licensee's ability to safely package and transport radioactive material on public roadways. The violation involved an occurrence in the licensee's radioactive material transportation program that is contrary to NRC or Department of Transportation regulations. When processed through the Public Radiation Safety Significance Determination Process, the finding was determined to be of very low safety significance because it: (1) was associated with radioactive material control, (2) involved the licensee's program for radioactive material packaging and transportation, (3) did not cause radiation limits to be exceeded, (4) did not result in a breach of package during transit, (5) did not involve a certificate of compliance issue, (6) did not involve a non-compliance with low level burial ground, and (7) did not involve a failure to make notifications or to provide emergency information. Corrective action is still being evaluated.

In addition, this finding had cross-cutting aspects associated with problem identification and resolution because the issue had been identified in an audit conducted by the licensee's Nuclear Overview Department of the radiation protection program, but not adequately evaluated and corrected. This audit, EVAL-2004-016, questioned whether crane operators and riggers working with radiation protection personnel on a radioactive material shipment were trained hazmat employees as defined in 49 CFR 172.704(a). This issue was entered into the licensee's corrective action program as Smart Form SMF-2004-003164-01, dated September 15, 2004. However, instead of contacting a representative of the U. S. Department of Transportation for interpretation of the regulation, the licensee conducted a "benchmarking" with a number of other utilities and concluded that radiation worker training and hazard communication training were sufficient to meet the regulatory requirements.

Enforcement. 10 CFR 71.5 states that each licensee who transports licensed material shall comply with the applicable Department of Transportation (DOT) regulations in 49 CFR parts 107, and 171 through 180. 49 CFR 171.8 defines a hazmat employee as a person who is employed by a hazmat employer and who in the course of employment directly affects hazardous materials transportation safety. 49 CFR 172.704(a) states that a hazmat employee must have general awareness training and function-specific training. General Awareness training shall be provided to familiarize the worker with the requirements of Subchapter C of 49 CFR and to enable the employee to recognize and identify hazardous materials. Function-specific training shall be provided concerning requirements of Subchapter C which are specifically applicable to the functions the employee performs. For example; 49 CFR 173.24 contains general requirements for use and maintenance of packages, 49 CFR 173.475 contains requirements for filling and closing the packaging for shipment, and 49 CFR 173.413 refers to the requirements specified in 10 CFR Part 71 which states that the licensee shall comply with the terms and conditions of the package certificate. Contrary to the above, the licensee did not provide general awareness training of the requirements of shipping regulations, and did not provide function-specific training of applicable sections of the shipping regulations to crane operators and riggers.

The violation was entered into the licensee's Corrective Action Program as Smart Form SMF-2006-001069. Because the failure to train hazmat workers was determined to be of very low safety significance and was entered into the licensee's corrective action program, this violation is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000445/2006008-01; 05000446/2006008-01 - Failure to train hazmat employees.

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (71122.03)

a. Inspection Scope

This area was inspected to ensure that the REMP verifies the impact of radioactive effluent releases to the environment and sufficiently validates the integrity of the radioactive gaseous and liquid effluent release program; and that the licensee's surveys and controls are adequate to prevent the inadvertent release of licensed materials into the public domain. The team used the requirements in 10 CFR Part 20, Appendix I of 10 CFR Part 50, the Offsite Dose Calculation Manual, and the licensee's procedures required by technical specifications as criteria for determining compliance. The team interviewed licensee personnel and reviewed

- Annual environmental monitoring reports and licensee event reports
- Selected air sampling and thermoluminescence dosimeter monitoring stations
- Collection and preparation of environmental samples
- Operability, calibration, and maintenance of meteorological instruments
- Each event documented in the Annual Environmental Monitoring Report which involved a missed sample, inoperable sampler, lost thermoluminescence dosimeter, or anomalous measurement
- Significant changes made by the licensee to the Offsite Dose Calculation Manual as the result of changes to the land census or sampler station modifications since the last inspection
- Calibration and maintenance records for air samplers, composite water samplers, and environmental sample radiation measurement instrumentation, quality control program, interlaboratory comparison program results, and vendor audits
- Locations where the licensee monitors potentially contaminated material leaving the radiological controlled area [or controlled access area] and the methods used for control, survey, and release from these areas

- Type of radiation monitoring instrumentation used to monitor items released, survey and release criteria of potentially contaminated material, radiation detection sensitivities, procedural guidance, and material release records

- Licensee event reports, special reports, audits, self-assessments and corrective action reports performed since the last inspection

The inspector completed 10 of the required 10 samples.

b. Findings

Introduction. The team reviewed a self-revealing non-cited violation of Technical Specification 5.4.1.a, resulting from the licensee's failure to prevent radioactive material from being unconditionally released from a radiologically controlled area (RCA).

