



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

January 26, 2023

Ken Peters, Senior Vice President
and Chief Nuclear Officer
Vistra Operations Company, LLC
P.O. Box 1002
Glen Rose, TX 76043

**SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – INTEGRATED
INSPECTION REPORT 05000445/2022004 AND 05000446/2022004**

Dear Ken Peters:

On December 31, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Comanche Peak Nuclear Power Plant, Units 1 and 2. On January 18, 2023, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

One finding of very low safety significance (Green) is documented in this report. This finding involved a violation of NRC requirements. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection 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, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at Comanche Peak Nuclear Power Plant, Units 1 and 2.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at Comanche Peak Nuclear Power Plant, Units 1 and 2.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,



Signed by Werner, Gregory
on 01/26/23

Gregory E. Werner, Chief
Projects Branch B
Division of Operating Reactor Safety

Docket Nos. 05000445, 05000446
License Nos. NPF-87, NPF-89

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000445/2022004 AND 05000446/2022004- DATED JANUARY 26, 2023.

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COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000445/2022004 AND 05000446/2022004

Non-Public Designation Category: MD 3.4 Non-Public _____ (A.3 - A.7 or B.1)

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**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Numbers: 05000445 and 05000446

License Numbers: NPF-87 and NPF-89

Report Numbers: 05000445/2022004 and 05000446/2022004

Enterprise Identifier: I-2022-004-0003

Licensee: Vistra Operations Company, LLC

Facility: Comanche Peak Nuclear Power Plant, Units 1 and 2

Location: Glen Rose, Texas 76043

Inspection Dates: October 1, 2022, to December 31, 2022

Inspectors: D. Antonangeli, Health Physicist
B. Baca, Health Physicist
B. Bergeon, Senior Operations Engineer
N. Day, Resident Inspector
J. Ellegood, Senior Resident Inspector
N. Greene, Senior Health Physicist
S. Hedger, Senior Emergency Preparedness Inspector
G. Kolcum, Senior Resident Inspector
J. Melfi, Project Engineer
C. Osterholtz, Senior Operations Engineer
D. Proulx, Senior Project Engineer
H. Strittmatter, Emergency Preparedness Inspector

Approved By: Gregory E. Werner, Chief
Projects Branch B
Division of Operating Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an integrated inspection at Comanche Peak Nuclear Power Plant, Units 1 and 2, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

Failure to Periodically Calibrate Radiation Monitors within their Frequency as Required by 10 CFR 20.1501(c)			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000445,05000446/2022004-01 Open/Closed	[H.5] - Work Management	71124.05
The inspectors identified a Green non-cited violation of 10 CFR 20.1501(c) for a failure to periodically calibrate radiation monitoring equipment used to perform quantitative radiation measurements within their required frequency. This monitoring equipment included effluent, process, area, and emergency protection related radiation monitors. The inspectors identified that required calibrations for 11 radiation monitors exceeded the specified frequency and the grace period.			

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
NOV	05000445,05000446/2021011-05	Failure to Restore Compliance for Inadequate Voltage Calculations for the 120 VAC Buses	71111.21M	Closed
NOV	05000445,05000446/2021011-06	Failure to Restore Compliance and Evaluate Inverter Fault Interrupting Capability During Design Basis Loss of Offsite Power and Seismic Conditions	71111.21M	Closed

PLANT STATUS

Unit 1 operated at or near 100 percent power for the entire inspection period.

Unit 2 started the inspection period operating at 100 percent power. On October 19, 2022, Unit 2 was down powered to 90 percent power for main condenser maintenance. On October 22, 2022, Unit 2 returned to 100 percent power and operated at or near 100 percent power for the remainder of the inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed activities described in IMC 2515, Appendix D, "Plant Status," observed risk significant activities, and completed on-site portions of IPs. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Seasonal Extreme Weather Sample (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated readiness for seasonal extreme weather conditions prior to the onset of seasonal cold temperatures for the following systems:

Unit 1, refueling water storage tank, fire water storage tanks and pump house, and exterior main feedwater piping on November 28, 2022.

External Flooding Sample (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated that flood protection barriers, mitigation plans, procedures, and equipment are consistent with the licensee's design requirements and risk analysis assumptions for coping with external flooding on October 27, 2022.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (1 Sample)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) circulating water south pit dewatering pumps on November 15, 2022.

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the Units 1 and 2 uninterruptible power supply systems on October 25, 2022.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) electrical and control building elevation 840 on October 21, 2022
- (2) circulating water intake structure on November 4, 2022
- (3) service water intake structure on December 5, 2022
- (4) flex building on December 13, 2022
- (5) Unit 1, control room air conditioning room on December 19, 2022
- (6) Unit 2, control room air conditioning room on December 19, 2022

71111.11A - Licensed Operator Requalification Program and Licensed Operator Performance

Requalification Examination Results (IP Section 03.03) (1 Sample)

- (1) The inspectors reviewed and evaluated the licensed operator examination failure rates for the requalification annual operating exam administered from September 19 to October 28, 2022.

71111.11B - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Requalification Program (IP Section 03.04) (1 Sample)

(1) Biennial Requalification Written Examinations

The inspectors evaluated the quality of the licensed operator biennial requalification written examination administered from September 19, to October 28, 2022.

Annual Requalification Operating Tests

The inspectors evaluated the adequacy of the facility licensee's annual requalification operating test.

Administration of an Annual Requalification Operating Test

The inspectors evaluated the effectiveness of the facility licensee in administering requalification operating tests required by 10 CFR 55.59(a)(2) and that the facility licensee is effectively evaluating their licensed operators for mastery of training objectives.

Requalification Examination Security

The inspectors evaluated the ability of the facility licensee to safeguard examination material, such that the examination is not compromised.

Remedial Training and Re-examinations

The inspectors evaluated the effectiveness of remedial training conducted by the licensee, and reviewed the adequacy of re-examinations for licensed operators who did not pass a required requalification examination.

Operator License Conditions

The inspectors evaluated the licensee's program for ensuring that licensed operators meet the conditions of their licenses.

Control Room Simulator

The inspectors evaluated the adequacy of the facility licensee's control room simulator in modeling the actual plant, and for meeting the requirements contained in 10 CFR 55.46.

Problem Identification and Resolution

The inspectors evaluated the licensee's ability to identify and resolve problems associated with licensed operator performance.

71111.11Q - Licensed Operator Requalification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during a planned Unit 2 down power to remove circulating water pump 2-01 from service prior to isolating water box 2-A-4 for maintenance on October 19, 2022.

Licensed Operator Requalification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator annual examination simulator scenarios on October 18, 2022.

