Comanche Peak 2
1Q/2008 Plant Inspection Findings

Initiating Events

Significance: G Dec 31, 2007
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Use a Procedure Appropriate to the Circumstances Led to Inadvertent Actuations of the Turbine Drive Auxiliary Feedwater Pump
A Green self-revealing non-cited violation of Technical Specification 5.4.1.a was identified for the failure to use a procedure appropriate to the circumstances when performing maintenance on safety-related equipment. Specifically, on October 22, 2006, the licensee used a procedure not appropriate to the circumstances when making adjustments to the Exhaust Pilot Valve 2-HV-2452-1-PR3 on the Main Steam Line 2-04 to Auxiliary Feedwater Pump Turbine Steam Supply Valve 2-HV-2452-1. The adjustments to the exhaust pilot valve eventually led to three inadvertent operations of the turbine driven auxiliary feedwater pump, on March 12, 2007. The licensee entered the finding into their corrective action program. One corrective action included adding additional information and guidance to the procedures.

This issue was determined to be more than minor because it is similar to Example b of Section 4, “Insignificant Procedural Errors,” in Manual Chapter 0612, Appendix E, “Examples of Minor Issues.” Specifically, this issue is more than minor because it led to a plant transient that resulted in a reduction in reactor power. Additionally, this issue is associated with the Initiating Events cornerstone attribute of human performance and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. This finding was determined to be of very low safety significance because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The cause of the finding is related to the cross-cutting aspect of Human Performance in that the licensee failed to use a systematic decision making process to determine unintended consequences that would occur in decreasing the stroke time of the exhaust pilot valve (H.1.(a)).

Inspection Report# : 2007005 *(pdf)*

Mitigating Systems

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Oct 25, 2007
Identified By: Self-Revealing
Item Type: NCV NonCited Violation

Failure to Evaluate Radiological Conditions
The inspector reviewed a self-revealing non-cited violation of 10 CFR 20.1501(a) for failure to conduct a radiological survey. Specifically, on April 16, 2007, a worker's electronic dosimeter alarmed when the individual attempted to move a bag containing a small vacuum cleaner from a posted contaminated and radiation area. The bag of materials had not been surveyed for radiation levels and therefore had not been labeled to indicate the potential hazard. The bag was subsequently surveyed and found to have radiation levels of 600 millirem per hour on contact and 150 millirem per hour at 30 centimeters from the surface. Corrective actions include counseling of personnel, evaluation of possible organizational changes, and generation of a training request to include this event in future training.

The failure to conduct a radiological survey is a performance deficiency. This finding is greater than minor because it is associated with the Occupational Radiation Safety Program and Process attribute and affected the cornerstone objective, which is to ensure adequate protection of worker health and safety from exposure to radiation. The failure to perform the radiation survey led to a worker receiving unintended and additional exposure. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined that the finding was of very low safety significance because it did not involve: (1) as low as is reasonably achievable planning and controls, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess dose. In addition, this finding has a crosscutting component associated with human performance and work coordination because the licensee failed to keep workers apprised of work status and plant conditions that may affect work activities prior to removing contaminated items from the reactor containment building. (H.3.(b3)).

Inspection Report# : 2007005 *(pdf)*

Significance: G Jun 22, 2007
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to Evaluate Radiological Hazards
The inspectors reviewed a self-revealing noncited violation of 10CFR20.1501(a) for the failure to adequately evaluate radiological conditions in a work area. While performing maintenance on proximity switch cable sleeves on an assembly from the spent fuel pool up-ender, one worker was exposed to concentrations of airborne radioactivity higher than anticipated, resulting in the internal contamination and unplanned dose to the individual. A committed effective dose equivalent of 27 millirem was assigned to the individual. Additionally, after the initial alarm of the airborne activity monitor, a contamination survey of the work area was not performed to evaluate conditions prior to resuming work.

