



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

July 31, 2017

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

SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT – NRC TRIENNIAL FIRE
PROTECTION INSPECTION REPORT 05000445/2017008 AND
05000446/2017008

Dear Mr. Peters:

On June 29, 2017, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Comanche Peak Nuclear Power Plant, Units 1 and 2, and 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.

The NRC inspection team documented one finding of very low safety significance (Green) in this report. The finding involved a violation of NRC requirements. Further, the team documented a licensee-identified violation which was determined to be of very low safety significance in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the violations or significance of these NCVs, 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, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC resident inspector at the Comanche Peak Nuclear Power Plant, Units 1 and 2.

K. Peters

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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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Gregory E. Werner, Chief
Engineering Branch 2
Division of Reactor Safety

Docket Nos. 50-445 and 50-446
License Nos. NPF-87 and NPF-89

Enclosure:
Inspection Report No. 05000445/2017008
and 05000446/2017008
w/Attachment: Supplemental Information

cc w/ encl: Electronic Distribution

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 05000445, 05000446

License: NPF-87, NPF-89

Report Nos.: 05000445/2017008; 05000446/2017008

Licensee: Vistra Operations Company LLC

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

Location: Glen Rose, Texas

Dates: June 12 through June 29, 2017

Team Leader: S. Graves, Senior Reactor Inspector, Engineering Branch 2

Inspectors: S. Alferink, Reactor Inspector, Engineering Branch 2
J. Watkins, Reactor Inspector, Engineering Branch 2

Approved By: Gregory E. Werner, Chief
Engineering Branch 2
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000445/2017008 and 05000446/2017008; 06/12/2017 – 06/29/2017; Comanche Peak Nuclear Power Plant; Fire Protection (Triennial)

The report covers a 2-week triennial fire protection team inspection by three specialist inspectors from Region IV. One finding, which is a non-cited violation, was documented. The significance of inspection findings is indicated by their color (i.e., Green, White, Yellow, or Red) and determined using Inspection Manual Chapter 0609, "Significance Determination Process," dated April 29, 2015. Cross-cutting aspects are determined using Inspection Manual Chapter 0310, "Aspects within the Cross-Cutting Areas," dated December 4, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated November 1, 2016. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

Green. The team identified a non-cited violation of Operating License Condition 2.G related to the licensee's failure to maintain adequate procedures for the inspection of required penetration sealing devices as required by the licensee's Fire Protection Report, Section IV-2.1.c.1. Specifically, the Fire Protection Report required, in part, that fire-rated assemblies and penetration sealing devices be confirmed operable by visually inspecting the exposed surfaces using a site approved sampling plan every 18 months. Fire Protection Manual Procedure FIR-310, "Penetration Seal Inspection," Revision 3, did not appropriately capture all penetration sealing devices for inspection. In 2009, guidance was added to the procedure restricting inspections to equipment accessible from the floor (8 feet or below). Also, the licensee's automated random sampling process did not ensure that all penetration seals would be inspected within the licensee's 15-year sampling plan interval. The licensee entered these issues into their corrective action program as Condition Reports CR-2017-007745 and CR-2017-007746 to revise the surveillance procedure and sampling plan to ensure all required penetration seals were included and inspected within the 15-year sampling plan interval.

The failure to ensure that fire protection program procedures used to establish inspection criteria for penetration sealing devices appropriately captured all required penetration sealing devices for visual inspection using a site approved sampling plan every 18 months was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the reactor safety Mitigating Systems cornerstone attribute of protection against external factors (i.e., fire), and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Using Inspection Manual Chapter 0609, Attachment 4, "Initial Characterization of Findings," dated October 7, 2016, the finding was determined to require additional evaluation under Inspection Manual Chapter 0609, Appendix F, "Fire Protection Significance Determination Process," dated September 30, 2013. The finding was screened as a Green finding of very low safety significance in accordance with Task 1.4.3, "Fire Confinement," Question B. Based on the analysis performed, the team concluded that the degradation of the fire barrier penetration seals represented a low

degradation of the fire confinement element. No inspected barriers were identified as degraded, and all inspected barriers provided at least a 1-hour or greater fire endurance rating. The team did not assign a cross-cutting aspect because the performance deficiency was not reflective of present performance in that the inspection procedure changes occurred in 2009. (Section 1R05.2.b)

B. Licensee-Identified Violations

One violation of very low safety significance that was identified by the licensee has been reviewed by the team. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and the corrective action tracking number are listed in Section 4OA7 of this report.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R05 Fire Protection (71111.05T)

This report presents the results of a triennial fire protection inspection conducted at Comanche Peak Nuclear Power Plant, Units 1 and 2, in accordance with NRC Inspection Procedure 71111.05T, "Fire Protection (Triennial)," dated January 31, 2013. The inspection team evaluated the implementation of the approved fire protection program in selected risk-significant areas with an emphasis on the procedures, equipment, fire barriers, and systems that ensure the post-fire capability to safely shutdown the plant.

Inspection Procedure 71111.05T requires the selection of three to five fire areas and one or more mitigating strategies for review. The inspection team used the fire hazards analysis section of the Comanche Peak Nuclear Power Plant, Units 1 and 2, "Individual Plant Examination of External Events," and licensee-provided fire modelling information to select the following three risk-significant fire areas (inspection samples) for review:

Fire Area	Description
2SD	Unit 2 Electrical Equipment Room/Train A Switchgear
AA	Auxiliary Building – Miscellaneous Area (Zone AA21b)
EC	Battery Rooms – Uninterruptible Power Supply Distribution Room/Train B

The inspection team evaluated the licensee's fire protection program using the applicable requirements, which included the plant Technical Specifications, Operating License Condition 2.G, NRC safety evaluations, 10 CFR 50.48, and Branch Technical Position 9.5-1. The team also reviewed related documents that included the Final Safety Analysis Report (FSAR), Section 9.5; the fire protection report; and the post-fire safe shutdown analysis. Specific documents reviewed by the team are listed in the attachment.

Three fire area inspection samples and one mitigating strategy sample were completed.