Description. On April 18, 2005, a radiation protection technician performed a survey of a level transmitter from the safety injection system that was brought to the RCA access control area for unconditional release. The technician was not informed that similar transmitters had to be decontaminated prior to release. The transmitter was physically too large to be counted in a small article monitor. Therefore, the technician performed the survey of the transmitter with a hand-held frisker. The transmitter was shaped like a box, approximately 3 feet wide and 5 feet long, with bellows on either side and approximately 25 feet of hose wrapped around it. The technician failed to recognize that the high pressure and low pressure side of the bellows were not connected. The high pressure side of the bellows was not contaminated; the low pressure side was contaminated. The technician surveyed only the high pressure side of the bellows, and therefore did not identify the contamination prior to releasing it from the RCA. The transmitter was stored in the instrument and calibration shop for approximately four months until it was shipped to a facility in Minnesota. Upon arrival at the Minnesota facility, the recipient performed a survey that indicated higher-than-background radiation levels were present. The licensee's radiation protection personnel were notified of the problem on August 30, 2005, at which time arrangements were made to retrieve the transmitter. Additional corrective action is still being evaluated.

Analysis. The failure to perform an adequate survey and prevent the unconditional release of radioactive material from the RCA is a performance deficiency. This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective because the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because it: (1) was a radioactive material control finding, (2) was not a transportation finding, (3) did not result in public dose greater than 0.005 rem, and (4) did not result in radioactive material being released from the protected area more than five times during the biennial inspection period.

Additionally, this finding had cross-cutting aspects associated with human performance because the technician's failure to perform an adequate survey directly contributed to the finding.

Enforcement. Technical Specification 5.4.1.a requires that procedures be established, implemented, and maintained covering the applicable procedures in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A, Section 7, includes, "Procedures for Control of Radioactivity (For limiting materials released to environment and limiting personnel exposure)." Procedure RPI-213, Section 4.2.1 states that the criteria for unconditional release from the radiologically controlled area (RCA) is no detectable activity. The licensee violated this requirement when it failed to prevent the unconditional release of the contaminated transmitter containing detectable quantities of radioactivity from a RCA. Because the failure to prevent the unconditional release of radioactive material from a RCA was determined to be of very low safety significance and the finding was entered into the licensee's corrective action program as Smart Form SMF-2005-003382, this violation is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000445/2006008-02; 05000446/2006008-02 - Failure to prevent the unconditional release of radioactive material from a radiologically controlled area.

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

The team evaluated the effectiveness of the licensee's problem identification and resolution process with respect to the following inspection areas:

- Radiation Monitoring Instrumentation (Section 2OS3)
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (Section 2PS1)
- Radioactive Material Processing and Transportation (Section 2PS2)
- Radiological Environmental Monitoring Program and Radioactive Material Control Program (Section 2PS3)

Section 2PS2 describes an finding with cross-cutting aspects associated with problem identification and resolution.

4OA6 Management Meetings

Exit Meeting Summary

On March 17, 2006, the team presented the inspection results to Mr. P. Polefrone, Plant Manager, and other members of the staff who acknowledged the findings. The team confirmed that proprietary information was not provided or examined during the inspection.

4OA7 Licensee Identified Violations

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a non-cited violation.

Technical Specification 5.4.1.a requires that procedures be established, implemented, and maintained covering the applicable procedures in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A, Section 7, includes, "Procedures for Control of Radioactivity (For limiting materials released to environment and limiting personnel exposure)." Procedure RPI-213, Section 4.2.1 states that the criteria for unconditional release from the radiologically controlled area (RCA) is no detectable activity. The licensee identified two examples of a violation of this requirement. The first example occurred on April 8, 2005, when a flashlight with radioactive contamination was found in a tool drawer outside the RCA. The flashlight was returned to the RCA, counted in a small article monitor and determined to have detectable radioactive contamination. The second example occurred on October 22, 2005, when a pair of contaminated sidecutters were found just outside of the RCA access control on top of a fire protection hose station. Radioactive material did not get out of the protected area in either example. These examples were documented in the licensee's corrective action program as Smart Form SMF-2005-1480 and SMF-2005-4260, respectively. This violation has very low safety significance because it involved an occurrence in the licensee's radioactive material control program, public exposure was not greater than five millirem, and there were no more than five occurrences during the previous eight quarters.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