71111.12 - Maintenance Effectiveness

Maintenance Effectiveness (IP Section 03.01) (3 Samples)

The inspectors evaluated the effectiveness of maintenance to ensure the following structures, systems, and components (SSCs) remain capable of performing their intended function:

- (1) Unit 2, service water valve failure on October 23, 2022
- (2) Unit 1, reactor coolant system on November 29, 2022
- (3) Unit 2, reactor coolant system on November 29, 2022

Quality Control (IP Section 03.02) (1 Sample)

The inspectors evaluated the effectiveness of maintenance and quality control activities to ensure the following SSC remains capable of performing its intended function:

- (1) safety chillers per strainer commercial grade dedication evaluation NEM11192018 and safety related applications requiring grease item ID 338097 per commercial grade dedication evaluation SAR 36001

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (6 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 2, circulating water realignment for condenser water box 2-A-4 isolation on October 20, 2022
- (2) Unit 1, turbine driven auxiliary water pump availability during quarterly testing on October 27, 2022
- (3) circulating water intake water intrusion with temporary pumps and heavy rain with ODMI 2021-7593-9 on October 28, 2022.

- (4) Unit 2, repair of circulating water leak on November 12, 2022
- (5) Unit 1, primary water system leakage water return pump B replacement and trip risk on November 29, 2022
- (6) tornado warning and emergent yellow risk on December 13, 2022

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (8 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) degraded fire barrier in the service water intake structure described in CR-2022-7333
- (2) Unit 1, turbine displacement per condition described in CR 2022-007076.
- (3) Unit 1, pressurizer control system per condition described in CR 2022-007329
- (4) Unit 2, circulating pumps from per condition described in CR 2022-007895
- (5) Unit 2, fuel oil transfer system with pump 2-03 not starting per CR-2022-008097
- (6) Unit 2 battery CP2-EPBTED-02 cell 53 cracked seal described in CR-2022-8479
- (7) Unit 1, degraded auxiliary feedwater pump flow indicator 1-FI-2465C per condition described in CR-2022-008473
- (8) functionality of various heat trace systems per CR 2022-8668

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (2 Samples)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Unit 1, modification of turbine thrust wear detector for failed probes on November 30, 2022
- (2) Units 1 and 2, leading edge flow meter system replacement on December 9, 2022

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (9 Samples)

The inspectors evaluated the following post-maintenance testing activities to verify system operability and/or functionality:

- (1) emergency diesel generator 2-01 snoop leakage test and reset of the air start system following monthly test on October 26, 2022
- (2) residual heat removal 2-01 quarterly surveillance following pump and breaker maintenance on October 27, 2022
- (3) centrifugal charging pump 1-02 return to service test following motor maintenance on November 1, 2022
- (4) emergency diesel generator 1-02 fuel oil booster pump 1-02 discharge relief valve replacement and return to service test on November 2, 2022

- (5) emergency diesel generator 2-02 pre-lube oil pump 2-02 discharge relief valve replacement and return to service test on November 9, 2022
- (6) circulating water discharge south vault pit manhole penetration clamp installation on November 12, 2022
- (7) safety injection pump 1-01 quarterly surveillance following online motor analysis on November 22, 2022.
- (8) Unit 1, generator primary water system leakage pump B replacement return to service and vibration testing on November 29, 2022
- (9) emergency diesel generator 2-01 return to service test following lube oil heater replacement on December 16, 2022

71111.21M - Design Bases Assurance (DBA) Inspection

The inspectors evaluated the following components and listed applicable attributes, permanent modifications, and operating experience:

Design Review - Large Early Release Frequency (LERFs) (IP Section 02.02)

The inspectors reviewed the licensee's response to NOV 05000445/2021011-05 and determined that the reason, corrective actions taken and planned to address recurrence, and the date when full compliance will be achieved for this violation is adequately addressed and captured on the docket.

The inspectors reviewed the licensee's response to NOV 05000446/2021011-06 and determined that the reason, corrective actions taken and planned to address recurrence, and the date when full compliance was achieved for this violation is adequately addressed and captured on the docket.

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance testing activities to verify system operability and/or functionality:

Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Unit 1, residual heat removal pump 1-01 on December 15, 2022

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) Unit 2, safety injection pump 2-02 on October 3, 2022

FLEX Testing (IP Section 03.02) (1 Sample)

- (1) multipurpose Flex Pump X-01 per work order 22-20762 on December 12, 2022

71114.02 - Alert and Notification System Testing

Inspection Review (IP Section 02.01-02.04) (1 Sample)

- (1) The inspectors evaluated the maintenance and testing of the alert and notification system between September 29, 2020, and November 11, 2022.

71114.03 - Emergency Response Organization Staffing and Augmentation System

Inspection Review (IP Section 02.01-02.02) (1 Sample)

- (1) The inspectors evaluated the readiness of the Emergency Preparedness Organization between September 29, 2020, and November 11, 2022. Inspectors also evaluated the licensee's ability to staff their emergency response facilities in accordance with emergency plan commitments.

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The inspectors evaluated the following submitted Emergency Action Level and Emergency Plan changes.
 - Emergency Plan, Revision 46 - effective September 1, 2022

This evaluation does not constitute NRC approval.

71114.05 - Maintenance of Emergency Preparedness

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the maintenance of the emergency preparedness program between September 29, 2020, and November 11, 2022. The evaluation reviewed evidence of completing various emergency plant commitments, the conduct of drills and exercises, licensee audits and assessments, and the maintenance of equipment important to emergency preparedness.

71114.06 - Drill Evaluation

Drill/Training Evolution Observation (IP Section 03.02) (1 Sample)

The inspectors evaluated:

- (1) Emergency Response Organization red team drill on November 30, 2022.

RADIATION SAFETY

71124.03 - In-Plant Airborne Radioactivity Control and Mitigation

Permanent Ventilation Systems (IP Section 03.01) (2 Samples)

The inspectors evaluated the configuration of the following permanently installed ventilation systems:

- (1) control room emergency filtration
- (2) Units 1 and 2 primary plant ventilation and exhaust

Self-Contained Breathing Apparatus for Emergency Use (IP Section 03.04) (1 Sample)

- (1) The inspectors evaluated the licensee's use and maintenance of self-contained breathing apparatuses.

