Comanche Peak 1
1Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Mar 24, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Perform an Adequate Receipt Inspection of Solenoid Valves
A self-revealing, noncited violation of 10 CFR Part 50, Appendix B, Criterion VII, "Control of Purchased Material, Equipment, and Services," was identified for failing to assure that purchased equipment conform to the procurement documents. This failure resulted in the installation of a solenoid coil with an alternating current voltage rating of 120 Vac, into a circuit with a direct current voltage rating of 125 Vdc, resulting in the failure of Valve 1-FV-2184. The licensee replaced the solenoid valve, reviewed for extent of condition, and revised the receipt inspection verification plan.

The violation is more than minor because it is associated with the equipment performance attribute of reliability and affected the mitigating system cornerstone objective to ensure the availability and reliability of the feedwater isolation system to respond to initiating events and prevent undesirable consequences. Using Appendix A of Manual Chapter 0609, the finding screened as very low safety significance in Phase 1 of the SDP because the finding affected the mitigation system cornerstone but did not represent a loss of system safety function, an actual loss of safety function of a single train, nor was potentially risk significant due to seismic, flooding, or severe weather initiating events. The finding has crosscutting aspects of human performance due to the inadequate receipt inspection verification plan and inattention to detail by the receipt inspection personnel.
Inspection Report# : 2006002*(pdf)*

Significance: G Mar 24, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to prevent foreign material from entering the station service water pump suction
A self-revealing, noncited violation was identified for the failure to implement effective corrective actions to prevent recurrence of a significant condition adverse to quality as described in 10 CFR Part 50, Appendix B, Criterion XVI. During cleaning activities in the station service water intake bay on August 17, 2005, the vacuum hose that was being used to clean the bay floor became lodged in the pump suction housing and caused reduced flow such that the control room operator had to secure the pump. Two very similar events had occurred in 1994 and 1996, and the corrective actions proved inadequate to prevent foreign material from becoming sucked into the pumps. The licensee is currently in the process of modifying and developing procedures and evaluating facility modifications to protect the station service water pumps from foreign material intrusion.

The failure to implement adequate corrective actions for the previous events to prevent foreign material from being sucked into the station service water pumps and causing the pumps to trip or be secured was the performance deficiency. This finding is considered more than minor because it is associated with the equipment performance attribute and affected the mitigating cornerstone objective to ensure the reliability of the station service water system to respond to initiating events and prevent undesirable consequences. The finding was processed through the significance determination process and required a Phase 3 evaluation. The finding was determined to be of very low safety significance based primarily on the short time the performance deficiency actually affected plant equipment. This finding has a crosscutting aspect of problem identification and resolution due to ineffective implementation of corrective action from previous events.
Inspection Report# : 2006002*(pdf)*

Significance: G Oct 20, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Trip of Emergency Diesel Generator Due to Lube Oil Check Valve Installed Backwards
A Green self-revealing noncited violation of Technical Specification 5.4.1.a was identified for failure to implement the maintenance procedure to properly install a check valve in the Emergency Diesel Generator 1-01 lubrication system. On October 20, 2005, the diesel generator shutdown for lack of lube oil to the turbo-chargers after 60 seconds during a post maintenance test. The lube oil strainer check valve had been installed backwards during the previous refueling outage but the opposite strainer had been in service for the ensuing 18 months. The check

valve was reinstalled properly, the flow direction of similar check valves verified, and the damaged turbo-chargers replaced.

The violation was more than minor because one of two lube oil strainers for the turbo-chargers was incapable of flow, thus affecting the reliability of the diesel generator. The finding has a human performance crosscutting aspect because the failure to follow the procedure caused the diesel generator failure. However, the error was committed in April 2004. The violation is of very low safety significance because CPSES operating experience indicated that the lube oil strainers had never been swapped outside of an outage, and then only to balance run time on the equipment. The significance determination process screened this out as Green because it only affected the mitigating systems cornerstone and it did not cause an actual loss of safety function of a single train nor a loss of safety function that contributed to external event initiated core damage sequences. This event was entered into the corrective action program as Smart Form 2005-004233.
Inspection Report# : 2005005*(pdf)*

Significance: G Oct 20, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Trip of Station Service Water Pump Due to Degraded Motor Lead
A Green self-revealing noncited violation of Appendix B, Criterion XVI was identified for failure to implement effective corrective actions for a significant condition adverse to quality. Specifically, station service water Pump 1-01 was returned to service on October 20, 2005, and after two hours of operation tripped on an electrical fault on Phase C of the motor leads. The degraded electrical condition of the motor lead had been identified during restoration from the pump maintenance, but the actions taken to ensure the pump was reliable failed. Phase C of the motor leads was replaced prior to returning the pump to service.