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D. Carden, Technician, Radiation Protection
J. Curtis, Manager, Radiation Protection
T. Edwards, Operations Rad Waste Supervisor
S. Fenton, Technician, Radiation Protection
R. Garcia, Supervisor-Radioactive Material Control, Radiation Protection
R. Kidwell, Senior Nuclear Specialist, Regulatory Affairs
R. Knapp, Principal Health Physicist
W. Knowles, Supervisor-Surveillance and Control, Radiation Protection
T. Marsh, Manager, Chemistry
S. Mostly, Senior Technician, Radiation Protection
B. Nichols, Technician, Radiation Protection
D. O'Connor, Supervisor-Dosimetry, Radiation Protection
T. Parker, Systems Engineer, Engineering
P. Polefrone, Plant Manager
R. Sprouse, Technician, Quality Control
M. Syed, Engineering Consultant, System Engineering
R. Walsh, Technician, Chemistry
D. Wilder, Manager, Radiation Protection and Safety Services

NRC

T. Farnholtz, Senior Project Engineer

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened
NONE

Opened and Closed During this Inspection

05000445/2006008-01; 05000446/2006008-01;	NCV	Failure to train hazmat employees
05000445/2006008-02; 05000446/2006008-02;	NCV	Failure to prevent the unconditional release of radioactive material from a radiologically controlled area

LIST OF DOCUMENTS REVIEWED

Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment

Audits and Self-Assessments

EVAL-2005-010	CPSES Nuclear Overview Department Evaluation Report, Annual Radiation Protection Audit
SA-2005-040	CPSES Self-Assessment Report, Self Assessment of Respiratory Protection Program at CPSES

Corrective Action Documents (Smart Forms)

2004-003634, 2004-003848, 2004-003889, 2005-000897, 2005-002430, 2005-002546, 2005-002621, 2005-002885, 2005-003036, 2005-003642, 2005-003725, 2005-003866, 2005-004277, 2005-004457, 2005-004627, 2006-000354

2005-003325, 2005-003596, 2005-003815, 2005-004197, 2005-004863, 2006-000975

Procedures

ICI-4930	Channel Calibration Low Range Area Monitor, Revision 3
ICI-4959	Channel Calibration High Range Area Monitor, Revision 2
ICI-4990	CCAL - Component Cooling Water Liquid Process Radiation Monitor, Revision 4
ICI-4998	Channel Calibration - Gas Process Monitor, Revision 4
INC-2047	DRMS Calibration Reference Activities, Revision 1
INC-4914	CCAL Main Steam Line Radiation Monitor, Revision 3
INC-7073X	DCOT & CCAL - Auxiliary Building Liquid Waste Disposal Radiation Monitor, Revision 2
INC-7079	Channel Calibration Containment High Range Radiation Monitor Channels, Revision 6
INC-7099X	GPRM COT & CCAL - Control Room Ventilation Intake Monitor, Revision 4
RPI-503	Operation of the Stand-Up Whole Body Counter, Revision 9
RPI-508	Calibration of the Stand-up Whole Body Counter, Revision 8
RPI-802	Performance of Source Checks, Revision 9
RPI-658	Radiation Protection Equipment Calibration Program, Revision 6
RPI-862	Calibration of Argos Personnel Contamination Monitor, Revision 2
RPI-881	Calibration of Portable Dose Rate Instruments, Revision 8
RPI-888	Calibration of Portable Air Sample Equipment, Revision 2
RPI-889	Calibration of the Eberline AMS-4, Revision 1
RPI-895	Calibration of NE Technology SAM - Small Article Monitor, Revisions 2 and 3
STA-658	Radiation Protection Equipment Calibration Program, Revision 6

Self-Contained Breathing Apparatus

RPI-902	Issue and Control of Respiratory Protection Equipment, Revision 11
RPI-903	Decontamination Cleaning and Disinfection of Respiratory Protection Equipment, Revision 9

RPI-904 Accountability and Inspection of Respiratory Protection Equipment Maintenance and Repair, Revision 10
SAF-101 Recharging Breathing Air Cylinders, Revision 0
SAF-104 Inspection of Respiratory Protection Equipment, Revision 6
SAF-106 Testing of Breathing Air Systems, Revision 1
STA-659 Respiratory Protection Program, Revision 14
TRA-103 Respiratory Protection Training, Revision 10

