# Comanche Peak 1
# 4Q/2005 Plant Inspection Findings

## Initiating Events

## Mitigating Systems

**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)*

**Significance:** G Mar 01, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
**Inadequate Abnormal Procedure for Filling the CST during accident conditions**
The examiners identified a noncited violation of Technical Specification 5.4.1 associated with an inadequate abnormal operating procedure. Specifically, the examiners determined that Procedure ABN-305, "Auxiliary Feedwater System Malfunction," Revision 5, was not adequate, in that, Attachment 4 of the procedure did not have an accurate list of all the adapters required to complete the connections to the valves listed in the attachment. Additionally, adapters required in Attachment 4 to complete connections to perform an emergency fill of the condensate storage tank with fire protection water were not readily available. This deficiency was discovered while walking down a job performance measure task during examination validation week. The licensed senior operator that was used for the task validation could not locate the required fitting in the nearby cabinets for the valve required to be used to fill the condensate storage tank in the procedure's attachment. Also, the attachment did not mention the specific types of adapters required for each of the different connection sources. The licensee is correcting the procedure to include information on the types of adapters required and the order of preference of these supply points for filling the condensate storage tank and has staged the proper adapters for each of the valve types in the area required by this procedure and has documented this issue in Condition Report/Smart Form SMF-2005-001022-00.

The finding is a performance deficiency in that the licensee failed to identify that the proper equipment was not readily available and the procedure did not correctly identify the required fittings for each of the possible supply valve choices. The finding is more than minor because it affects the Mitigating Systems Cornerstone of procedural quality and equipment performance, in that, it could result in a failure to locate and use the proper equipment to fulfill the abnormal procedure, Attachment 4, when the condensate storage tank is at a low level. Using the Phase 1 worksheet in Manual Chapter 0609, "Significance Determination Process", this finding is determined to be of very low safety significance because there was no actual loss of a safety function.
Inspection Report# : 2005301*(pdf)*

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# 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**
A Green noncited violation of 10 CFR Part 50, Appendix B, Criterion XVI (Corrective Action) was identified, in that licensee personnel failed to identify the cause for a body-to-bonnet leak, a significant condition adverse to quality and take corrective action to prevent recurrence. 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 identify the root cause and to take effective corrective action to prevent recurrence 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.
Inspection Report# : 2005005*(pdf)*

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

Physical Protection information not publicly available.

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## 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 : March 03, 2006