.01 Protection of Safe Shutdown Capabilities

a. Inspection Scope

The team reviewed the piping and instrumentation diagrams, safe shutdown equipment list, safe shutdown design basis documents, and the post-fire safe shutdown analysis to verify that the licensee properly identified the components and systems necessary to achieve and maintain safe shutdown conditions for fires in the selected fire areas. The team observed walkdowns of the procedures used for achieving and maintaining safe

shutdown in the event of a fire to verify that the procedures properly implemented the safe shutdown analysis provisions.

For each of the selected fire areas, the team reviewed the separation of redundant safe shutdown cables, equipment, and components located within the same fire area. The team also reviewed the licensee's method for meeting the requirements of 10 CFR 50.48; Branch Technical Position 9.5-1, Appendix A; and 10 CFR Part 50, Appendix R, Section III.G. Specifically, the team evaluated whether at least one post-fire safe shutdown success path remained free of fire damage in the event of a fire. In addition, the team verified that the licensee met applicable license commitments.

b. Findings

No findings were identified.

.02 Passive Fire Protection

a. Inspection Scope

The team walked down accessible portions of the selected fire areas to observe the material condition and configuration of the installed fire area boundaries (including walls, fire doors, and fire dampers) and verify that the electrical raceway fire barriers were appropriate for the fire hazards in the area. The team compared the installed configurations to the approved construction details, supporting fire tests, and applicable license commitments.

The team reviewed installation, repair, and qualification records for a sample of penetration seals to ensure the fill material possessed an appropriate fire rating and that the installation met the engineering design. The team also reviewed similar records for the rated fire wraps to ensure the material possessed an appropriate fire rating and that the installation met the engineering design.

b. Findings

Introduction. The team identified a Green non-cited violation of Operating License Condition 2.G related to the licensee's failure to maintain adequate procedures for the inspection of penetration sealing devices as required by the licensee's Fire Protection Report, Section IV-2.1.c.1. Specifically, the licensee implemented a revision in 2009 to Fire Protection Manual Procedure FIR-310, "Penetration Seal Inspection," which resulted in removing inspections for required penetration sealing devices located higher than 8 feet above floor level. Also, the licensee used an automated random sampling process for selection of sealing devices for inspection which failed to ensure all required penetration sealing devices were inspected within their 15-year sampling plan interval.

Description. The licensee's Fire Protection Report contained fire protection program administrative control requirements for the fire protection systems and equipment, and included a description of the operability, testing, and surveillance requirements. These operability, testing, and surveillance requirements were implemented by station procedures. Section IV-2.1.c.1 of the Fire Protection Report required, in part, that required fire rated assemblies and penetration sealing devices be confirmed operable by

visually inspecting the exposed surfaces of sealed penetrations using a site approved sampling plan every 18 months.

In January 2009 the licensee approved a revision to Fire Protection Manual Procedure FIR-310, "Penetration Seal Inspection." This revision implemented a change to the penetration seal inspection process based on information contained in a corrective action program document written to address Nuclear Electric Insurance Limited visual inspection guidelines for nonsafety-related penetrations located in the turbine building. The guidelines described inspection and acceptance criteria for nonsafety-related penetration seals when the visual inspection was performed from floor-level. Smart Form SMF 2007-001482 was evaluated and resulted in the licensee incorrectly determining that any penetration sealing device located higher than 6 feet above floor level should not require routine inspection. This determination was subsequently incorporated into Revision 3 of Fire Protection Manual Procedure FIR-310, "Penetration Seal Inspection." This revision, in part, added notes to Step 8.2.4, "Interior Conduit Seal Inspection" and Step 8.2.5, "Mechanical/Electrical Seals and Type 9 Seal Inspection," which stated that the steps were to be performed on equipment accessible from the floor (8 feet or below). The revised procedure also required an inspection sample size of 11.11 percent of each of the nine listed types of penetrations at least once per 18 months. Typically, licensees inspect about 10 percent of their penetration seals every 18 months over a 15-year interval which results in 100 percent of seals being inspected on a rotating basis every 15 years.

Discussions with the licensee identified that they used a computer program to automate the selection of penetration seals for inspection and the automated system used a process of selection with replacement, which would place recently inspected seals back in the sample population from which the next iteration made a selection. The team questioned the effectiveness of this "select with replacement" process because they were concerned that with this sampling method, certain seals could be chosen for inspection repeatedly, while others may be excluded within the sampling interval resulting in the possible omission of penetration seals from inspection. Further review by the team showed that the licensee had previously identified this concern as an improvement opportunity as part of a self-assessment review performed in 2016 and captured in Condition Report CR 2016-007817. The sampling method concern was also discussed in Tracking Report TR-2017-002621 as part of a lessons learned review from the 2016 self-assessment, however these corrective action program items were subsequently closed without changes to the sampling process or the inspection procedure. The licensee documented this issue in Condition Reports CR-2017-007745 and CR-2017-007746.

Analysis. The failure to ensure that fire protection program procedures used to establish inspection criteria for penetration sealing devices appropriately captured all required penetration sealing devices for visual inspection using a site approved sampling plan every 18 months was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the reactor safety Mitigating Systems cornerstone attribute of protection against external factors (i.e., fire), and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

Using Inspection Manual Chapter 0609, Attachment 4, "Initial Characterization of Findings," dated October 7, 2016, the finding was determined to require additional evaluation under Inspection Manual Chapter 0609, Appendix F, Attachment 1, "Fire Protection Significance Determination Process Worksheet," dated September 20, 2013. The finding was screened as a Green finding of very low safety significance in accordance with Task 1.4.3, "Fire Confinement," Question B. Based on the analysis performed, the team concluded that the degradation of the fire barrier penetration seals represented a low degradation of the fire confinement element. No inspected barriers were identified as degraded or modified from the reviewed configuration, and all inspected barriers provided at least a 1-hour or greater fire endurance rating. The team did not assign a cross-cutting aspect because the performance deficiency was not reflective of present performance in that the inspection procedure changes occurred in 2009.

Enforcement. License Condition 2.G requires the licensee to implement and maintain in effect all provisions of the approved fire protection program:

- For Unit 1:

As described in the Final Safety Analysis Report through Amendment 78 and as approved in the Safety Evaluation Report (NUREG-0797), and its supplements through Supplemental Safety Evaluation Report 24.

