Comanche Peak 1
4Q/2012 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Sep 25, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Compensatory Measures for Inoperable Hose Stations
The inspectors identified a non-cited violation of Technical Specification 5.4.1.d for the failure of the licensee to place signs at inoperable fire hose stations and at the compensatory fire hoses identifying the purpose and location of the compensatory measures. The inspectors determined that the licensee's compensatory actions were complex, undocumented, and not communicated to the fire brigade leader. As a result, the compensatory actions for inoperable hose stations were inadequate. The licensee entered the finding into the corrective action program as Condition Report CR-2012-006524.

The licensee's failure to place signs at the inoperable fire hose stations and at the compensatory fire hoses identifying the purpose and location of the compensatory measures was a performance deficiency. The finding was more than minor because it was associated with the protection against external factors attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the fire protection compensatory actions for inoperable hose stations were inadequate. Using NRC Inspection Manual Chapter 0609, "Significance Determination Process," Attachment 4, Appendix A, Exhibit 2, d.3.c, the finding was referred to NRC Inspection Manual Chapter 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria." A senior reactor analyst evaluated the finding and determined qualitatively that the resultant increase in risk would be of very low safety significance. The finding has a human performance cross-cutting aspect associated with decision-making because the licensee failed to communicate decisions to personnel who have a need to know the information in order to perform work safely [H.1c].
Inspection Report# : 2012004 *(pdf)*

Significance: G Sep 25, 2012
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Inadequate Gasket Installation Causes Diesel Jacket Water Leak
The inspectors reviewed a self-revealing non-cited violation of Technical Specification 5.4.1.a for the failure of the licensee to adequately install a gasket in accordance with procedure. As a result, the diesel generator jacket water connection leaked above the Final Safety Analysis Report allowable value for a seven day technical specification mission time for the diesel generator. The licensee replaced the leaking gasket and entered the finding into the corrective action program as Condition Report CR-2012-006536.

The licensee's failure to adequately install a gasket in accordance with procedure was a performance deficiency which resulted in a diesel generator jacket water leak. The finding was more than minor because it was associated with the human performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the jacket water leakage rate exceeded the Final Safety Analysis Report allowable value for a seven day diesel generator technical specification mission time. Using NRC Inspection Manual Chapter 0609, Appendix A, "The Significance

Determination Process (SDP) for Findings At-Power," the finding screened to a detailed risk evaluation because it represented an actual loss of function of a single train for greater than its technical specification allowed outage time. A senior reactor analyst determined that the risk significance was of very low safety significance because the diesel generator was always capable of functioning for greater than the probabilistic risk assessment mission time of 24 hours. The finding has a human performance cross-cutting aspect associated with resources because the licensee failed to maintain design margins and minimize long-standing equipment issues [H.2a].
Inspection Report# : 2012004 *(pdf)*

Significance: G Jun 26, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Analyze Tornado Missile Strike on Turbine Driven Auxiliary Feedwater Exhaust Pipe
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, for the failure to translate tornado missile protection design requirements to a pipe stress analysis procedure. This resulted in the licensee's failure to analyze the effects of a tornado missile strike on the turbine driven auxiliary feedwater pumps' steam exhaust piping. The licensee preliminarily determined that the auxiliary feedwater system would be able to perform its safety function given a tornado missile strike. The licensee entered the finding into the corrective action program as Condition Report CR 2012 006134.

The licensee's failure to translate design requirements into the pipe stress analysis procedure resulted in the failure to analyze the effects of a tornado missile strike on the turbine driven auxiliary feedwater pump steam exhaust pipes. The finding was more than minor because it was associated with the protection against external events attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to ensure the reliability of the auxiliary feedwater system in response to a tornado missile hazard. Using NRC Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The finding did not have a cross-cutting aspect because the performance deficiency was not representative of current plant performance.

Inspection Report# : 2012003 *(pdf)*

Significance: G Jun 26, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Revise Turbine Driven Auxiliary Feedwater Pump Acceptance Criteria
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, for the failure to incorporate acceptance limits from applicable design documents into test procedures. Specifically, the licensee revised the Unit 1 and Unit 2 requirement for the turbine driven auxiliary feedwater pump discharge pressure for a power uprate, but failed to incorporate the change into the pump surveillance procedures. As a result, the acceptance criteria were incorrect and nonconservative. The pumps were able to meet the revised acceptance criteria and perform their safety function. The licensee entered the finding into the corrective action program as Condition Report CR 2012-006135.

The licensee's failure to update the turbine driven auxiliary feedwater surveillance procedure acceptance criteria following an accident analysis revision was a performance deficiency which resulted in the failure to ensure the pump was meeting its discharge pressure requirements. The finding was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern, in that, if the turbine driven auxiliary feedwater pump performance degraded below the accident analysis assumptions, the surveillance would not detect the inoperability and corrective actions would not be taken. Using NRC Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance in the mitigating systems cornerstone because it was not a design or qualification deficiency, was not a loss of system safety function, was not an actual loss of safety function of a single train for greater than its technical specification allowed outage time, and did not screen as potentially risk significant

due to a seismic, flooding, or severe weather initiating event. The finding did not have a cross-cutting aspect because the performance deficiency was not representative of current plant performance.
Inspection Report# : 2012003 *(pdf)*

Significance: G Jun 26, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Adequately Evaluate Fish Intrusion Operating Experience and Initiate Corrective Action
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for the failure of the licensee to identify and correct a condition adverse to quality. Specifically, the licensee failed to adequately evaluate industry operating experience related to fish intrusion into cooling water systems, which resulted in the failure to take appropriate corrective actions. Subsequently, shad from the safe shutdown impoundment entered the service water system and lowered cooling water flow to safety-related components when the fish were caught in the component strainers. The licensee entered the finding into the corrective action program as Condition Report CR-2012-006133.