Calibration Data Sheets

Electronic Dosimeters: 102881, 102975, 25775, 26054, 26109, 26271, 26354

HP1084, HP1115, HP1212, HP1858, HP1925/1926, HP1906, HP1925, HP1966, HP2144, HP2155, HP2162, HP2167, HP2171, HP7A-0002, HP7C-0035, HP7C-0042, HP7C-0055, HP7C-0056, HP7C-0058

Quality Control and Calibration Packages

AccuScan Whole Body Counter Calibration Data Package 08-15-05
FastScan Whole Body Counter Calibration Data Package 07-19-05
FastScan Whole Body Counter Daily Quality Control Results Feb 06-20, 2006

Work Orders

3-99-304305-01, 3-02-301795-01, 3-02-312603-01, 3-03-305396-01, 3-03-308167-01, 3-03-308167-02, 3-03-309379-01, 3-03-315745-01, 3-03-317534-01, 3-03-318561-01, 3-04-305363-01, 3-04-305693-01, 3-04-308372-01, 3-04-309068-01, 3-04-326305-01, 5-03-500716-AA, 5-03-502180-AA, 5-03-502497-AA, 5-04-500759-AA, 5-03-501371-AA, 5-03-502180-AA, 5-04-504311-AA

Miscellaneous

2004 Comanche Peak Steam Electric Station Units 1 and 2 Radioactive Effluent Release Report
Internal Dose Calculation Summaries for three occupational workers

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Audits and Self-Assessments

CPSES Nuclear Overview Department Evaluation Report EVAL-2005-017, Radwaste Effluent and Environmental

Corrective Action Documents (Smart Forms)

2005-001990-00, 2005-003999-00, 2005-004524-00, 2005-000720-00, 2005-000823-00, 2005-003706-00

Procedures

CHM-170	Liquid and Gaseous Effluent Program, Revision 1
CLI-740	Effluent Pre-Release Processing, Revision 6
COP-816	Plant Ventilation, Revision 4
ICI-4995X	Channel Calibration - Plant Ventilation Stack Gas, Revision 5
ICI-4998	Channel Calibration - Gas Process Monitor, Revision 4
INC-7081X	DCOT &CCAL - Liquid Effluent Waste Process Monitor, Revision 6
INC-7084	DCOT &CCAL - Turbine Building Floor Drains, Revision 8
INC-7090X	DCOT, ACOT, & CCAL Vent Stack WRGM, Revision 5
RPI-704	Pre-Release Processing for Radioactive Effluent Releases, Revision 11
RPI-705	Post-Release Processing for Radioactive Effluent Releases, Revision 5
RWS-103	Drain Channel B, Revision 13
STA-603	Control of Station Radioactive Effluents, Revision 17

Radioactive Effluent Release Permits

GRP-2005143, GRP-2005144

Auxiliary Sampling Records

12/13/04, 12/20/04, 5/17/05, 6/21/05

Effluent Monitor and Flow meter Calibrations

5-03-500487-AA, 5-03-501813-AA, 5-03-502068-AA, 5-03-502604-AA, 5-04-501846-AA, 5-05-500147-AE, 5-05-501055-AE, 5-05-501609-AE, 5-05-501637-AE, 5-05-502135-AD

Filter Testing Results

WO#	Test Procedure	Tag Description	Date
5-04-500898-AA 5-02-500898-AA	PPT-SX-7511A	Primary Plant Ventilation Exhaust Filter Unit X-01	1/04/06 4/04/04
5-04-501621-AA 5-03-501621-AA	PPT-SX-7507A	Primary Plant Ventilation Exhaust Filter Unit X-01	12/12/05 3/09/04
5-04-501638-AA 5-02-501638-AA	PPT-SX-7512B	Primary Plant Ventilation Exhaust Filter Unit X-02	3/07/06 6/07/04
5-04-501196-AA 5-02-501196-AA	PPT-SX-7508B	Primary Plant Ventilation Exhaust Filter Unit X-02	2/12/06 5/20/04
5-02-504818-AA 5-01-504818-AA	PPT-SX-7511A	Primary Plant Ventilation Exhaust Filter Unit X-15	10/26/04 12/12/02
5-03-500434-AA 5-01-500434-AA	PPT-SC-7509A	Primary Plant Ventilation Exhaust Filter Unit X-15	10/19/04 1/14/03