- For Unit 2:

As described in the Final Safety Analysis Report through Amendment 87 and as approved in the Safety Evaluation Report (NUREG-0797), and its supplements through Supplemental Safety Evaluation Report 27.

The Fire Protection Report was included as part of the licensee's approved fire protection program for both units, and states, in part, that administrative control of the fire protection program is provided through station procedures to assure that the fire protection equipment and systems are operable and properly maintained. This includes periodic tests and inspections, compensatory measures concerning items which may be inoperable, and quality assurance audits. The program applies to fire protection equipment and systems that protect fire areas which contain safe shutdown equipment. Section IV-2.1.c.1 of the Fire Protection Report required, in part, that the required fire rated assemblies and penetration sealing devices are confirmed operable by visually inspecting the exposed surfaces using a site approved sampling plan every 18 months.

Contrary to this requirement, from 2009 to June 29, 2017, the licensee failed to ensure that fire protection program procedures used to establish inspection criteria for penetration sealing devices appropriately captured all required penetration sealing devices for visual inspection using a site approved sampling plan every 18 months. Specifically, Revision 3 to Fire Protection Manual Procedure FIR-310, "Penetration Seal Inspection," omitted penetration sealing devices located higher than 8 feet above floor level from the inspection population, and the random sampling process did not ensure that all required penetration sealing devices would be inspected within the licensee's sampling plan interval.

Because this violation was determined to be of very low safety significance and has been entered into the licensee's corrective action program as Condition Reports CR-2017-007745 and CR-2017-007746, this violation is being treated as a non-cited violation, consistent with Section 2.3.2.a of the NRC Enforcement Policy: NCV 05000445/2017008-01; 05000446/2017008-01, "Failure to Implement and Maintain Adequate Inspection Procedures for Penetration Sealing Devices."

.03 Active Fire Protection

a. Inspection Scope

The team reviewed the design, maintenance, testing, and operation of the fire detection and suppression systems in the selected fire areas. The team verified the automatic detection systems and the manual and automatic suppression systems were installed, tested, and maintained in accordance with the National Fire Protection Association code of record or approved deviations, and that each suppression system was appropriate for the hazards in the selected fire areas.

The team performed a walkdown of accessible portions of the detection and suppression systems in the selected fire areas. The team also performed a walkdown of major system support equipment in other areas (e.g., fire pumps and Halon supply systems) to assess the material condition of these systems and components.

The team reviewed the electric and diesel fire pumps' flow and pressure tests to verify that the pumps met their design requirements. The team also reviewed the halon suppression functional tests to verify that the system capability met the design requirements.

The team assessed the fire brigade capabilities by reviewing training, qualification, and drill critique records. The team also reviewed pre-fire plans and smoke removal plans for the selected fire areas to determine if appropriate information was provided to fire brigade members and plant operators to identify safe shutdown equipment and instrumentation, and to facilitate suppression of a fire that could impact post-fire safe shutdown capability. In addition, the team inspected fire brigade equipment to determine operational readiness for firefighting.

The team observed an unannounced fire drill and subsequent drill critique on June 27, 2017, using the guidance contained in Inspection Procedure 71111.05AQ, "Fire Protection Annual/Quarterly," dated September 30, 2010. The team observed fire brigade members fight a simulated fire in the Auxiliary Building, located in the radiological controlled area. The team verified that the licensee identified problems, openly discussed them in a self-critical manner at the drill debrief, and identified appropriate corrective actions. Specific attributes evaluated were: (1) proper wearing of turnout gear and self-contained breathing apparatus; (2) proper use and layout of fire hoses; (3) employment of appropriate firefighting techniques; (4) sufficient firefighting equipment was brought to the scene; (5) effectiveness of fire brigade leader communications, command, and control; (6) search for victims and propagation of the fire into other areas; (7) smoke removal operations; (8) utilization of pre-planned strategies; (9) adherence to the pre-planned drill scenario; and (10) drill objectives.

b. Findings

No findings were identified.

.04 Protection From Damage From Fire Suppression Activities

a. Inspection Scope

The team performed plant walkdowns and document reviews to verify that redundant trains of systems required for hot shutdown, which are located in the same fire area, would not be subject to damage from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems. Specifically, the team verified:

- A fire in one of the selected fire areas would not directly, through production of smoke, heat, or hot gases, cause activation of suppression systems that could potentially damage all redundant safe shutdown trains.
- A fire in one of the selected fire areas or the inadvertent actuation or rupture of a fire suppression system would not directly cause damage to all redundant trains (e.g., sprinkler-caused flooding of other than the locally affected train).
- Adequate drainage was provided in areas protected by water suppression systems.

b. Findings

No findings were identified.

.05 Alternative Shutdown Capability

a. Inspection Scope

Review of Methodology

The team reviewed the safe shutdown analysis, operating procedures, piping and instrumentation drawings, electrical drawings, the Final Safety Analysis Report, and other supporting documents to verify that hot and cold shutdown could be achieved and maintained from outside the control room for fires that require evacuation of the control room, with or without offsite power available.

The team conducted plant walkdowns to verify that the plant configuration was consistent with the description contained in the safe shutdown and fire hazards analyses. The team focused on ensuring the adequacy of systems selected for reactivity control, reactor coolant makeup, reactor decay heat removal, process monitoring instrumentation, and support systems functions.

The team also verified that the systems and components credited for shutdown would remain free from fire damage. Finally, the team verified that the transfer of control from the control room to the alternative shutdown location would not be affected by fire induced circuit faults (e.g., by the provision of separate fuses and power supplies for alternative shutdown control circuits).

Review of Operational Implementation

The team verified that licensed and non-licensed operators received training on alternative shutdown procedures. The team also verified that sufficient personnel to perform an alternative shutdown were trained and available onsite at all times, exclusive of those assigned as fire brigade members.

The team performed a timed walkdown of the alternative shutdown procedure for Unit 2 with licensed and non-licensed operators to determine the adequacy of the procedure. The team verified that the operators could reasonably be expected to perform specific actions within the time required to maintain plant parameters within specified limits. Time critical actions that were verified included restoring electrical power, establishing control at the remote shutdown and local shutdown panels, establishing reactor coolant makeup, and establishing decay heat removal.