71124.05 - Radiation Monitoring Instrumentation

Walkdowns and Observations (IP Section 03.01) (9 Samples)

The inspectors evaluated the following radiation detection instrumentation during plant walkdowns:

- (1) portable survey instruments, including friskers, RO-20 ion chambers, and telepoles stored 'ready for use' in the laboratory
- (2) area radiation monitors in use within the auxiliary building
- (3) continuous air monitors in use within the auxiliary building
- (4) Canberra ARGOS personnel contamination monitors in use at the access to the radiologically controlled area
- (5) small article monitors in use at the access to the radiologically controlled area
- (6) liquid effluent radiation monitors in use at the plant
- (7) gaseous effluent radiation monitors in use at the plant
- (8) REM 500 neutron meter (HP-2213)
- (9) survey friskers in use within the auxiliary building and the radwaste building

Calibration and Testing Program (IP Section 03.02) (14 Samples)

The inspectors evaluated the calibration and testing of the following radiation detection instruments:

- (1) Eberline AMS-4, HP-2171, November 2, 2022
- (2) low volume air sampler, HP-2224, August 30, 2022
- (3) Ludlum Model 177 survey meter, HP-2403, September 26, 2022
- (4) Ludlum Model 3000 survey meter, HP-3165, May 23, 2022
- (5) Thermo Scientific RO-20 ion chamber, HP-4148, October 25, 2022
- (6) Mirion Technologies telepole, HP-5012, October 11, 2022
- (7) Canberra ARGOS - 5WBAB personnel contamination monitor, HP-0065, December 22, 2021
- (8) Canberra ARGOS - 5WBAB personnel contamination monitor, HP-0072, June 9, 2022
- (9) Canberra ARGOS - 5ABG personnel contamination monitor, HP-0060, May 24, 2022

- (10) Mirion Technologies telepole, HP-1966, August 23, 2022
- (11) AMP-100 radiation detector, HP-1846, August 31, 2022
- (12) Apex FSCAN whole body counter, April 28, 2022
- (13) Apex ASCAN whole body counter, September 14, 2021
- (14) Ludlum 54R-11 small article monitor, HP-0055, September 12, 2022

Effluent Monitoring Calibration and Testing Program Sample (IP Sample 03.03) (3 Samples)

The inspectors evaluated the calibration and maintenance of the following radioactive effluent monitoring and measurement instrumentation:

- (1) auxiliary building vent exhaust radiation monitor, X-RE-5701, WO 5371788, July 18, 2019
- (2) south vent stack wide range gas monitor, X-RE-5570A, WO 5826291, June 24, 2021
- (3) liquid waste processing discharge radiation detector, X-RE-5253, WO 5833378, March 9, 2021

71124.08 - Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation

Radioactive Material Storage (IP Section 03.01) (2 Samples)

The inspectors evaluated the licensee's performance in controlling, labeling, and securing the following radioactive materials:

- (1) outage equipment located within warehouse C
- (2) interim low level radioactive waste storage facility located in the owner-controlled area

Radioactive Waste System Walkdown (IP Section 03.02) (2 Samples)

The inspectors walked down the following accessible portions of the solid radioactive waste systems and evaluated system configuration and functionality:

- (1) Units 1 and 2, spent resin transfer system
- (2) Units 1 and 2, spent process filters system

Waste Characterization and Classification (IP Section 03.03) (2 Samples)

The inspectors evaluated the following characterization and classification of radioactive waste:

- (1) Unit 1, reactor coolant system filter - 2021
- (2) Unit 2, reactor coolant system - 2022

Shipment Preparation (IP Section 03.04) (1 Sample)

- (1) The inspectors observed the preparation of radioactive material shipment 20220044.

Shipping Records (IP Section 03.05) (4 Samples)

The inspectors evaluated the following non-excepted radioactive material shipments through a records review:

- (1) shipment 2020044; one poly liner, LSA-II, Type A
- (2) shipment 2021017; one poly liner, LSA-II, Type A
- (3) shipment 2022024; one poly liner, LSA-II, Type A
- (4) shipment 2022056; one resin liner, LSA-II, Type A

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS08: Heat Removal Systems (IP Section 02.07) (2 Samples)

- (1) Unit 1 (July 1, 2021, through September 30, 2022)
- (2) Unit 2 (July 1, 2021, through September 30, 2022)

MS10: Cooling Water Support Systems (IP Section 02.09) (2 Samples)

- (1) Unit 1 (October 1, 2021, through September 30, 2022)
- (2) Unit 2 (October 1, 2021, through September 30, 2022)

OR01: Occupational Exposure Control Effectiveness Sample (IP Section 02.15) (1 Sample)

- (1) October 1, 2021, through September 30, 2022

PR01: Radiological Effluent Technical Specifications/Offsite Dose Calculation Manual
Radiological Effluent Occurrences (RETS/ODCM) Radiological Effluent Occurrences Sample
(IP Section 02.16) (1 Sample)

- (1) October 1, 2021, through September 30, 2022

71152A - Annual Follow-up Problem Identification and Resolution

Annual Follow-up of Selected Issues (Section 03.03) (4 Samples)

The inspectors reviewed the licensee's implementation of its corrective action program related to the following issues:

- (1) failure of emergency diesel generator 1-01 rocker arm bolts
- (2) trip of Unit 1 due to failed cables for displacement probes
- (3) through wall leak on turbine driven AFW governor valve leak offline.
- (4) degraded Flex program batteries

71152S - Semiannual Trend Problem Identification and Resolution

Semiannual Trend Review (Section 03.02) (1 Sample)

- (1) The inspectors reviewed the licensee’s corrective action program for potential adverse trends in operator workarounds and control room deficiencies that might be indicative of a more significant safety issue. In addition, the inspectors toured the safeguards building with the building operators on November 30, 2022, to verify that no undocumented operator workarounds/operator burdens existed outside of the licensee's tracking programs. The inspectors determined that the licensee was properly managing these backlogs and did not identify any adverse trends in operator workarounds or control room deficiencies.

INSPECTION RESULTS

Failure to Periodically Calibrate Radiation Monitors within their Frequency as Required by 10 CFR 20.1501(c)			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Occupational Radiation Safety	Green NCV 05000445,05000446/2022004-01 Open/Closed	[H.5] - Work Management	71124.05
The inspectors identified a Green non-cited violation of 10 CFR 20.1501(c) for a failure to periodically calibrate radiation monitoring equipment used to perform quantitative radiation measurements within their required frequency. This monitoring equipment included effluent, process, area, and emergency protection related radiation monitors. The inspectors identified that required calibrations for 11 radiation monitors exceeded the specified frequency and the grace period.			

