

Palisades

1Q/2006 Plant Inspection Findings

Initiating Events

G**Significance:** Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Spent Fuel Pool Crane Manipulated Outside bounds of Approved Procedures

The inspectors identified one finding of very low safety significance and an associated non-cited violation when plant personnel performed activities outside the scope of the work package used to inspect the spent fuel pool crane. On October 11, 2005, while raising a dry fuel storage (DFS) cask from the spent fuel pool following loading of the cask, the emergency brake on the crane engaged. The engaged emergency brake stopped movement of the load resulting in suspension of the load partially out of the pool. During troubleshooting activities, the workers exceeded the bounds of the approved work package by manipulating the brake release. This finding represented a violation of the license by performing work contrary to requirements specified by NUREG-0612. Corrective actions included reinforcing site standards for procedural adherence as well as successfully lowering the DFS cask. The licensee entered the item in the Corrective Action Program.

The finding was not suitable for evaluation under the SDP. However, because the actions by the worker did not result in any load motion and both crane brakes remained set, NRC management determined the finding to be of very low safety significance (Green). This finding also affected the cross cutting area of human performance.

Inspection Report# : [2005012\(pdf\)](#)**G****Significance:** Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Failure to Provide Adequate Oversight of Maintenance Activities in the Switchyard

A finding of very low safety significance was self-revealed on April 25, 2005, when the 345 kilovolt rear bus in the switchyard was unexpectedly de-energized during planned breaker testing. Consequently, one qualified offsite power source to the onsite electrical distribution system was rendered inoperable for about 30 minutes. Plant administrative procedures did not establish an adequate level of oversight by licensee personnel for activities in the switchyard by personnel working for the switchyard owner.

This finding was more than minor because it was related to the procedure quality attribute of the Initiating Events cornerstone and adversely impacted the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding was of very low safety significance because all mitigating systems were available while the rear bus was de-energized, and the bus was de-energized for only about 30 minutes. No violation of regulatory requirements occurred. This finding also affected the cross-cutting area of human performance.

Inspection Report# : [2005006\(pdf\)](#)**G****Significance:** Jun 30, 2005

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to Provide Adequate Oversight of Contractors Modifying Turbine Drains

A finding of very low safety significance was self-revealed on January 9, 2005, when there was an unexpected lowering of condenser vacuum which resulted in a manual reactor trip. Licensee personnel found that a low pressure turbine bearing drain line had failed which caused the lowering of condenser vacuum. This drain line was to have been permanently plugged in 2003 along with three other drain lines as directed by a permanent modification, but was not included in the work package that was implemented.

The finding was more than minor because it was associated with the design control attribute of the Initiating Events cornerstone and adversely impacted the cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during power operations. The finding was of very low safety significance because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation functions would not be available. No violation of regulatory requirements occurred. This finding also affected the cross-cutting area of human performance.

Inspection Report# : [2005006\(pdf\)](#)**G****Significance:** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Loss of Primary Coolant Due to Unseated Check Valve

A finding of very low safety significance was self-revealed on May 9, 2005, when the licensee created an unexpected loss of primary coolant inventory while depressurizing a portion of a safety injection line.

The inspectors determined that the finding was more than minor because the finding was associated with the procedure quality attribute of the Initiating Events cornerstone and adversely impacted the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during power operation. Specifically, the event resulted in an unexpected loss of coolant in excess of Technical Specifications allowable leakage; however, the finding was of very low safety significance since the leakage was within the capacity of the centrifugal charging pumps. This finding represented a Non-Cited Violation of Technical Specification 5.4, "Procedures", in that procedures were not adequate to perform the evolution. Corrective actions included isolating the leak.

Inspection Report# : [2005006\(pdf\)](#)

Mitigating Systems

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Significance: Feb 17, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failed Swagelok Fitting on High Pressure Safety Injection Flow Transmitter FT-0312

A finding of very low safety significance was self-revealed on January 4, 2006, when an incorrectly installed swagelok fitting on high pressure safety injection flow transmitter FT-0312 failed. A Non-Cited Violation of 10 CFR 50 Appendix B, Criterion V, "Instructions, Procedures and Drawings," was associated with this finding for the failure to have prescribed instructions when the swagelok fitting was originally installed during field change FC-731 in 1988. Corrective actions included: the swagelok fitting on FT-0312 was repaired and verified to be installed correctly; two other swagelok fittings on high pressure safety injection flow transmitters were disassembled, inspected and repaired as necessary; other swagelok fittings installed in 1988 during field change FC-731 were visually inspected to verify that there was no evidence of leakage. Additional swagelok fittings were scheduled to be disassembled and inspected during the 2006 refueling outage to further address extent of condition.

This finding was more than minor because it was associated with the equipment performance attribute for mitigating systems and the cornerstone objective to ensure the capability of systems that respond to initiating events to prevent undesirable consequences was affected. Specifically, a leak from the failed swagelok fitting on the high pressure safety injection system flow transmitter FT-0312 would have decreased the capability of the high pressure safety injection system to inject water to the reactor core during a small break loss of coolant accident. The finding is of very low safety significance because the high pressure safety injection system's safety function was not lost.