The team also reviewed the periodic testing of the alternative shutdown transfer capability and instrumentation and control functions to verify that the tests were adequate to demonstrate the functionality of the alternative shutdown capability.

b. Findings

No findings were identified.

.06 Circuit Analysis

a. Inspection Scope

The team reviewed the post-fire safe shutdown analysis to verify that the licensee identified the circuits that may impact the ability to achieve and maintain safe shutdown. The team verified, on a sample basis, that the licensee properly identified the cables for equipment required to achieve and maintain hot shutdown conditions in the event of a fire in the selected fire areas. The team verified that these cables were either adequately protected from the potentially adverse effects of fire damage or were analyzed to show that fire-induced circuit faults (e.g., hot shorts, open circuits, and shorts to ground) would not prevent safe shutdown.

The team's evaluation focused on the cables of selected components from the auxiliary feedwater, chemical volume and control, essential service water, main steam atmospheric vent, and main steam isolation systems. For the sample of components selected, the team reviewed electrical elementary and block diagrams and identified power, control, and instrument cables necessary to support their operation. In addition, the team reviewed cable routing information to verify that fire protection features were in place as needed to satisfy the separation requirements specified in the fire protection license basis. Specific components reviewed by the team are listed in the attachment.

b. Findings

No findings were identified.

.07 Communications

a. Inspection Scope

The team inspected the contents of designated emergency storage lockers and reviewed the alternative shutdown procedure to verify that portable radio communications and fixed emergency communications systems were available, operable, and adequate for the performance of designated activities. The team verified the capability of the communication systems to support the operators in the conduct and coordination of their required actions. The team also verified that the design and location of communications equipment such as repeaters and transmitters would not cause a loss of communications during a fire. The team discussed system design, testing, and maintenance with the system engineer.

b. Findings

No findings were identified.

.08 Emergency Lighting

a. Inspection Scope

The team reviewed the portion of the emergency lighting system required for alternative shutdown to verify that it was adequate to support the performance of manual actions required to achieve and maintain hot shutdown conditions, and to illuminate access and egress routes to the areas where manual actions would be required. The team evaluated the locations and positioning of the emergency lights during a walkdown of the alternative shutdown procedure.

The team verified that the licensee installed emergency lights with an 8-hour capacity, maintained the emergency light batteries in accordance with manufacturer recommendations, and tested and performed maintenance in accordance with plant procedures and industry practices.

b. Findings

No findings were identified.

.09 Cold Shutdown Repairs

a. Inspection Scope

The team verified that the licensee identified repairs needed to reach and maintain cold shutdown, and had dedicated repair procedures, equipment, and materials to accomplish these repairs. Using these procedures, the team evaluated whether these components could be repaired in time to bring the plant to cold shutdown within the time frames specified in their design and licensing bases. The team verified that the repair equipment, components, tools, and materials needed for the repairs were available and accessible on site.

b. Findings

No findings were identified.

.10 Compensatory Measures

a. Inspection Scope

The team verified that compensatory measures were implemented for out-of-service, degraded, or inoperable fire protection and post-fire safe shutdown equipment, systems, or features (e.g., detection and suppression systems and equipment; passive fire barriers; or pumps, valves, or electrical devices providing safe shutdown functions). The team also verified that the short-term compensatory measures compensated for the degraded function or feature until appropriate corrective action could be taken, and that the licensee was effective in returning the equipment to service in a reasonable period of time.

The team reviewed operator manual actions credited for achieving hot shutdown for fires that do not require an alternative shutdown. The team verified that operators could reasonably be expected to perform the actions within the applicable shutdown time requirements. The team reviewed these operator manual actions using the guidance contained in NUREG-1852, "Demonstrating the Feasibility and Reliability of Operator Manual Actions in Response to Fire," dated October 2007.

For the train of systems necessary to achieve and maintain hot shutdown conditions, the team verified that the licensee treated these manual actions as compensatory measures while appropriate corrective actions are implemented or while preparations are made by the licensee to submit exemptions or deviations. For components important to safe shutdown that could adversely affect the safe shutdown capability, the team verified that operators could reasonably be expected to perform the actions within the applicable shutdown time requirements.

b. Findings

No findings were identified.

.11 Review and Documentation of Fire Protection Program Changes

a. Inspection Scope

The team reviewed changes made to the approved fire protection program since March 27, 2014. The team verified that the changes did not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

b. Findings

No findings were identified.

.12 Control of Transient Combustibles and Ignition Sources

a. Inspection Scope

The team reviewed the licensee's approved fire protection program, implementing procedures, and programs for the control of ignition sources and transient combustibles. The team assessed the licensee's effectiveness in preventing fires and in controlling combustible loading within limits established in the fire hazards analysis. The team performed plant walkdowns to independently verify that transient combustibles and ignition sources were being properly controlled in accordance with the administrative controls.

b. Findings

No findings were identified.

.13 Alternative Mitigation Strategy Inspection Activities

a. Inspection Scope

The team reviewed the licensee's implementation of guidance and strategies intended to maintain or restore core, containment, and spent fuel pool cooling capabilities under the circumstances associated with the potential loss of large areas of the plant due to explosions or fire as required by 10 CFR 50.54(hh)(2).

The team verified that the licensee implemented and maintained adequate procedures, maintained and tested equipment necessary to properly implement the strategies, and ensured station personnel were knowledgeable and capable of implementing the procedures. The team performed a visual inspection of portable equipment used to implement the strategy to ensure the availability and material readiness of the equipment, including the adequacy of portable pump trailer hitch attachments, and verify the availability of on-site vehicles capable of towing the portable pump. The team assessed the off-site ability to obtain fuel for the portable pump and foam used for firefighting efforts. The strategy and procedure selected for this inspection sample included:

- Extreme Damage Mitigation Guideline Procedure 2, Section 4, "Backfeeding Electrical Power From Unaffected Unit DG"

One mitigating strategy sample was completed.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES [OA]

4OA2 Identification and Resolution of Problems

Corrective Actions for Fire Protection Deficiencies

a. Inspection Scope

The team selected a sample of condition reports associated with the licensee's fire protection program to verify that the licensee had an appropriate threshold for identifying deficiencies. The team reviewed the corrective actions proposed and implemented to verify that they were effective in correcting identified deficiencies. The team evaluated the quality of recent engineering evaluations through a review of condition reports, calculations, and other documents during the inspection.

