

## Comanche Peak 2

### 3Q/2006 Plant Inspection Findings

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## Initiating Events

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## Mitigating Systems

**Significance:**  Jun 23, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

### **Operators Unable to Meet Some Critical Action Times During Alternate Shutdown Walkthrough**

The team identified a Green noncited violation of License Condition 2.G and Technical Specification 5.4.1.d for failure to complete simulated operator actions within analyzed times and for the inability to perform some of the required actions with five examples. Specifically, the following deficiencies were identified: (1) the shift manager was unable to easily obtain the keys needed to access the transfer and hot shutdown panels, which delayed taking the required actions; (2) directions for starting the safety chiller, if not already operating, were not provided, which could have delayed accomplishing the task; (3) the licensee had not accounted for 1.5 minutes needed by operators to perform required actions prior to evacuating the control room; (4) operators took 4 minutes to mitigate a spuriously open power-operated relief valve, whereas, the analysis used 3 minutes; and (5) the 3.5 minutes needed to don the flash protective gear prevented completion of subsequent procedure steps within the time analyzed. The cause of the finding is related to the crosscutting aspect of human performance because: (1) operations personnel were unfamiliar with procedures and did not have some pertinent procedure steps available, and (2) organizations failed to communicate changes to the procedure that impacted the response time.

The team determined that this finding had more than minor significance because the inadequate procedure impacted the mitigating systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of the system that responds to the event to prevent undesirable consequences. A Phase 3 analysis of the above issues concluded the finding was of very low risk significance. Specifically, the Phase 3 analysis concluded that the 8-minute delay in transferring equipment from the control room and an additional 10-minute delay in accessing the remote shutdown room, did not result in a significant increase in risk. The analyst determined that a hot-short to a power operated relief valve was the most risk significant situation. The risk associated with a stuck open power-operated relief valve combined with a fire in the control room panel not suppressed was determined to be 2.7E-11/year. The analyst concluded that it would require a 22 percent increase in the stress levels of the operators to result in the risk exceeding the threshold to be considered greater than that of very low risk significance.

Inspection Report# : [2006003\(pdf\)](#)

**Significance:**  Oct 07, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **Inoperability of Emergency Power to a Safety Bus Due to Degraded Relay**

A Green self-revealing non-cited violation of 10 CFR 50, Appendix B, Criterion XVI was identified for failure to take prompt and adequate corrective action for a condition adverse to quality. Specifically, on October 19, 2004, an unplanned loss of the preferred offsite power caused the Unit 2, Train B, 6.9 kV safeguards bus to de-energize. A degraded Agastat relay delayed the normal power supply breaker from opening for 30 seconds, which delayed powering the bus from the alternate offsite AC power supply or the emergency diesel generator. This issue had crosscutting aspects in the area of problem identification and resolution because the licensee previously identified that aged Agastat relays were unreliable and should be replaced if they were in service greater than 12 years. The failed relay had been in service for 16 years.

The licensee's failure to identify the cause and implement corrective actions to prevent repetitive failures of safety-related

Agastat relays was a performance deficiency. The violation was more than minor because it impacted the Mitigating Systems Cornerstone objective of availability, reliability, and capability of systems that respond to initiating events. Using Inspection Manual Chapter 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," the finding was determined to be of very low safety significance because the likelihood of a medium or large break loss of coolant accident coincident with a loss of offsite power, which are the only conditions where the deficiency would cause a non-negligible change in the baseline risk profile, is less than or equal to 1E-6 per year. Therefore the change in core damage frequency will be less than 1E-6 per year. The licensee captured the issue in their corrective action program as Smart Form SMF-2004-003528.

Inspection Report# : [2005005\(pdf\)](#)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:**  May 19, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

### Three Examples of a Failure to Conspicuously Post a Radiation Area

The inspector identified three examples of a non-cited violation of 10 CFR 20.1902(a) because the licensee failed to conspicuously post a radiation area. Specifically, on May 18, 2006, two discrete radiation areas in the fuel building and one in the auxiliary building were identified as not being conspicuously posted. The highest general area dose rate was 15 millirem per hour. The licensee conspicuously posted these areas and entered the finding into their corrective action program as Smart Form SMF-2006-001787-00.

The finding was greater than minor because it was associated with the Occupational Radiation Safety Cornerstone attribute of Program and Process and affected the cornerstone objective to ensure the adequate protection of a worker's health and safety from exposure to radiation because not alerting workers to the presence of radiation could prevent them from taking measures to minimize radiation exposure. The finding was processed through the Occupational Radiation Safety Significance Determination Process and determined to be of very low safety significance because it was not an as low as reasonably achievable finding, there was no overexposure or substantial potential for an overexposure, and the ability to assess dose was not compromised.

Inspection Report# : [2006003\(pdf\)](#)

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## Public Radiation Safety

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## Physical Protection

[Physical Protection](#) information not publicly available.

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## **Miscellaneous**

Last modified : December 21, 2006