The failure to take effective corrective actions was the performance deficiency. The violation was more than minor because the pump was returned to service with a degraded motor lead. At the time of the event, Unit 1 was defueled and did not require an operable station service water pump. However, Unit 2 was required by Technical Specifications 3.7.8 to have at least one operable station service water pump from the opposite unit. With Unit 2 at 100 percent power, a significance determination was performed using Appendix A of Manual Chapter 0609. The finding was determined to be of very low safety significance (Green) because it did not represent a loss of system safety function, was not an actual loss of safety function for a single Unit 2 train, did not involve equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event, and did not involve the total loss of any safety function that contributed to external event initiated sequences. The cause of this finding is related to the crosscutting aspects of problem identification and resolution. The event was entered into the corrective action program as Smart Form 2005-004220.
Inspection Report# : 2005005*(pdf)*

Significance: G Sep 23, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate control room heat exchanger surveillance
NRC identified, noncited violation of Technical Specification Requirement 3.7.11.1 was identified because the licensee's surveillance that was performed to demonstrate compliance with the requirement was inadequate. Specifically, the acceptance criteria did not account for all differences between test conditions and accident conditions. The licensee performed an operability assessment to demonstrate current operability.

The failure to provide an adequate surveillance procedure to demonstrate the control room air conditioning system operability was a performance deficiency. The issue was more than minor because, if left uncorrected, it could become a more significant safety concern. Using the Phase 1 significance determination process worksheet, the finding was of very low risk significance because it was a qualification deficiency that did not result in a loss of function per Generic Letter 91-18, "Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions," Revision 1. The licensee captured the issue in their corrective action program as Smart Form 2005-000937-00.
Inspection Report# : 2005004*(pdf)*

Significance: G Jun 23, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to protect the integrity of the annual reactor operator requalification examination as described in 10 CFR 55.49
A self-revealing NCV was identified for the failure to protect the integrity of the annual reactor operator requalification examination as described in 10 CFR 55.49. The examination material was inadvertently left in the control room simulator facility following annual requalification examination administration. The material was subsequently discovered by the on-coming initial operator licensing instructors. The licensee has counseled individuals involved, reviewed and made changes to the controlling procedure, and reviewed the operator examination security processes and procedures to identify areas for improvement.

This finding was determined to be more than minor because, if left uncorrected, the finding could become a more significant safety concern. Based on the results of a Significance Determination Process using Manual Chapter 0609, Appendix I, this finding was determined to have very low safety significance, since compensatory actions were immediately taken upon discovery of the examination compromise. The cause of the finding is related to the cross cutting element of human performance.

Inspection Report# : 2005003*(pdf)*

Barrier Integrity

Significance: G Oct 21, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Inadequate Corrective Actions for a Leaking Valve with a Seal Weld which Subsequently Leaked
Green. A Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI (Corrective Action) was identified, in that licensee personnel failed to take effective corrective action for a condition adverse to quality. Specifically, licensee welders repaired a body-to-bonnet leak on Valve 1-8702B, Residual Heat Removal Pump 1-02 hot-leg recirculation isolation valve, in April 2004 by installing a seal weld. The valve required additional repair in October 2005 for a body-to-bonnet leak.

The failure to take effective corrective action for a body-to-bonnet leak on Valve 1-8702 B was a performance deficiency. This finding is greater than minor because it is similar to Example 3.g. of Appendix E of Manual Chapter 0612 because the leakage reoccurred. The inspectors found this finding screened out of the Phase 1 process as Green. The inspectors considered this finding to be of very low safety significance because the event was leakage and not a line break. The cause of this finding is related to the crosscutting aspects of problem identification and resolution. (Section 1R08.1).
Inspection Report# : 2005005*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Significance: N/A Jul 29, 2005
Identified By: NRC
Item Type: FIN Finding
Problem Identification and Resolution Inspection (PI&R) Team's Overall Assessment of the Licensee's PI&R Program
The team reviewed 151 risk significant issues, apparent and root cause analyses, and other related documents, to assess the effectiveness of the licensee's problem identification and resolution processes and systems. The team concluded that the licensee's management systems were generally effective. However, the team identified poor evaluation, prioritization, and corrective actions associated with longstanding safety related Agastat relay problems. A similar performance concern was documented in the last problem identification and resolution assessment. The team also concluded that licensee corrective actions taken to address an historical adverse trend in human performance have not been effective.

The team concluded that the licensee established a safety-conscious work environment at Comanche Peak Steam Electric Station. The team determined that employees and contractors felt free to enter issues into the corrective action program and raise safety concerns to their supervision, to the employees concern program, and to the NRC. All plant personnel, interviewed by the team, stated that potential safety

issues were addressed by the licensee. However, the licensee had identified long-term organizational effectiveness issues within the operations department, which continued to challenge the safety-conscious work environment for shift operations personnel. The team concluded that licensee's past actions to improve operations department organizational effectiveness had not been fully effective.

Inspection Report# : 2005009*(pdf)*

Last modified : May 25, 2006