The licensee's failure to identify a condition adverse through an inadequate evaluation of industry operating experience related to fish intrusion into cooling water systems was a performance deficiency and resulted in the failure to take appropriate corrective actions that could have prevented a similar fish intrusion event at the station. The finding was more than minor because it was associated with the protection against external events attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the fish intrusion resulted in the clogging of strainers and the lowering of service water flow to safety-related pumps. Using NRC Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance because it was not a design or qualification deficiency, was not a loss of system safety function, was not an actual loss of safety function of a single train for greater than its technical specification allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding did not have a cross-cutting aspect because the performance deficiency was not representative of current plant performance.

Inspection Report# : 2012003 *(pdf)*

Significance: G Mar 27, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Initiate Condition Report for Emergency Core Cooling System Pump Leaks
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, for the failure to follow procedure and initiate a condition report for degradation of safety-related equipment. Specifically, the licensee failed to initiate a condition report for multiple small oil leaks on emergency core cooling system pumps and motors. As a result, the licensee failed to characterize the operability of the equipment and identify potential corrective actions. The licensee entered the finding into the corrective action program as Condition Report CR-2012-003390.

The licensee's failure to follow procedure and initiate a condition report for emergency core cooling system pump and motor oil leaks was a performance deficiency and resulted in the failure to characterize the operability of the equipment and the failure to initiate appropriate corrective actions. The finding was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern, in that, the leaks could worsen before establishing corrective actions and cause inoperable safety-related equipment. Using NRC Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance in the mitigating systems cornerstone because the equipment was able to perform its safety function and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a problem identification and resolution cross-cutting aspect associated with the corrective action program because the licensee did not use a low threshold for identifying issues [P.1a].
Inspection Report# : 2012002 *(pdf)*

Significance: G Mar 27, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate Past Operability Determination for the Diesel Generators
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, for the failure to follow procedure and perform an adequate past operability evaluation to determine if a condition would have made a system inoperable in the past. Specifically, the licensee failed to determine that when a diesel generator was paralleled to the grid with a high bus voltage condition, the diesel generator was inoperable. As a result of the inadequate past operability evaluation, the licensee incorrectly classified the significance of the condition report. The licensee entered the finding into the corrective action program as Condition Report CR-2011-006113.

The failure to follow procedure and perform an adequate past operability evaluation of the diesel generators was a performance deficiency which resulted in the licensee incorrectly classifying the significance of the condition report. The finding was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern, in that, the licensee could fail to correct a condition commensurate with its safety significance. Using NRC Manual Chapter 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings," the finding was determined to be of very low safety significance in the mitigating systems cornerstone because it did not result in the equipment being unable to perform its safety function for greater than its technical specification allowed outage time, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a human performance cross-cutting aspect associated with work practices because the licensee failed to use error prevention techniques, such as pre-job briefings, that were commensurate with the risk of the assigned task and support human performance error prevention [H.4a].
Inspection Report# : 2012002 *(pdf)*

Barrier Integrity

Significance: G Sep 25, 2012
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Promptly Correct a Nonconservative Technical Specification
The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, for failure to promptly correct a nonconservative technical specification, a condition adverse to quality. Specifically, in December 2010, the licensee implemented the administrative controls of NRC Administrative Letter 98-10, "Dispositioning of Technical Specifications that are Insufficient to Ensure Plant Safety," to permit storage of uprated fuel assemblies in Region II of the spent fuel pools. The licensee determined Technical Specification 3.7.17, "Spent Fuel Assembly Storage," was nonconservative for this condition, and did not submit a license amendment request in a timely manner to correct the technical specification. The licensee entered the finding into the corrective action program as Condition Report CR-2012-010304.

The licensee's failure to promptly correct a condition adverse to quality was a performance deficiency. This performance deficiency was more than minor because it was associated with the spent fuel pool controls attribute of the barrier integrity cornerstone. Because the significance determination process does not directly address spent fuel pool criticality, a senior reactor analyst evaluated this issue using NRC Inspection Manual Chapter 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria." Based on calculations provided by the licensee, the analyst determined that even with all uncertainties included in the calculations, the spent fuel pools would remain subcritical under all conditions, including a complete dilution of the borated water. The analyst qualitatively considered a completed dilution of the spent fuel pools to be a very low probability event. Therefore, the analyst concluded that this issue was of very low safety significance. This finding has a human performance cross-cutting aspect associated with work practices because licensee management did not provide adequate oversite to support nuclear safety by ensuring a timely submittal of a technical specification amendment following implementation of administrative controls [H.4c].
Inspection Report# : 2012004 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

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