

Comanche Peak 2

3Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Mar 23, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to perform required inservice testing following pump replacement

An NRC identified noncited violation of Technical Specification 5.4.1.e was identified for the failure to establish, implement and maintain written procedures for the inservice testing program. STA-711, "Inservice Testing Program for Pumps and Valves" required a new set of reference values be determined following pump replacement and all subsequent test results be compared to the new reference values. Station Service Water Pump 2-02 was declared operable on October 19, 2006, following pump replacement and, although the new pump's performance was fully acceptable, the inservice testing requirements to establish new reference values were not performed and subsequent test results were not compared to the new reference values. On March 13, 2007, the licensee provided technical justification for the operability of Station Service Water Pump 2-02, based, in part, on comparison of the new pump performance with the design flow requirements.

This violation is more than minor because it resulted in a condition where there was a reasonable doubt of the operability of the pump, and programmatic deficiencies were identified in the Inservice Testing Program that could lead to significant errors if not corrected. The violation affected the mitigation system cornerstone objective to ensure the capability of the station service water system and the attribute of human performance. The finding has very low significance because the pump was always fully capable of performing its safety function. The cause of the finding has a crosscutting aspect in the area of human performance with a resources component, in that, the licensee failed to ensure complete, accurate and up-to-date procedures were available and adequate to implement the inservice testing program (H.2(c)).

Inspection Report# : [2007002](#) (*pdf*)

Significance:  Dec 22, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

TWO CONTAINMENT SPRAY SYSTEM FUNCTIONS NOT DESCRIBED IN UFSAR OR DESIGN BASIS DOCUMENTS

A noncited violation of 10 CFR 50, Appendix B, Criterion III, Design Control, with two examples, was identified for failure to correctly translate regulatory requirements and design bases associated with the containment spray system into specifications, drawings, procedures, and instructions. Specifically, the functioning of the vacuum breakers on the chemical additive tank and the chemical additive tank isolation valves were not described in the design basis documents for this system. The vacuum breakers must operate for the system to inject sodium hydroxide, and the isolation valves must shut prior to draining the tank to prevent injecting air into the containment spray pump. This finding was entered into the corrective action program under SMF-2006-4073 and SMF-2006-4097.

Failure to correctly translate regulatory requirements and design bases associated with the containment spray system into design basis documents was a performance deficiency. This finding was determined to be more than minor because, if left uncorrected, it could become a more significant safety concern. Absent a proper description of these important functions, operability evaluations or plant changes could be made which negatively impact the functions without being recognized. This issue screened as Green in Phase 1 because there was no identified loss of function as a result of this performance deficiency. This issue had cross-cutting aspects in Problem Identification and Resolution

(Corrective Action Program, correcting problems in a timely manner), because a 2003 self-assessment identified that the isolation valves' function was not described in the UFSAR (documented in SMF-2003-3860), but this was never corrected (P.1(d)).

Inspection Report# : [2006009](#) (*pdf*)

Significance:  Dec 20, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE DESIGN CONTROL TO EXCLUDE AIR FROM CONTAINMENT SPRAY PIPING

Two examples of 10 CFR 50, Appendix B, Criterion III violations were identified for failure to translate design basis into instructions, procedures, and drawings. The team found that surveillance testing drained water out of the containment sump suction line for the containment spray system with no provision to ensure the system was refilled prior to declaring it operable. Specifically, in August 2006, the Containment Spray Containment Sump Suction Valve 1-HV-4783 for Train B in Unit 1 was cycled for surveillance testing, draining approximately 61 gallons from the line. This allowed about 8 cubic feet of air into the system. The air remained in the system until it was vented on December 1, 2006, after the team questioned whether the system was filled. Also, the licensee failed to assess/prevent vortexing in the chemical additive tank for the containment spray system in the event of a design basis accident. The team independently determined that vortexing could occur for approximately 20 minutes before the tank would be isolated, entraining air in each of the running pumps.

This violation is more than minor because it affects the design control attribute of the mitigating system cornerstone objective to ensure the availability, reliability and capability of the containment spray system to respond to initiating events and prevent undesirable consequences. This finding screened as Green during a Phase 1 significance determination process because analyses showed that the small amount of air in these cases was not enough to cause a loss of function or detrimental fluid dynamic effects. This finding had cross-cutting aspects in problem identification and resolution (corrective action program, evaluating and prioritizing problems), because there were two prior opportunities to have identified that water was being drained from the suction piping. This issue was entered into the corrective action program under SMF-2006-3965 (P.1(c)).

Inspection Report# : [2006009](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  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*)

G

Significance: 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*)

G

Significance: Dec 31, 2006

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to post a radiation area

The inspector reviewed a self-revealing noncited violation of 10 CFR 20.1902 for a failure to post a radiation area. The posting deficiency was identified during an investigation of a dosimeter dose alarm in Auxiliary Building Room 208. A radiological survey was performed two days prior with a radiation area being identified and documented on the survey; however, the radiation protection technician performing the survey failed to post the area. In addition, the lead technician who reviewed the survey failed to identify the posting deficiency. As an immediate corrective action, the licensee posted the area.

This finding is greater than minor because it is associated with one of the cornerstone attributes (exposure control) and affects the Occupational Radiation Safety cornerstone objective, in that the failure to post a radiation area could result in additional personnel exposure. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined that this finding was of very low safety significance because it did not involve: (1) an ALARA finding, (2) an overexposure, (3) a substantial potential for overexposure, or (4) an impaired ability to assess doses. Additionally, this finding has a cross-cutting aspect in the area of human performance related to work practices because the radiation protection technicians failed to use error prevention tools such as self and peer checking to identify the posting deficiency (H.4(a)).

Inspection Report# : [2006005](#) (*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 : December 07, 2007