Description: During a review of radiation monitor calibration data, as provided by the licensee, the inspectors noted that the licensee performed scheduled calibrations on a total of 93 radiation monitors/detectors. These radiation monitors/detectors supported effluents, process, area monitoring, and emergency preparedness monitoring programs. The calibration frequency of the radiation monitors subject to technical surveillance requirements (TSRs) is controlled by the surveillance frequency control program. This program is implemented by Technical Specification (TS) 5.5.21 and procedure STA-700, "Surveillance Frequency Control Program." The calibration frequency of other radiation monitors, not subject to TSRs, is maintained within the preventive maintenance (PM) program, with established frequencies. The licensee implements their PM-related radiation monitor calibrations via procedure STA-677, "Preventive Maintenance Program," which maintains scheduling of their instrument calibrations using a work management database called Maximo.

The radiation monitors that are required by TSRs are allotted additional time to complete calibrations if an unplanned issue challenges the calibration completion by the original due date for the equipment to remain operable. This additional time for completing the calibration is commonly referred to as the "grace period." The grace period is defined as an additional 25 percent of the scheduled calibration period to complete a required TSR calibration. Surveillance Requirement (SR) 3.0.2 states, in part, "The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specific in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met." The grace period is applicable to liquid and gaseous effluent radiation monitoring equipment, which are required by the TSs and/or the Offsite Dose Calculation Manual. Of the 93 radiation monitors/detectors reviewed by the NRC, only thirteen (13) were effluent monitors. However, the licensee has implemented an approach that the "grace period" may be applied to any radiation monitor, coded as "TU" for a licensee commitment, providing some justification existed for not completing the calibration within its established frequency.

Per NRC's request, the licensee provided a chart of the established calibration frequency requirement for each of their radiation monitors/detectors. Of the 93 radiation monitors/detectors on the chart, the inspectors identified there were 78 (84 percent) in total that were not calibrated within their established calibration frequency. However, of those 78 radiation monitors/detectors, at least ten included TSR radiation monitors, which were allowed a "grace period" by SR 3.0.2, if needed. None of the ten radiation monitors related to TSRs exceeded their grace period, although most had inadequate justifications as to why the radiation monitor calibrations were not completed on time (within 550 days). The remaining 68 PM-related radiation monitors (73 percent) that were not controlled by the surveillance frequency control program exceeded their established calibration frequency failing to comply with NRC calibration requirements. Within a limited scope of calibration records reviewed, NRC identified that three of the subsequent calibrations for these radiation monitors had as-found conditions/parameters out-of-tolerance.

As a reference, the following chart summarizes 11 of the 68 radiation monitors that not only exceeded their specific radiation calibration frequency per the PM program, procedure STA-677, but were not calibrated until a significant time past their established period (greater than 1.25 times the calibration frequency – grace period):

Radiation Monitor/ Detector ID	Calibration Frequency (days)	Calibration Completion Date	Subsequent Calibration Due Date	Previous Calibration Date	Percent Past Calibration Date
2-RE-6292	1648	11/21/2019	05/14/2015	11/08/2010	100%
2-RE-6291A	1648	08/01/2022	07/17/2019	01/11/2015	67%
1-RE-6260B	1648	07/24/2020	08/17/2017	02/11/2013	65%
2-RE-6259A	1648	06/15/2022	08/15/2019	02/09/2015	63%
2-RE-6297	1648	05/10/2017	04/05/2015	09/30/2010	46%
1-RE-6296	1648	06/11/2021	10/12/2019	04/08/2015	37%
2-RE-5637	1648	05/19/2022	10/11/2020	04/07/2016	35%
1-RE-6292	732	01/16/2020	05/17/2019	05/15/2017	33%
2-RE-6253	1098	11/01/2021	04/19/2020	04/17/2017	51%
2-RE-6251	1098	10/25/2021	04/19/2020	04/17/2017	51%
X-RE-6275	1648	02/11/2021	07/14/2019	01/08/2015	35%

The inspectors reviewed a 2020 evaluation that the licensee documented in CR-2020-000814 that addressed a minor violation for not calibrating two installed radiation monitors (1-RE-6295 and 2-RE-6297) within their respective calibration frequency. According to CR-2020-000814, the licensee evaluated this issue and reviewed the surveillance frequencies of their radiation monitors. The evaluation stated, "Based on the current strategy for non-critical PMs, rescheduling of calibration work activities will continue to be as a result of parts issues, resource availability or ongoing critical work. To ensure this does not repeat, Maintenance have been coached to use the deferral process to extend or move calibration activities beyond their compliance dates into the grace period."

The inspectors reviewed this information and determined that the licensee used the "grace period" as a routine process to complete their calibrations. Comments provided by the licensee as a justification for not meeting the scheduled calibration date frequently used "no resources" or had no justification at all. Additionally, the licensee only documents a justification to extend their calibration frequency when they are entering the second half of the grace period (i.e., "violation time period"). NRC inspectors explained that this approach to completing calibrations often results in issues of concern because the frequent use of the "grace period" does not leave much room to complete calibrations in a timely manner to maintain their established calibration frequency. It was also discussed with the licensee that radiation monitors that are not required by their TSRs are not usually allotted a "grace period." As stated above, in the TSs, the "grace period" or the calibration frequency factor of 1.25 is used for operational flexibility. Additionally, the licensee has established that you should not routinely use the grace period, as stated in TS Bases Surveillance Requirement (SR) Applicability SR 3.0.2, which in part states that, "The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified."

With the significant number of missed calibration requirements, the failure to periodically calibrate radiation monitoring equipment within their established frequency is not an isolated occurrence and is deemed a programmatic breakdown of the licensee's radiation protection program barrier, rendering it ineffective in radiological surveys and monitoring. This is primarily due to the current way the licensee implements their program for radiation monitoring equipment calibrations via the surveillance frequency control program, the PM program, and their work management for frequently planning calibrations into the "grace period" without proper justification.

The inspectors reviewed the annual effluent release reports and determined the licensee did not fail to implement the effluent program nor had public doses greater than the 10 CFR 50, Appendix I, or 10 CFR 20.1301(e) annual public dose limits.

Corrective Actions: The licensee entered the issue into their corrective action program to evaluate the extent of conditions. The licensee also re-evaluated their corrective actions from CR-2020-000814.

Corrective Action References: CR-2022-008715

Performance Assessment:

Performance Deficiency: The failure to ensure that instruments and equipment used for quantitative radiation measurements (e.g., dose rate and effluent monitoring) are calibrated periodically for the radiation measured, as required by 10 CFR 20.1501(c), is a performance deficiency.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the Program & Process attribute of the Occupational Radiation Safety cornerstone and adversely affected the cornerstone objective to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Specifically, the licensee failed to ensure they periodically calibrated their radiation monitors within their required frequency to maintain adequate quantitative radiation measurements.

Significance: The inspectors assessed the significance of the finding using IMC 0609 Appendix C, "Occupational Radiation Safety SDP." The inspectors determined the finding to be of very low safety significance (Green) because (1) it was not associated with ALARA planning and work controls, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised.