5-03-504820-AA 5-01-504820-AA	PPT-SX-7512B	Primary Plant Ventilation Exhaust Filter Unit X-16	10/18/04 5/02/03
5-02-501978-AA 5-01-501978-AA	PPT-SX-7510B	Primary Plant Ventilation Exhaust Filter Unit X-16	9/23/04 12/03/02
5-02-502132-AA 5-01-502132-AA	PPT-SX-7520A	Control Room Emergency Pressurization Unit X-21, Train A	6/01/04 11/14/02
5-03-501759-AA 5-02-501759-AA	PPT-SX-7503A	Control Room Emergency Pressurization Unit X-21, Train A	6/28/05 12/01/03
5-03-501481-AA 5-01-501481-AA	PPT-SX-7522B	Control Room Emergency Pressurization Unit X-22, Train B	10/26/04 1/23/03
5-02-501655-AA 5-01-501655-AA	PPT-SX-7521A	Control Room Emergency Pressurization Unit X-23, Train A	6/01/04 7/22/02
5-04-504822-AA 5-02-504822-AA	PPT-SX-7503A	Control Room Emergency Pressurization Unit X-23, Train A	9/12/05 1/28/04
5-04-504824-AA	PPT-SX-7504B	Control Room Emergency Pressurization Unit X-24, Train B	38720
5-03-500409-AA 5-01-500409-AA	PPT-SX-7523B	Control Room Emergency Pressurization Unit X-24, Train B	10/26/04 1/24/03

Miscellaneous

2004 Annual Effluent Report
Monthly/Quarterly/Annual Dose Calculations

Section 2PS2: Radioactive Material Processing and Transportation

Audits and Self-Assessments

EVAL-2005-017	Radwaste Effluent & Environmental
SA-2004-012	Benchmarking Radwaste Processing Systems
SA-2005-066	Radioactive Material Transportation & Storage
BM-2006-026	10CFR 61 Waste Stream Evaluation

Corrective Action Documents (Smart Forms)

2004-003164, 2004-003823, 2004-004071, 2005-002043, 2005-003440, 2005-003700, 2005- 004801, 2006-000055, 2006-001069

Procedures

RPI-202	Receipt of Radioactive Material, Revision 11
RPI-215	Waste Stream Sampling, Revision 4

RPI-230 Radioactive Material Shipments, Revision 3
RPI-232 Characterizing Radioactive Material for Shipment, Revision 5
RPI-234 Packaging Radioactive Material for Shipment, Revision 9
RPI-240 Radioactive Waste Shipments, Revision 5
RPI-274 CPSES Transportation Security Plan, Revision 2
STA-709 Radioactive Waste Management Program, Revision 8

Shipment Records

2006-017, 2005-064, 2005-020, 2004-079, 2004-068

Section 2PS3: Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program

Audits and Self-Assessments

Comanche Peak Steam Electric Station Nuclear Overview Department Evaluation Report, EVAL-2005-010, "Annual Radiation Protection Audit," 09/12/2005 to 09/29/2005

Comanche Peak Steam Electric Station Nuclear Overview Department Evaluation Report, EVAL-2005-017, "Radwaste Effluent & Environmental," 01/23/2006 to 02/03/2006

Corrective Action Documents (Smart Forms):

Environmental

2005-000038 2005-000143 2005-000223 2005-002455
2005-004859 2005-004864 2006-000333 2006-000334
2006-000335 2005-000939

Meteorological

2005-000988 2005-003465 2006-000489 2006-000931

Radioactive Material Control

2005-001480 2005-003382 2005-004084 2005-004260

Procedures

Environmental

RPI-710 Radiological Environmental Monitoring, Sampling, and Analysis Program, Revision 8
RPI-713 Collection, Preparation, and Shipment of Radiological Environmental Samples, Revision 4
RPI-714 Land Use Census, Revision 2

Meteorological

RPI-309 Routine Operations of the Meteorological Computer System, Revision 8
STA-714 Meteorological Monitoring Program, Revision 3

Radioactive Material Control

RPI-213 Survey and Release of Material and Personnel, Revision 11
RPI-602 Radiological Surveillance and Posting, Revision 27
STA-652 Radioactive Material Control, Revision 14

Calibration Records

Meteorological

WO 3-05-344817-01, WO 3-05-325429-01, WO 3-05-325182-01, WO 3-05-316260-01
WO 3-05-315564-01, WO 5-05-502577-01, WO 5-05-502261-AA, WO 5-05-502210-AA
WO 5-05-502127-AA, WO 5-05-501633-AA, WO 5-05-501551-AA, WO 5-05-501440-AA
WO 5-05-500117-AA

Miscellaneous

2004 Annual Radiological Environmental Monitoring Report
Offsite Dose Calculation Manual, Revision 23