The team reviewed one example where the licensee failed to write a condition report for a condition adverse to fire protection. Specifically, the licensee failed to write a condition report documenting a high failure rate of the 8-hour emergency lights during battery discharge testing. The licensee identified the high failure rate and the failure to write a condition report during an internal audit. The internal audit results were documented in Condition Report CR-2015-004086.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The team presented the inspection results to Mr. K. Peters, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff at an exit meeting on June 29, 2017. The licensee acknowledged the findings presented.

The team verified that no proprietary information was retained by the team or documented in this report.

4OA7 Licensee-Identified Violations

The following licensee-identified violation of NRC requirements was determined to be of very low safety significance and met the NRC Enforcement Policy criteria for being dispositioned as a non-cited violation.

License Condition 2.G requires the licensee to implement and maintain in effect all provisions of the approved fire protection program: The license condition states:

- For Unit 1:

As described in the Final Safety Analysis Report through Amendment 78 and as approved in the Safety Evaluation Report (NUREG-0797), and its supplements through Supplemental Safety Evaluation Report 24.

- For Unit 2:

As described in the Final Safety Analysis Report through Amendment 87 and as approved in the Safety Evaluation Report (NUREG-0797), and its supplements through Supplemental Safety Evaluation Report 27.

The Fire Protection Report was included as part of the licensee's approved fire protection program for both units. The Fire Protection Report was included as part of the licensee's Final Safety Evaluation Report for both units, and states, in part, that administrative control of the fire protection program is provided through station procedures to assure that the fire protection equipment/systems are operable and properly maintained. This includes periodic tests and inspections, compensatory measures concerning items which may be inoperable, and quality assurance audits. The program applies to fire protection equipment and systems that protect fire areas which contain safe shutdown equipment. Revision 30, Section IV-2.1.b.1.g of the Fire Protection Report required that at least once per 3 years the fire suppression water system be demonstrated operable by performing a flow test of the system in accordance with Chapter 5, Section 11 of the NFPA Fire Protection Handbook, 14th Edition. This section of the handbook directs the licensee to carefully choose test points and conduct tests in such a way that the available flow and pressure at high value or hazardous areas can be determined readily.

Contrary to the above, prior to June 29, 2017, the licensee failed to implement all provisions of the approved fire protection program. Specifically, the licensee identified that Comanche Peak currently performs loop flow testing of the underground Fire Suppression Water System piping per Procedure FIR-PX-3200, "Fire Suppression Loop Flow Test," Revision 3, which the licensee identified did not test portions of the underground loop that feed into the main power block buildings, which contain areas housing safety-related and important to safety equipment, and may not be in accordance with the methodology described in Chapter 5, Section 11 of the Fire Protection Handbook, 14th Edition, such that the available flow and pressure at high value or hazardous areas can be determined readily.

The performance deficiency was more than minor because it was associated with the protection against external factors (fire) attribute of the Mitigating Systems cornerstone and adversely affected the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was screened in accordance with Inspection Manual Chapter 0609, Appendix F, dated September 20, 2013. The finding was determined to be of very low safety significance (Green) in Task 1.4.7, "Fire Water Supply," Question A, because at least 50 percent of required fire water capacity (flow at required pressure) will still be available as evidenced by successful testing of the main transformer suppression systems. The violation was entered into the licensee's corrective action program as Condition Report CR-2017-007536.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

K. Peters, Senior Vice President and Chief Nuclear Officer
M. Stakes, Interim Plant Manager
T. Hope, Manager, Regulatory Affairs
J. Hicks, Consulting Nuclear Engineer, Regulatory Affairs
D. Scorziello, Fire Protection Program Engineer
C. Tran, Manager, Engineering Programs
H. Beck, Fire Safe Shutdown Analysis Engineer
D. Goodwin, Director, Work Management
J. Taylor, Director, Site Engineering
F. Ames, Supervisor, Fire Protection
M. Wisdom, Fire Protection System Engineer
S. Copeland, Manager, Electrical, Diesel, and I&C
A. Marzloff, Manager, Shift Operations
C. Herring, Maintenance
D. Davis, Manager, Organizational Development

NRC Personnel

R. Kumano, Resident Inspector
G. Werner, Chief, Engineering Branch 2

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened and Closed

05000445/2017008-01	NCV	Failure to Implement and Maintain Adequate Inspection Procedures for Penetration Sealing Devices
05000446/2017008-01		

LIST OF DOCUMENTS REVIEWED

Cable Routing Data Components

EG224066	EG200196B	EO232556B	EO209741
EG204555	EO204357	NK237471	NK221909
EG200196A	EO209365	NK221907	EG211109

Calculations

<u>Number</u>	<u>Title</u>	<u>Revision</u>
ME-CA-0000-1086	Fire Safe Shutdown Analysis for CPSES Unit 1, Unit 2, and Common	4
ME-CA-0000-1086	Fire Safe Shutdown Analysis for CPSES Unit 1, Unit 2, and Common Attachment 1.02 Fire Analysis Area AA	2
ME-CA-0000-1086	Fire Safe Shutdown Analysis for CPSES Unit 1, Unit 2, and Common Attachment 1.14 Fire Analysis Area EC	2
ME-CA-0000-1086	Fire Safe Shutdown Analysis for CPSES Unit 1, Unit 2, and Common Attachment 2.24 Fire Analysis Area 2SD	2
ME-CA-0000-5478	Fire Safe Shutdown Analysis – MSO – RWST Gravity Drain Down Time (to Containment Sumps)	0

Condition Reports

2009-004454	2014-001568	2016-003742	2016-010350
2010-004331	2014-009497	2016-009415	2017-000091
2011-001742	2014-010354	2016-009592	2017-000317
2011-001821	2015-004086	2016-009934	2017-000330
2014-000847	2015-006038	2016-010120	2017-000391
2017-000640	2017-002488	2017-004759	2017-005441
2017-000740	2017-002696	2017-004966	2017-005922
2017-001333	2017-003203	2017-005069	2017-005931
2017-001956	2017-004177	2017-005184	2017-006945
2017-007343*	2017-007345*	2017-007348*	2017-007353*
2017-007378*	2017-007536*	2017-007745*	2017-007785*
2017-007380*	2017-007577	2017-007746*	2017-007793*
2017-007386*	2017-007711*	2017-007748	2017-007861*

*Issued as a result of inspection activities.