Cross-Cutting Aspect: H.5 - Work Management: The organization implements a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities. Specifically, the licensee failed to complete calibrations for most of their radiation monitors (84 percent) within their specific frequency.

The licensee mostly cited a lack of resources. This is a failure to properly plan and execute the calibration/PM tasks. The licensee has implemented a process of only documenting a PM basis/comment for exceeding the frequency period as the calibration enters the second half of the grace period. NRC asserts that planning for calibrations in the grace period challenges not meeting required calibration frequencies by providing less time to address unforeseen issues.

Enforcement:

Violation: Title 10 CFR 20.1501(c) requires, in part, that licensees ensure instruments and equipment used for quantitative radiation measurements (e.g., dose rate and effluents) are calibrated periodically for the radiation measured.

Procedure STA-677, is used to maintain the periodicity of calibration of instruments and equipment used for quantitative radiation measurements. Section 6.7.2 of STA-677, states, in part, "PMs which are required by License Basis Documents coded as "TU" should be performed within the specified time interval of PM frequency plus 25% of the PM frequency (Grace Period)."

Contrary to the above, from April 5, 2015, to August 1, 2022, the licensee failed to ensure that all radiation monitors were calibrated periodically for the radiation measured. Specifically, the licensee failed to ensure 11 of their radiation monitors were calibrated within their established calibration/PM frequency, plus 25 percent, as noted in the chart above, in accordance with procedure STA-677.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On October 27, 2022, the inspectors presented the licensed operator requalification program and licensed operator performance inspection debrief results to C. Herring, Training Director, and other members of the licensee staff.
- On November 3, 2022, the inspectors presented the licensed operator requalification program and licensed operator performance inspection exit results to J. Beaver, Training Manager, and other members of the licensee staff.
- On November 17, 2022, the inspectors presented the emergency preparedness program inspection results to S. Sewell, Acting Site Vice President, and other members of the licensee staff.
- On December 5, 2022, the inspectors presented the occupational radiation safety inspection results to S. Sewell, Acting Site Vice President, and other members of the licensee staff.
- On December 13, 2022, the inspectors presented the public radiation safety inspection results to B. Pineda, Maintenance Director, and other members of the licensee staff.
- On January 18, 2023, the inspectors presented the integrated inspection results to S. Sewell, Acting Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.01	Calculations	CS-CA-0000-4062	Flooding	0
71111.01	Engineering Evaluations	DBD-CS-071	Probable Maximum Flood	13
71111.01	Procedures	ABN-907	Acts of Nature	17
71111.01	Procedures	ABN-912	Heat Tracing and Freeze Protection System Malfunction	10
71111.01	Procedures	EPP-201	Assessment of Emergency Action Levels	13
71111.01	Procedures	ODA-308	LCO Tracking Program	21
71111.01	Procedures	OWI-912	Cold Weather	5
71111.01	Procedures	STA-696	Hazard Barrier Controls	4
71111.04	Engineering Evaluations	DBD-EE-043	118 VAC Uninterruptible Power Supply System	15
71111.04	Engineering Evaluations	DBD-EE-044	DC Power Systems	29
71111.04	Miscellaneous	2nd QTR FY22 System Health Report	Inverters System Health Report	10/19/2022
71111.04	Miscellaneous	DC Distribution	2nd QTR FY22 System Health Report	10/19/2022
71111.04	Procedures	ABN-603	Loss of Protection or Instrument Bus	8
71111.04	Procedures	SOP 607A	118 VAC Distribution System and Inverters	25
71111.04	Procedures	SOP-605A	125 VDC Switchgear and Distribution Systems, Batteries and Battery Chargers	13
71111.04	Procedures	SOP-605B	125 VDC Switchgear and Distribution Systems, Batteries and Battery Chargers	6
71111.04	Procedures	SOP-607B	118 VAC Distribution System and Inverters	18
71111.05	Fire Plans	FPI-2001	Flex Storage Building X-FX-2K19	1
71111.05	Fire Plans	FPI-507	Electrical and Control Building Elevation 840'6"	3
71111.05	Fire Plans	FPI-508	Electrical and Control Building Elevation 854'-4" Fire Pre-plan	4
71111.05	Fire Plans	FPI-701	Service Water Intake Structure Elev. 796'-0" & 810'-6"	4
71111.05	Fire Plans	FPI-801	Circulating Water Intake Structure Elevation 795'-0"	3

71111.11B	Corrective Action Documents	CR 2022-001092	Licensed Operator Failure to Report a Medical Condition	02/15/2022
71111.11B	Corrective Action Documents	CR-2021-001490	Time Critical Action Validation Failure	02/25/2021
71111.11B	Corrective Action Documents	IR-2022-007530,	1-8811 CCP Miniflow Valve Switch Failed During LO49F22E05 Scenario 2	
71111.11B	Corrective Action Documents	IR-2022-007531	Simulator Headset Communication Failure	
71111.11B	Corrective Action Documents	IR-2022-007933	2022 LOR Examination Summary	11/03/2022
71111.11B	Corrective Action Documents Resulting from Inspection	IR-2022-007715	Simulator Operability Test Data Collection Frequency	10/26/2022
71111.11B	Miscellaneous		Open Simulator Work Report	08/02/2022
71111.11B	Miscellaneous		Simulator Inspection Report	08/02/2022
71111.11B	Miscellaneous		Simulator Annual Performance Test Summary, 2021	2021
71111.11B	Miscellaneous		Operations Crew 15 Training Records, June 2020 - August 2022	
71111.11B	Miscellaneous	LO49.D21.E06	2021 LORT Operational Examination 6	05/12/2021
71111.11B	Miscellaneous	LO49.D21.JS6	2021 LORT Senior Reactor Operator JPM Exam 6	05/12/2021
71111.11B	Miscellaneous	LO49.F22.E06	2022 LORT Operational Exam 6	09/19/2022
71111.11B	Miscellaneous	LO49.F22.ER1	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ER2	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ER3	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ER4	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ER5	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ER6	2022 LORT Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ES1	2022 LORT Senior Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ES2	2022 LORT Senior Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ES3	2022 LORT Senior Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ES4	2022 LORT Senior Reactor Operator Written Examination	10/4/2022
71111.11B	Miscellaneous	LO49.F22.ES5	2022 LORT Senior Reactor Operator Written Examination	10/04/2022
71111.11B	Miscellaneous	LO49.F22.ES6	2022 LORT Senior Reactor Operator Written Examination	10/04/2022