The finding is more than minor because it is associated with the occupational radiation safety attribute of program and process and affected the cornerstone objective because it involves unplanned and unintended dose to a worker. Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined that the finding was of very low safety significance because: (1) it was not an ALARA finding, (2) there was no overexposure, (3) there was no substantial potential for an overexposure, and (4) the ability to assess dose was not compromised. In addition, this finding has a cross-cutting aspect in the area of human performance associated with work control because the licensee failed to appropriately coordinate work activities by incorporating actions to keep personnel apprised of conditions at the job site which impacted radiological safety (H.3(b)).
Inspection Report# : 2007003 *(pdf)*

Significance: G Jun 22, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Provide a Detailed Work Plan
The inspectors identified a noncited violation of Technical Specification 5.4.1.a for the failure to develop an adequately detailed work plan for the maintenance of proximity switch sleeves which resulted in the internal contamination of one individual. Specifically, the licensee did not provide adequately detailed work instructions in the work order to allow the ALARA planners to develop an adequate Radiation Work Permit and radiological controls for the maintenance evolution.

The finding is more than minor because it is associated with the occupational radiation safety attribute of program and process and affected the cornerstone objective because it involves unplanned and unintended dose to a worker. Using the Occupational Radiation Safety Significance Determination Process, the inspectors determined that the finding was

of very low safety significance because: (1) it was an ALARA work planning finding, (2) the 3-year rolling average collective dose is less than 135 person-rem/unit. In addition, this finding has a cross-cutting aspect in the area of human performance associated with work control because the licensee failed to appropriately plan work activities by incorporating job site conditions which may impact radiological safety (H.3(a)).
Inspection Report# : 2007003 *(pdf)*

Public Radiation Safety

Significance: G Feb 28, 2008
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
"Failure to ship radioactive material corrrectly"
The team reviewed a self-revealing, noncited violation of 10 CFR 71.5, which occurred when the licensee failed to ship radioactive material correctly. A radioactive shipment classified as an “excepted package-limited quantity” exceeded the external dose rate limit of 0.5 millirem per hour on the surface of the package. The package recipient identified dose rates of 0.9 millirem per hour on the exterior surface of the package and notified the licensee of the problem. The licensee revised its procedure to correct for this problem by limiting the inner package dose rate to 0.3 millirem per hour, thus reducing the risk for the external dose rate to be more than 0.5 millirem per hour. The finding was placed into the licensee’s corrective action program as Smart Form SMF-2006-2403.

The finding is greater than minor because it was associated with a Public Radiation Safety cornerstone attribute (transportation program) and it affected the associated cornerstone objective because the failure to correctly ship radioactive material decreases the licensee’s assurance that the public will not receive unnecessary dose. However, this finding cannot be evaluated by the Public Radiation Safety Significance Determination Process because it did not involve radioactive shipments classified as Schedule 5 through 11, as described in NUREG-1660, and it did not fit traditional enforcement. Therefore, the finding was reviewed by NRC management using Inspection Manual Chapter 0609, Appendix M, and determined to be of very low safety significance because the package was not accessible by the public. Additionally, this finding has a cross cutting aspect in the area of human performance, work practices component, because the worker preparing the shipment did not use self checking as an error prevention technique to ensure that the package did not exceed the dose rate limit (H4.a).
Inspection Report# : 2008007 *(pdf)*

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Sep 25, 2007
Identified By: NRC
Item Type: FIN Finding
Problem Identification and Resolution Team Inspection Results
The team reviewed approximately 189 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 effective, although seven examples occurred during the assessment period of failure to implement appropriate and timely corrective actions. Overall, corrective actions were appropriate to the circumstances. The licensee implemented an effective program for evaluating operational experience, although the team identified one example where ineffective use of operating experience led to a valve

becoming inoperable.

The team concluded that the licensee maintained an overall safety-conscious work environment. However, based on interviews, concerns with trust in management and the ability to raise issues above direct supervision existed within the security force. A majority of security officers interviewed stated that although they would issue smart forms or inform their direct supervision with concerns, they would be hesitant to elevate issues. Individuals interviewed (outside of the security organization) were comfortable raising safety issues and elevating them to appropriate levels of management as necessary. The team concluded that the employee concerns program (SafeTeam) effectively resolved safety issues raised by plant and contract personnel. Plant personnel interviewed generally considered the employee concerns program a viable option to pursue safety issues. However, the majority of security force personnel interviewed lacked confidence in the SafeTeam's ability to resolve issues or maintain confidentiality.

The licensee overall performed effective and critical self-assessments. However, a licensee contract employee safety culture survey performed during this assessment period failed to identify the above concerns within the security force. Licensee management stated that a new safety culture survey was planned (with emphasis on ensuring a representative sample within the security force) for the fall of 2007.
Inspection Report# : 2007007 *(pdf)*

Last modified : June 05, 2008