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
AB-810-202 (Sheets 1-8)	Penetration Seal Map Rm. 202, Auxiliary – Unit 1	CP-/
AB-810-203 (Sheets 1-8)	Penetration Seal Map Rm. 203, Auxiliary – Unit-1	CP-/
BRP-CC-2-SB-034B	Component Cooling Water	CP-9
E1-0001	Plant One Line Diagram Units 1 and 2	CP-33
E1-0001 Sheet A	Plant One Line Diagram Unit 1 and Common Distribution Panels	CP-18
E1-0003	6.9 KV Auxiliaries One Line Diagram Normal Buses	CP-30
E1-0004	6.9 KV Auxiliaries One Line Diagram Safeguard Buses	CP-41
E1-0005	480V Auxiliaries One Line Diagram Safeguard Buses	CP-27
E1-0005 Sheet A	480V Auxiliaries One Line Diagram Safeguard Buses	CP-23
E1-0006	480V Auxiliaries One Line Diagram Normal Buses	CP-15
E1-0007	Safeguard and Auxiliary Buildings Safeguard 480V MCC'S One Line Diagram	CP-36
E1-0008	Containment and Common-Fuel Building Normal 480V MCC's One Line Diagram	CP-48
E1-0009	Containment and Diesel Generator Safeguard 480V MCC's One Line Diagram	CP-27
E1-0010	Common Auxiliary and Control Buildings Safeguard 480V MCC'S One Line Diagram	CP-44
E1-0010 Sheet A	Common Auxiliary and Control Buildings Safeguard 480V MCC'S One Line Diagram	CP-40
E1-0011	Safeguard Auxiliary and Turbine Buildings Normal 480V MCC'S One Line Diagram	CP-64
E1-0012	Turbine Building Unit 1 and Common Normal 480V MCC'S One Line Diagram	CP-39

<u>Drawings</u>		
<u>Number</u>	<u>Title</u>	<u>Revision</u>
E1-0013	Turbine Building Normal 480V MCC'S One Line Diagram	CP-20
E1-0014	Service Water Intake Structure and Diesel Generator Safeguard 480V MCC'S One Line Diagram	CP-31
E1-0015	Circulating Water Intake Structure Normal 480V MCC'S One Line Diagram	CP-26
E1-0016	Common Auxiliary and Chemical Feed Buildings Normal 480V MCC'S One Line Diagram	CP-26
E1-0017	Common Turbine, Control, and Auxiliary Buildings Normal 480V MCC'S One Line Diagram	CP-43
E1-0018	118V AC Instrument Bus Distribution One Line Diagram	CP-24
E1-0018 Sheet 1	208/120V AC One Line Diagram	CP-49
E1-0018 Sheet 1B	208/120V AC One Line Diagram	CP-32
E1-0018 Sheet D	118V AC Instrument Bus Distribution One Line Diagram	CP-26
E1-0018 Sheet F	118V AC Instrument Bus Distribution One Line Diagram	CP-19
E1-0019	125/250V DC Switchboard 1D2 One Line Diagram	CP-27
E1-0020	125V DC One Line Diagram	CP-20
E1-0024 Sheet 2	Normal Loads 480V AC Distribution Panels One Line Diagram	CP-37
E1-0030 Sheet 34	138 kV High Speed Ground Switch CPX-ECGSST-01 (GXST1) Schematic Diagram	CP-6
E1-0061 Sheet 15	Motor Operated Valve 1-LCV-0112C Volume Control Tank Outlet Isolation Valve Schematic/External Connection Diagram	CP-9
E1-0061 Sheet 4	Motor Operated Valve 1-8110 Charging Pump Miniflow Isolation	CP-10
E1-2000 Sheet D	Miscellaneous Systems One-Line Diagram Panel XEC2-7	CP-3

<u>Drawings</u>		
<u>Number</u>	<u>Title</u>	<u>Revision</u>
E2-0005	480V Auxiliaries One Line Diagram Safeguard Buses	CP-15
E2-0031 Sheet 1	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1 Start-Up Breaker 2EA1-1 Schematic Diagram	CP-9
E2-0031 Sheet 1A	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1 Start-Up Breaker 2EA1-1 Schematic Diagram	CP-4
E2-0031 Sheet 2	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1 Start-Up Breaker 2EA1-1 Switch Development and Connection Diagram	CP-8
E2-0031 Sheet 21	6.9 kV Switchgear Bus 2EA1 Diesel Generator Breaker 2EG1 Schematic Diagram	CP-12
E2-0031 Sheet 21A	6.9 kV Switchgear Bus 2EA1 Diesel Generator Breaker 2EG1 Schematic Diagram	CP-3
E2-0031 Sheet 22	6.9 kV Switchgear Bus 2EA1 Diesel Generator Breaker 2EG1 Switch Development and Connection Diagram	CP-12
E2-0031 Sheet 23	6.9 kV Switchgear Bus 2EA2 Diesel Generator Breaker 2EG2 Schematic Diagram	CP-8
E2-0031 Sheet 24	6.9 kV Switchgear Bus 2EA2 Diesel Generator Breaker 2EG2 Switch Development and Connection Diagram	CP-7
E2-0031 Sheet 3	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1-2 Schematic Diagram	CP-11
E2-0031 Sheet 3A	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1-2 Schematic Diagram	CP-3
E2-0031 Sheet 3B	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1-2 Schematic Diagram	CP-4
E2-0031 Sheet 4	6.9 kV Switchgear Bus 2EA1, Breaker 2EA1-2 Switch Development and Connection Diagram	CP-7
E2-0037 Sheet 25	Motor Operated Valve 2-HV-2491B Steam Generator Loop 1 Isolation Valve	CP-6