71111.11B	Miscellaneous	LO49.F22.JR6	2022 LORT Reactor Operator JPM Exam 6	09/19/2022
71111.11B	Miscellaneous	LO49.F22.JS6	2022 LORT Senior Reactor Operator JPM Exam 6	09/19/2022
71111.11B	Miscellaneous	LO49/D21.JR6	2021 LORT Reactor Operator JPM Examination 6	05/12/2021
71111.11B	Procedures	ODA-315	Licensed Operator Maintenance Tracking	8
71111.11B	Procedures	SAPT-001	Steady State Performance Testing	1
71111.11B	Procedures	SAPT-002	Transient Performance Testing	1
71111.11B	Procedures	SAPT-003	Malfunctions Testing	1
71111.11B	Procedures	SAPT-004	Normal Operations Testing	3
71111.11B	Procedures	SAPT-005	Core Performance Test	0
71111.11B	Procedures	SOMI-09	Simulator Configuration Control	13
71111.11B	Procedures	SOMI-10	Simulator Testing Program	18
71111.11B	Procedures	TRA-204	Licensed Operator Requalification Training	20
71111.11B	Procedures	TRA-206	Operations Department Examination Control and Implementation	5
71111.11B	Procedures	TRA-206-1	Examination Remedial Training Plan	1
71111.11B	Procedures	TRA-207	Simulator Configuration Management	3
71111.11B	Procedures	TRA-208	Simulator Training	3
71111.11B	Procedures	TRI-204.01	Licensed Operator Requalification Training Processes and Program Reviews	2
71111.11B	Procedures	TRI-206-5	LORT Annual/Biennial Requalification Exam – Examinee Security Agreement	1
71111.11B	Procedures	TRI-206.02	NRC Requalification Exam Development Process	2
71111.11B	Procedures	TRI-206.02-1	LORT Biennial Written Exam Checklist	2
71111.11B	Procedures	TRI-206.02-2	JPM Exam Development Process	1
71111.11B	Procedures	TRI-206.02-3	Simulator Scenario Review Checklist	1
71111.11B	Procedures	TRI-207.01	Simulator Maintenance	1
71111.11B	Procedures	TRI-208.02	Conduct of LORT Simulator Training	5
71111.12	Corrective Action Documents	CR-YYYY-NNNN	2022-3605, 2022-6509, 2022-8156	
71111.12	Corrective Action Documents	TR-YYYY-NNNN	2022-7334	
71111.12	Miscellaneous		Reactor Coolant System Health Reports	
71111.12	Miscellaneous		Reactor Coolant System Maintenance Rule Database	

71111.13	Shipping Records	WO 21-331956	Unit 1 generator primary water system leakage pump B replacement	10/29/2022
71111.13	Work Orders	WO 22-541086	Unit 1 generator primary water system leakage pump B replacement	10/29/2022
71111.15	Corrective Action Documents	CR-YYYY-NNNN	2022-007333, 2017-10202, 2017-12716, 2021-7593, 2022-8479, 2022-007076, 2022007329, 2022-007895, 2022-008097, 2022-009473, 2022-8668	
71111.15	Corrective Action Documents	TR-YYYY-NNNN	2022-8822	
71111.18	Corrective Action Documents	CR-YYYY-NNNN	2022-006497, 2022-007076	
71111.18	Engineering Changes	Final Design Authorization (FDA) -	2017-000141-01-01; 2017-000141-02-00- 2017-000141-03-00; 2017-000141-04-00	
71111.18	Work Orders		2022-295661, 2022-449574	
71111.19	Work Orders		2022-486831, 2022-399034, 6017468, 5889486, 2022-497829, 2022-495254, 6038099, 2022-536980, 2022-448761, 6017179, 2022-520193, 2021-331956 2022-541086	
71111.20	Work Orders		2022-476174, 2022-370203	
71111.21M	Miscellaneous	CP-202100256, TXX-21084	Comanche Peak Nuclear Power Plant (CPNPP) Docket Nos. 50-445 and 50-44, Reply to A Notice of Violation. NRC Letter from Vincent Gaddy to Ken Peters dated May 6, 2021, "Comanche Peak Nuclear Power Plant, Units 1 And 2 - Design Basis Assurance Inspection (Teams) Inspection Report 05000445/2021011 And 05000446/2021011 And Notice of Violation" (ADAMS Accession Number ML21124A130)	06/09/2021
71114.02	Corrective Action Documents	CR-YYYY-NNNN	2020-007714, 2021-007470, 2021-007705, 2022-003197, 2022-005482	
71114.02	Corrective Action Documents	TR-YYYY-NNNN	2021-004019, 2022-005642	

71114.02	Miscellaneous	Activity Number: TR-2017-003895-1	Comanche Peak Nuclear Power Plant, 10 CFR 50.54(q)(3) Screening Evaluation Form - ANS Design Report	03/11/2021
71114.02	Miscellaneous	CP-202100137	Alert & Notification System (ANS) Design Report, Revision 2, Change 1, Effective Date 3-11-2021 (Reference AI-TR-2017-003895-1)	03/11/2021
71114.02	Procedures	SG-012	Alert and Notification System Surveillance	31
71114.02	Procedures	STA-662	Administrative Control of the Siren System	1
71114.02	Work Orders	Work Order Number	5950180	
71114.03	Corrective Action Documents	CR-YYYY-NNNN	2020-009218	
71114.03	Corrective Action Documents	TR-YYYY-NNNN	2020-009209, 2021-001908	
71114.03	Corrective Action Documents Resulting from Inspection	CR-YYYY-NNNN	2022-008425	
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 4th Quarter	12/15/2020
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 1st Quarter	03/26/2021
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 2nd Quarter	07/08/2021
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 3rd Quarter	09/28/2021
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 4th Quarter	12/28/2021
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 1st Quarter	03/15/2022
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 2nd Quarter	04/18/2022
71114.03	Miscellaneous		Attachment 1, Quarterly Augmentation Verification Results, 3rd Quarter	09/26/2022
71114.03	Miscellaneous		Comanche Peak On-Shift Staffing Analysis	1

