Comanche Peak 1
4Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Oct 18, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Both Unit 1 Channels of Reactor Trip P4 Interlock Disabled in Mode 3
A self-revealing noncited violation of Technical Specification 5.4.1.a was identified for I&C technicians disabling both channels of P4 Reactor Trip Interlock in Unit 1, without procedural guidance, while performing main turbine stop/control valve leakage testing in Mode 3. This resulted in the turbine unexpectedly speeding up from 74 rpm to 1800 rpm within one minute. The operators attempted to trip the turbine via the turbine trip pushbutton, but the trip push-button, as well as the P4 Reactor Trip Interlock was disabled. The operators eventually closed the control valves by setting the startup/load limit device to zero percent. The licensee entered the issue into their corrective action program.

This finding is more than minor because the procedural error caused a transient in Mode 3 that resulted in the main turbine speeding up to 1800 rpm and a RCS cooldown from 511 degrees F to 499 degrees F. In addition, the finding affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of a system that responds to initiating events to prevent undesirable consequences. This finding is of very low safety significance in accordance with Phase 1 of Manual Chapter 0609, Appendix A because it was not a design or qualification deficiency, did not represent a loss of system safety function nor an actual loss of safety function, and did not screen as potentially risk significant due to external events. The cause of this finding is related to the crosscutting area of Human Performance because the licensee did not effectively communicate expectations regarding procedural compliance and personnel to follow procedures.
Inspection Report# : 2006004 *(pdf)*

Significance: G 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: 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)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G 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)*

Public Radiation Safety

Significance: G Mar 17, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to train hazmat employees.
The team identified a non-cited violation of 49 CFR 172.704(a) because the licensee failed to provide required training to hazmat employees involved in the shipment of radioactive material. The licensee did not provide general awareness training of the requirements of shipping regulations, and did not provide function-specific training of applicable sections of the shipping regulations to crane operators and riggers.

The finding is greater than minor because it is associated with the Public Radiation Safety Cornerstone attribute of program and process and affects the cornerstone objective. The finding involved the potential to impact the licensee's ability to safely package and transport radioactive material on public roadways. When processed through the Public Radiation Safety Significance Determination Process, the finding was determined to be of very low safety significance because it: (1) was associated with radioactive material control, (2) involved the licensee's program for radioactive material packaging and transportation, (3) did not cause radiation limits to be exceeded, (4) did not result in a breach of package during transit, (5) did not involve a certificate of compliance issue, (6) did not involve a low level burial ground nonconformance, and (7) did not involve a failure to make notifications or to provide emergency information. Corrective action is still being evaluated. Additionally, this finding had cross-cutting aspects associated with problem identification and resolution because the issue had been identified in an audit conducted by the licensee's Nuclear Overview Department, but had not been adequately evaluated and corrected.
Inspection Report# : 2006008 *(pdf)*

Significance: G Mar 17, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to prevent radioactive material from being unconditionally released from a radiologically controlled area
The team reviewed a self-revealing, non-cited violation of Technical Specification 5.4.1, resulting from the licensee's failure to prevent radioactive material from being unconditionally released from a radiologically controlled area. On April 18, 2005, the licensee released a contaminated transmitter from the RCA and in August 2005, shipped it to a facility Minnesota. The recipient surveyed the transmitter upon arrival and detected the radioactive material. The licensee's immediate corrective action was to have the transmitter returned. This finding did not have aspects associated with the transportation of hazardous material due to the low levels of radioactivity.

This finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (material release) and it affected the associated cornerstone objective in that the failure to control radioactive material decreases the licensee's assurance that the public will not receive unnecessary dose. Using the Public Radiation Safety Significance Determination Process, the team determined that the finding had very low safety significance because it: (1) was a radioactive material control finding, (2) was not a transportation finding, (3) did not result in public dose greater than 0.005 rem, and (4) did not result in radioactive material being released from the protected area more than five times during the biennial inspection period. Additionally, this finding had cross-cutting aspects associated with human performance because a technician's failure to perform an adequate survey directly contributed to the finding.
Inspection Report# : 2006008 *(pdf)*

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

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