Drawings

<u>Number</u>	<u>Title</u>	<u>Revision</u>
E2-0037 Sheet 35	Air Operated Valve 2-HV-2452-2 Turbine Driven Auxiliary Feedwater Pump Main Steam Loop 2-01 Isolation Valve Switch Development and Connection Diagram	CP-8
E2-0037 Sheet 36	Air Operated Valve 2-HV-2452-2 Turbine Driven Auxiliary Feedwater Pump Main Steam Loop 2-01 Isolation Valve Schematic Diagram	CP-7
E2-0040 Sheet 44	Air Operated Valve 2-HV-2397 Steam Generator 1 Blowdown Isolation Valve	CP-3
E2-0043 Sheet 13	Motor Operated Valve 2-HV-4393 Diesel Generator Package A Service Water Control Valve	CP-3
E2-0043 Sheet 15	Motor Operated Valve 2-HV-4395 Station Service Water Train A to Auxiliary Feed Water PPS Valve	CP-4
E2-0053 Sheet 45	Motor Driven Auxiliary Feedwater Pump Room Fan 07 Tag CP2-VAAUSE-07	CP-3
E2-0061 Sheet 14	Motor Operated Valve 2-LCV-0112B Volume Control Tank Outlet Isolation Valve	CP-8
E2-0061 Sheet 14A	Motor Operated Valve 2-LCV-0112B Volume Control Tank Outlet Isolation Valve	CP-1
E2-0061 Sheet 15	Motor Operated Valve 2-LCV-0112C Volume Control Tank Outlet Isolation Valve Schematic/External Connection Diagram	CP-10
E2-0061 Sheet 16	Motor Operated Valve 2-LCV-0112D Refueling Water Storage Tank to Charging Pump Valve	CP-5
E2-0061 Sheet 16A	Motor Operated Valve 2-LCV-0112D Refueling Water Storage Tank to Charging Pump Valve	CP-2
E2-0061 Sheet 17	Motor Operated Valve 2-LCV-0112E Refueling Water Storage Tank to Charging Pump Valve	CP-5
E2-0061 Sheet 21	Air Operated Valve 2-8141A Reactor Coolant Pump 1 Seal Leakoff Isolation	CP-4

<u>Drawings</u>			
<u>Number</u>	<u>Title</u>		<u>Revision</u>
E2-0061 Sheet 22	Air Operated Valve 2-8141B Reactor Coolant Pump 2 Seal Leakoff Isolation		CP-4
E2-0061 Sheet 31	Air Operated Valve 2-8154 Excess Letdown Line Isolation		CP-5
E2-0061 Sheet 4	Motor Operated Valve 2-8110 Charging Pump Miniflow Isolation		CP-6
E2-0061 Sheet 66	Motor Operated Valve 2-8351A Seal Water Injection Isolation		CP-4
E2-0061 Sheet 68	Motor Operated Valve 2-8351C Seal Water Injection Isolation		CP-3
E2-0061 Sheet 84	Air Operated Valve 2-HV-8220 Charging Pump Suction Vent Line Valve		CP-5
E2-0064 Sheet 2	Motor Operated Valve 2-800B Pressurizer Relief Isolation Valve		CP-4
E2-0141	Balance of Plant Analog Rack Cabinet 1 CP2-E1PRC1-01 External Connection Diagram		CP-5
E2-0155	Balance of Plant Auxiliary Relay Rack 1 CP2-ECPRCR-03 External Connection Diagram		CP-11
E2-0172 Sheet 1	Termination Rack CP2-ECPRTC-01 External Connection Diagram		CP-7
E2-0172 Sheet 13	Termination Rack CP2-ECPRTC-13 External Connection Diagram		CP-3
E2-0172 Sheet 13A	Termination Rack CP2-ECPRTC-13 External Connection Diagram		CP-5
E2-0172 Sheet 14	Termination Rack CP2-ECPRTC-14 External Connection Diagram		CP-8
E2-0172 Sheet 14A	Termination Rack CP2-ECPRTC-14 External Connection Diagram		CP-5
E2-0172 Sheet 27	Termination Rack CP2-ECPRTC-27 External Connection Diagram		CP-9

<u>Drawings</u>		
<u>Number</u>	<u>Title</u>	<u>Revision</u>
E2-0172 Sheet 28A	Termination Rack CP2-ECPRTC-28 External Connection Diagram	CP-2
E2-0173	Hot Shutdown Panel CP2-ECPRLV-01 External Connection Diagram	CP-4
E2-0173 Sheet 01A	2-HV-2461 Motor Driven Auxiliary Feedwater Pump Flow Control	CP-4
E2-0173 Sheet 1	Hot Shutdown Panel CP2-ECPRLV-01 External Connection Diagram	CP-5
E2-0173 Sheet 15	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-8
E2-0173 Sheet 15A	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-7
E2-0173 Sheet 15B	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-4
E2-0173 Sheet 1A	Hot Shutdown Panel CP2-ECPRLV-01 External Connection Diagram	CP-4
E2-0173 Sheet 36	2-PT-0455F RCS Pressure Transmitter	CP-2
E2-0173 Sheet 36	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-6
E2-0173 Sheet 36A	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-7
E2-0173 Sheet 37	Shutdown Transfer Panel CP2-ECPRLV-15 External Connection Diagram	CP-3
E2-0192	Hot Shutdown Panel CP2-ECPRLV-01 External Connection Diagram	CP-5
E2-1709 Sheet 24	Raychem Cable Splice Details Hot Short Prevention Cable (HSPC) Installation	CP-7
M2-1920 Sheet 01	Fire Hazard Analysis – Unit 2 Containment and Safeguard Buildings Plan at Elevation 790'-6"	CP-4