71114.03	Procedures	SG-005	Quarterly Augmentation Verification of the Emergency Response Organization (ERO)	19
71114.04	Corrective Action Documents Resulting from Inspection	IR-	2022-008551	
71114.04	Miscellaneous	CPNPP 10 CFR 50.54(q)(3) Screening and Effectiveness Evaluation Form for ETE Update	CPNPP 10 CFR 50.54(q)(3) Screening and Effectiveness Evaluation Form for ETE Update	08/15/2022
71114.04	Procedures	EPP-123	10 CFR 50.54(q) Screening and Evaluation of Changes to Emergency Plan Documentation	3
71114.05	Corrective Action Documents	CR-YYYY-NNNN	2021-005014, 2022-007495, 2020-007181, 2020-007714, 2020-008038, 2020-009537, 2021-005946, 2021-007705, 2021-008154, 2022-001649, 2022-003197, 2022-005388, 2022-005482, 2022-007002, 2022-007168, 2020-009415, 2021-003239, 2021-003405, 2021-008501, 2021-008503, 2022-003973, 2022-004837, 2020-007154	
71114.05	Corrective Action Documents	TR-YYYY-NNNN	2021-003554, 2021-005058, 2021-000198, 2021-008155, 2022-001822, 2022-001892	
71114.05	Corrective Action Documents Resulting from Inspection	CR-YYYY-NNNN	2022-008423, 2022-008464	
71114.05	Procedures	EPP-100	Maintaining Emergency Preparedness	11
71114.05	Procedures	SG-24	Evacuation Time Estimate Annual Population Estimate and Update Process	1
71114.05	Procedures	SG-25	Evaluation and Critique of Exercises	0
71114.05	Procedures	STA-153	Management of Contracts	13
71114.05	Procedures	TRA-104	Fire Protection Training	19
71114.06	Miscellaneous		Exercise Guide for November 30, 2022 emergency planning drill	11/30/2022

71124.01	Corrective Action Documents	Tracking Report (TR)	2021-007015, 2021-007150, 2021-0072209, 2021-007307, 2021-7670, 2021-007862, 2022-000408, 2022-000630, 2022-001439, 2022-001797, 2022-002190, 2022-002364, 2022-2408, 2022-002522, 2022-002567, 2022-002998, 2022-003201, 2022-003215, 2022-003218, 2022-003620, 2022-003638, 2022-003942, 2022-005442, 2022-005860, 2022-006865, 2022-007169, 2022-008079	
71124.01	Miscellaneous		Final Source Term Assessment Letter Report for Comanche Peak Station U2, 2021 Review	10/25/2021
71124.01	Self-Assessments	EV AL-2020-009	Nuclear Oversight Audit Report: Work Management, Maintenance and Radiation Protection	04/07/2021
71124.03	Corrective Action Documents	TR-YYYY-NNNN	2020-008943, 2020-009271, 2021-000896, 2021-001557, 2021-005053, 2021-008354, 2022-007992	
71124.03	Corrective Action Documents Resulting from Inspection	TR-YYYY-NNNN	2022-008418, 2022-008420, 2022-008421, 2022-008470	
71124.03	Miscellaneous		Scott Authorized Service Center Certification ID: C007797-2	08/02/2020
71124.03	Work Orders		5354557, 5358655, 5377734, 5382993, 5404601, 5410233, 5416926, 5431171, 5431297, 5558463, 556156, 5606050, 5626932, 5651677, 5656809, 5661215, 5661217, 5677686, 5677756, 567787, 5714373, 5795600, 5815720, 5855701	
71124.05	Corrective Action Documents	CR/TR-YYYY-NNNN	CR-2020-000814, TR-2020-000838, TR-2020-002420, TR-2021-001492, TR-2021-002846, TR-2021-005888, TR-2021-008670, TR-2022-001797	
71124.05	Corrective Action Documents Resulting from Inspection	CR/TR-YYYY-NNNN	TR-2022-007842, TR-2022-007856, TR-2022-007897, TR-2022-007898, TR-2022-007899, CR-2022-008715	
71124.05	Miscellaneous		CPNPP Offsite Dose Calculation Manual	34
71124.05	Miscellaneous		Chapter 12 of the CPNPP Final Safety Analysis Report	104
71124.05	Miscellaneous		Chapter 11 of the CPNPP Final Safety Analysis Report	111
71124.05	Miscellaneous	2nd QTR FY22	CPNPP System Status: Radiation Monitoring	06/30/2022
71124.05	Miscellaneous	4th QTR FY21	CPNPP System Status: Radiation Monitoring	12/31/2021
71124.05	Miscellaneous	CP-202100152	2020 Annual Radioactive Effluent Release Report	04/28/2021

71124.05	Miscellaneous	CP-202100225	2020 Annual Radiological Environmental Operating Report	04/29/2021
71124.05	Miscellaneous	CP-202200145	2021 Annual Radioactive Effluent Release Report	04/18/2022
71124.05	Miscellaneous	CP-202200183	2021 Annual Radiological Environmental Operating Report	04/28/2022
71124.05	Miscellaneous	EV CR-2011-012968	Evaluation of Changes to Eberline AMS-4 Procedure	2011
71124.05	Procedures	ICI-4995X	Channel Calibration Plant Vent Stack Gas Channels: X-RE-5567A & X-RE-5567B	6
71124.05	Procedures	INC-4915X	Channel Calibration Auxiliary Building Vent Duct Exhaust Gas Process Radiation Monitor Channel: X-RE-5701	2
71124.05	Procedures	INC-7079	Channel Calibration Containment High Range Radiation Monitor Channels: 1-RE-6290A/B and 2-Re-6290A/B	6
71124.05	Procedures	INC-7082	Digital Channel Operational Test and Channel Calibration Service Water System Effluent Liquid Process Radiation Monitors Channels: 1-RE-4269, 1-RE-4270, 2-RE-4269, 2-RE-4270	7
71124.05	Procedures	INC-7090X	Digital Channel Operational Test Channel Operational Test and Channel Calibration Plant Vent Stack Wide Range Gas Monitor Channels: X-RE-5570A, X-RE-5570B	8
71124.05	Procedures	RPI-301	Portable Survey Instruments	16
71124.05	Procedures	RPI-800	Control of Radiation Protection Equipment	18
71124.05	Procedures	RPI-802	Performance of Source Checks	31
71124.05	Procedures	RPI-862	Calibration of the ARGOS SIRIUS Personnel Contamination Monitor and GEM-5 Gamma Exit Monitor	15
71124.05	Procedures	RPI-881	Calibration of Portable Dose Rate Instruments	38
71124.05	Procedures	RPI-882	Calibration of Portable Count Rate Instruments	15
71124.05	Procedures	RPI-889	Calibration of the Eberline AMS-4	5
71124.05	Procedures	STA-619	Administrative Control of the Digital Radiation Monitoring System	8
71124.05	Procedures	STA-658	Radiation Protection Equipment Calibration Program	17
71124.05	Procedures	STA-700	Surveillance Frequency Control Program	2
71124.05	Self-Assessments		GEL Environmental Laboratory Quality Report: 2022 - First Quarter	06/17/2022
71124.05	Self-Assessments		GEL Environmental Laboratory Quality Report: 2022 - Second Quarter	08/22/2022