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

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Significance: Sep 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Adequate Instruction for Proper Breaker Reassembly

A finding of very low significance (Green) was self-revealed on June 6, 2005, when the licensee discovered that a safety injection valve failed to close as expected. The licensee determined that the procedure used to reassemble the safety-related breaker for the valve was inadequate. This finding represented a Non-Cited Violation of Technical Specifications 5.4, "Procedures," in that procedures were not adequate to ensure the safety related breaker was adequately reassembled after maintenance. Corrective actions included correcting the beaker and looking at other possible breakers with similar failure mechanisms. The licensee entered the item in the Corrective Action Program. The deficiency was also an issue in the cross-cutting area of problem identification and resolution in that a previous event investigation from the same valve failing, and corrective actions from the event, were not effective.

The inspectors determined the issue was more than minor because the issue impacted the cornerstone attributes of equipment performance and procedure quality. The deficiency affected the mitigating system objective to ensure availability and reliability of systems that respond to events to prevent core damage. Specifically, some alternate functions, where the valve was shut in the Emergency Operating Procedures to control charging or ensure adequate hot leg injection, would not be available based on this deficiency.

Inspection Report# : [2005008\(pdf\)](#)

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Significance: Apr 02, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Implement Corrective Actions Which Impaired the Ability to Identify the Cause of CV-0823 and CV-0826 Failing to Open

The inspectors identified a finding of very low safety significance (Green) regarding the failure to implement corrective actions in a timely manner to identify why the component cooling water heat exchanger service water outlet valves failed to open in February 2003 and March 2003. Consequently, the cause was not identified and on January 16, 2005, CV-0826, "Component Cooling Water Heat Exchanger E-54B

Service Water Outlet Valve," again failed to open when control room operators initially attempted to open the valve. The primary cause of this finding was related to the cross-cutting area of problem identification and resolution for failing to implement corrective actions.

This finding was more than minor because it was related to the equipment performance attribute of the mitigating systems cornerstone and the cornerstone objective to ensure the reliability and capability of systems that respond to initiating events to prevent undesirable consequences was adversely impacted. Specifically, the reliability and capability of CV-0826 to automatically open on a recirculation actuation signal and provide the required flow to the component cooling water heat exchangers was not ensured when CV-0826 failed to open on January 16, 2005.

The finding was of very low safety significance because the safety function was not lost. A non-cited violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," was identified. As an interim corrective action, both CV-0823 and CV-0826 are being cycled on an increased frequency to verify the valves will stroke open. Other planned corrective actions included installing a larger spring in the valve actuators to increase the opening force to overcome high frictional forces and to evaluate and implement appropriate modifications for the valves.

Inspection Report# : [2005004\(pdf\)](#)

Barrier Integrity

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Significance: Dec 31, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Declare VHX-4 Cooler Inoperable with a Through-wall Piping Leak

The inspectors identified a finding of very low significance (Green) when the licensee failed to declare the containment air cooler, VHX-4, SW piping inoperable and take action in accordance with licensee procedures and technical specifications when a through-wall (pressure boundary) leak existed. This finding represented a non-cited violation of Technical Specifications 5.4, "Procedures," in that procedures were not properly implemented which would have resulted in declaration of inoperability of component. Corrective actions included conducting repairs to stop the leak. The licensee entered the item in the Corrective Action Program. The deficiency was also an issue in the cross-cutting area of human performance in that personnel did not properly follow the procedure for determining operability.

The inspectors determined that the issue was more than minor because the finding impacted the barrier integrity cornerstone attribute for containment barrier performance. The deficiency affected the barrier integrity objective of providing reasonable assurance that physical design barriers for the containment protect the public from radionuclide releases in that part of the boundary to a closed system for a containment penetration was breached. The finding was of very low safety significance since the breach in the containment boundary was small and would have very little impact on offsite dose evaluations.

Inspection Report# : [2005012\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

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Significance: Jun 30, 2005

Identified By: NRC

Item Type: FIN Finding

Failure to Maintain Collective Doses ALARA for RWP No. P046005

An NRC-identified finding of very low safety significance was identified when the collective dose for RWP P046005, "Engineered Safeguards Room Cooler Maintenance," conducted during the RO17 refueling outage, exceeded 5 person-rem and exceeded the dose estimate by more than 50 percent.

This finding was more than minor because it was associated with the ALARA planning/dose projection attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation. The licensee's current 3-year rolling collective dose average was greater than 135 person-rem per unit; however, the actual dose expended for the work activity was not greater than 25 person-rem, and there were no additional ALARA findings identified during the assessment period. Therefore, the finding was of very low safety significance. No violation of regulatory requirements occurred.

Inspection Report# : [2005006\(pdf\)](#)

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : May 25, 2006