Evaluations

<u>Number</u>	<u>Title</u>	<u>Date</u>
EV-TR-2010-004331-27	Twisted Shielded Pair Evaluation	2010
EV-TR-2014-000847	Evaluation of Shorting Switch Deviation to Appendix R III.G.2	March 31, 2015
EV-TR-2014-010354-2	Deviation is from the requirements of 10 CFR 50, Appendix R, Section III.G.2 for lack of separation between LCV-0112B/C, VCT Outlet Isolation Valves, and LCV-0112D/E, RWST to Charging Pump Suction Isolation Valves	January 19, 2015
EV-TR-2014-010354-3 EV-TR-2014-000847-4	Applicability Determination CPNPP Fire Protection Report Deviation Addition 2015-3; Shorting Switches	March 18, 2015
EV-TR-2014-010354-5	GL86-10 Evaluation to declassify the Reactor Head Vent Valves as High/Low Pressure Interface Valves	January 19, 2015
EV-TR-2014-010354-6	GL86-10 Evaluation to declassify the Pressurizer Vent Valves as High/Low Pressure Interface Valves	January 19, 2015
EV-TR-2014-010354-7	GL86-10 Evaluation to declassify the Letdown Isolation Valves as High/Low Pressure Interface Valves	January 19, 2015

Engineering Report

<u>Number</u>	<u>Title</u>	<u>Revision</u>
ER-ME-129	Identification of Fire Safe Shutdown Manual Action Resolution Requirements on the Protected Shutdown Train	3

Fire Impairments

17717	17951	18693	18750	18902	18946	19355	19456
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Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	Comanche Peak Nuclear Power Plant Fire Protection Report (FPR) Unit 1 and Unit 2	30

Miscellaneous Documents

<u>Number</u>	<u>Title</u>	<u>Revision/Date</u>
	Fire Protection Program Health Report	July 1, 2016 – January 31, 2017
	Unit 1 and Unit 2 DC Distribution System Health Report Fourth Quarter 2016	
	Unit 1 and Unit 2 Low Voltage AC [EL and EPS] System Health Report Fourth Quarter 2016	
	Unit 1 and Unit 2 I&C Miscellaneous 3 [CM, EA & SE] System Health Report Fourth Quarter 2016	
2323-AS-18	Specification - Hollow Metal Doors and Frames	1
DBD-ME-001	Design Basis Document – Fire Protection Program	10
DBD-ME-002	Design Basis Document - Penetration Seals	10
DBD-ME-063	Design Basis Document - Fire Barriers	7
DBD-ME-255	Design Basis Document – Chemical and Volume Control System	45
EP38SEGAG1	Extreme Damage Mitigation Guidelines (B.5.B Training)	April 29, 2013
EVAL-2016-009	CPNPP Nuclear Oversight Evaluation Report	September 8 - October 13, 2016
Final Safety Analysis Report, Section 13.3B, Amendment 104	CPNPP Fire Protection Program	
Final Safety Analysis Report, Section 9.5.1, Amendment 106	Fire Protection System	
TR-2017-002621	Tracking Report - Lessons learned from the 2016 Fire Protection Self-Assessment	
TR-2017-002621	Tracking Report - Document changes to the fire protection self-assessment	March 6, 2017

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
2323-ES-100	Units 1 and 2 Specification Electrical Installation	116
ABN-803B	Response to a Fire in the Control Room or Cable Spreading Room	10
FIR-202	Fire Protection Inspections	5
FIR-308	Fire Brigade Equipment	4
FIR-309	Hose Station And Hydrant/Hose House Inspections	4
FIR-310	Penetration Seal Inspection	3
FIR-311	Fire Rated Assembly Visual Inspection	3
FIR-312	Hydrostatic Testing of Fire Hose	1
FIR-PX-3200	Fire Suppression Loop Flow Test	3
FIR-PX-3601	Fire Hydrant Yearly Flow Test	1
FIR-PX-3802	Diesel Driven Fire Protection Pump CPX-FPAPFP-05 Operability Test	4
FPI-103B	Unit 2 Safeguards Building Elevation 810'-6" Rad, Pen. Area & Elec. Equip. Rm	3
FPI-403	Auxiliary Building Elevation 810'-6"	5
FPI-502	Electrical & Control Building Unit 1 & 2 Battery Rooms, 792'-0" ELEV	3
MSE-P0-5306	Emergency Lighting Unit Inspection	9
MSE-P1-7702	Fire Protection Control Panel CP1-EIPRLV-33 TEST	3
MSE-PX-4011	Fire Pump Motor Inspection	2

Procedures

<u>Number</u>	<u>Title</u>	<u>Revision</u>
OPT-108B	Remote Shutdown Instrumentation Check	6
OPT-206B	Auxiliary Feedwater System	22
OPT-216B	Unit 2 Remote Shutdown Operability Test	12
OWI-203	Operations Department Management Periodic Reviews	13
OWI-203-19	Operations Department Management Periodic Reviews	19
OWI-203-19	Operations Department Management Periodic Reviews	20
OWI-203-35	Accident Mitigation Equipment Periodic Review	6
STA-722	Fire Protection Program	7
STA-723	Fire Protection Systems/Equipment Requirements	5
STA-727	Fire Brigade	6
STA-738	Fire Protection Systems/Equipment Impairments	7
STI-214.01	Control of Timed Operator Actions	1

Vendor Documents

<u>Number</u>	<u>Title</u>	<u>Date</u>
	Product Information Sheet - Dow Corning® 790 Silicone Building Sealant	
	Product Information Sheet - Dow Corning® Firestop 3-6548 Silicone RTV Foam	
VDRT-4313337	3M Nextel 312 Braided Sleeving	February 12, 2012

Work Order

4812260	4913161	5056529	5198609	5317399	5347776	5400695
4869947	5002988	5056959	5306038	5341555	5400691	

K. Peters

COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 – NRC TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000445/2017008 AND 05000446/2017008 –
Date July 31, 2017

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ADAMS ACCESSION NUMBER: ML17213A147

SUNSI Review: ADAMS: Non-Publicly Available Non-Sensitive Keyword: NRC-002
By: STG Yes No Publicly Available Sensitive

OFFICE	SRI:DRS/EB2	RI:DRS/EB2	RI:DRS/EB2	C:DRS/EB2	C:DRP/A	C:DRS/EB2
NAME	SGraves	SAlferink	JWatkins	GWerner	MHaire	GWerner
SIGNATURE	/RA/	/RA/	/RA/	/RA/JMM for	/RA/	/RA/
DATE	07/17/2017	07/17/2017	07/21/2017	07/26/2017	07/31/2017	07/31/2017

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