71124.05	Self-Assessments		GEL 2021 Annual Quality Assurance Report for the Radiological Environmental Monitoring Program (REMP)	03/15/2022
71124.05	Self-Assessments	Eval-2021-006	CPNPP Nuclear Oversight Audit Report: Chemistry, Environmental, Effluent, and Radioactive Waste	03/31/2022
71124.05	Work Orders	5371788	Auxiliary Building Vent Exhaust Radiation Monitor, X-RE-5701	07/18/2019
71124.05	Work Orders	5826291	South Vent Stack Wide Range Gas Monitor, X-RE-5570A	06/24/2021
71124.05	Work Orders	5833378	Liquid Waste Processing Discharge Radiation Monitor, X-RE-5253	03/09/2021
71124.05	Work Orders	5901918	Unit 2 Containment EL 905 High Range Radiation Monitor, 2-RE-6290A	10/23/2021
71124.05	Work Orders	5946156	North Vent Stack Discharge Gas Radiation Detector, X-RE-5567B	03/02/2022
71124.08	Corrective Action Documents	CR/TR-YYYY-NNNN	TR-2021-004459, TR-2021-006713, TR-2021-007297, TR-2021-008001, TR-2022-001442, CR-2022-001458	
71124.08	Corrective Action Documents Resulting from Inspection	CR/TR-YYYY-NNNN	TR-2022-007709, TR-2022-007934, CR-2022-008665	
71124.08	Miscellaneous		2022 - Unit 2 waste characterization sample for reactor coolant system	06/07/2022
71124.08	Miscellaneous		2021 - Unit 1 waste characterization sample of the reactor coolant system filter	06/28/2021
71124.08	Procedures	RPI-202	Receipt of Radioactive Material	19
71124.08	Procedures	RPI-204	Radioactive Waste Handling	15
71124.08	Procedures	RPI-212	Radioactive Source Control	13
71124.08	Procedures	RPI-213	Survey and Release of Material	30
71124.08	Procedures	RPI-215	Waste Stream Sampling	9
71124.08	Procedures	RPI-232	Characterizing Radioactive Material for Shipment	11
71124.08	Procedures	RPI-238	Radioactive Material/Waste Shipment Surveys	15
71124.08	Procedures	RPI-240	Radioactive Waste Shipments	12
71124.08	Procedures	RPI-242	Radioactive Waste Characterization and Classification	10
71124.08	Procedures	RPI-243	Packaging Radioactive Waste for Shipment	9

71124.08	Procedures	RPI-261	Operating Instructions for the Use of Filter Disposal Containers	6
71124.08	Procedures	RPI-271	Interim Storage of Low-Level Radioactive Waste	3
71124.08	Procedures	RPI-273	Rad-Vault/Trailer Inspections and Movement	6
71124.08	Procedures	RPI-274	CPNPP Transportation Security Plan	6
71124.08	Procedures	RPI-304	Radiological Posting and Labeling	4
71124.08	Procedures	STA-709	Radioactive Waste Management Program	10
71124.08	Procedures	STA-713	Process Control Program (PCP)	3
71124.08	Shipping Records	2020044	Shipping package and associated documents for shipment #2020044	08/18/2020
71124.08	Shipping Records	2021017	Shipping package and associated documents for shipment #2021017	05/19/2021
71124.08	Shipping Records	2022024	Shipping package and associated documents for shipment #2022024	11/02/2022
71124.08	Shipping Records	2022056	Shipping package and associated documents for shipment #2022056	10/18/2022
71151	Corrective Action Documents	CR-YYYY-NNNN	2021-007878	
71151	Corrective Action Documents	TR-YYYY-NNNN	2022-003934, 2022-004991	
71151	Miscellaneous		2021 Annual Radiological Effluents Release Report: January 1, 2021 - December 31, 2021	04/09/2022
71151	Miscellaneous		2022 Quarterly Air Doses Due to Gaseous Releases - January through September	
71151	Miscellaneous		2022 Quarterly Doses to a member of the public due to Liquid Releases - January through September	
71151	Miscellaneous		2022 Quarterly Doses due to Radioiodines, Tritium, and Particulates in Gaseous Releases - January through September	
71151	Miscellaneous		MSPI Margin Report for Unit 2 Heat Removal System and Cooling Water System	11/22/2022
71151	Miscellaneous		MSPI Margin Report for Unit 1 Heat Removal System and Cooling Water System	11/22/2022
71151	Miscellaneous		Maximo Limiting Condition for Operation database for AFW, Service Water, and Component Cooling Water	07/01/2021 - 09/30/2022

71152A	Calculations	RXE-TA-CPX/0-052	Analysis of Proposed Auxiliary Feedwater Turbine Drain System for CPSES	0
71152A	Corrective Action Documents	CR-YYYY-NNNN	2022-3593, 2022-6527, 2021-007070	
71152A	Corrective Action Documents	TR-YYYY-NNNN	2022-4854, 2021-006947	
71152A	Miscellaneous		Comanche Peak Unit 2 MSIP® High Pressure Box Press Failure Root Cause Analysis Report	04/2022
71152A	Miscellaneous	MRS-SSP-2592-02	Comanche Peak Unit 1 Reactor Vessel Inlet Nozzle to Sale End Weld Mechanical Stress Improvement Process Field Service Procedure	1
71152A	Miscellaneous	MRS-SSP-3538	Comanche Peak Unit 2 (TCX) Reactor Vessel to Nozzle Safe End Weld Mechanical Stress Improvement Process Field Service Procedure	0
71152A	Miscellaneous	TCX-PP000-CN-PX-000002	Comanche Peak Unit 2 Operability Assessment of the Reactor Coolant Piping and Support System due to the MSIP Tool Failures	0
71152A	Miscellaneous	TCX-PP000-TR-PX-000001	Reactor Coolant Loop (RCL) Piping and Support System Operability Assessment due to impact of the MSIP Tool Failure at Comanche Peak Unit 2 by Westinghouse	0
71152A	Procedures	ECE-5.01	Design Control Program	
71152A	Procedures	ECE-5.08	Standard Design Process	
71152A	Procedures	ECE-5.09	Engineering Design Review Process	
71152A	Procedures	NQA-3.14	Control Of Vendor Activities	24
71152A	Procedures	STA-206	Review Of Vendor Documents and Vendor Technical Manuals	25
71152A	Procedures	STA-627	Control Of Planned Outages	15
71152A	Procedures	STI-604.04	Outage Safety Function Guide	3
71152A	Procedures	VISTRAOPCO	Comanche Peak Nuclear Power Plant Quality Assurance Manual	24