

Wolf Creek 1

4Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Jan 03, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Manipulation of component outside of procedural guidance causes reactor trip.

The inspectors documented a failure to follow Procedure AP 21D-005, "Component Manipulation Control." Step 6.1.2 of Procedure AP 21D-005, requires shift manager or designee authorization to operate all systems or components. While restoring a rod-drive motor generator to service, an operator did not receive authorization prior to operating the motor-generator output breaker handle. The manipulation of the handle was an action not directed by procedure and resulted in a reactor trip. The failure to follow Procedure AP 21D-005 was identified as a violation of Technical Specification 5.4.1, for a Regulatory Guide 1.33 referenced procedure. This violation is being treated as a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy and is in the licensee's corrective action program as Performance Improvement Request 2003-0010.

This issue was considered more than minor because the failure to follow procedure resulted in an unplanned reactor trip and the inherent challenges to plant safety systems and equipment associated with a reactor trip. This issue was determined to be of very low safety significance because the finding did not contribute to the likelihood of: (1) a primary or secondary system loss of coolant accident, (2) mitigation equipment or function unavailability; and (3) a plant fire or internal/external flooding affecting plant response.

Inspection Report# : [2003003\(pdf\)](#)

Mitigating Systems

Significance:  Jul 05, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That Emergency Operating Procedures Could Have Been Successfully Performed

The inspectors identified a noncited violation of 10 CFR 50, Appendix B, Criterion V, for failure to ensure that instructions, procedures, or drawings shall include appropriate quantitative or qualitative criteria for determining that important activities have been satisfactorily accomplished. The licensee failed to ensure that the emergency operating Procedure EMG C-11, "Loss of Emergency Coolant Recirculation," Revision 14, could have been successfully performed with the loss of the postaccident dynamic reactor vessel level instrumentation.

This finding is greater than minor because it is associated with the Reactor Safety Strategic Performance Area Mitigating System Cornerstone. Specifically, the quality of emergency operating Procedure EMG C-11 was affected by the inoperable postaccident reactor vessel level instrument. The failure is of very low safety significance because it did not:

Represent a design or qualification deficiency that resulted in a loss of function

Represent an actual loss of a safety function of a system

Represent an actual loss of a single function of a train for greater than the Technical Specification allowed outage time
 Represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk significant

Screen as potentially risk significant due to seismic, fire, flooding, or severe weather

This finding is a noncited violation of 10 CFR 50, Appendix B, Criterion V. The licensee entered into the corrective action program as Performance Improvement Requests 2003-0805 and 1731.

Inspection Report# : [2003004\(pdf\)](#)



Significance: Jul 05, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Ensure That Changes to an Off-Normal Procedure Were Appropriate

The inspectors identified a noncited violation of 10 CFR 50, Appendix B, Criterion XVI, for failure to identify and correct a procedure deficiency while performing corrective actions due to an NRC identified finding documented in NRC Inspection Report 50-482/2002-08. The licensee failed to ensure that the off-normal Procedure OFN RP-017, "Control Room Evacuation", Revision 18, could have been successfully performed following the procedure change resulting from the corrective actions.

. This finding is greater than minor because it is associated with the Reactor Safety Strategic Performance Area Mitigating System Cornerstone. Specifically, off-normal Procedure OFN RP-017, "Control Room Evacuation" did not verify a volume control tank outlet valve closed in a timely manner. The failure is of very low safety significance because it did not:

- . Represent a design or qualification deficiency that resulted in a loss of function
- . Represent an actual loss of a safety function of a system
- . Represent an actual loss of a single function of a train for greater than the Technical Specification allowed outage time
- . Represent an actual loss of safety function of one or more non-Technical Specification trains of equipment designated as risk significant
- . Screen as potentially risk significant due to seismic, fire, flooding, or severe weather

This finding is a noncited violation of 10 CFR 50, Appendix B, Criterion XVI. The licensee entered into the corrective action program as Performance Improvement Requests 2003-0333 and 0338.

Inspection Report# : [2003004\(pdf\)](#)



Significance: Jun 24, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Translate a Design Basis into the Applicable Flooding Calculation

The inspectors identified a noncited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," regarding internal flooding Calculation FL-08, Revision 0. The calculation improperly credits nonexistent 0.25 inch gaps under four doors for drainage of Room 3302 which contains vital Train "B" switchgear equipment.

The finding is greater than minor because it affects the mitigating systems cornerstone objective to ensure reliability and capability of systems that respond to flood hazards. Additionally, this finding is similar to Inspection Manual Chapter 0612, Appendix E, Example 3i. The licensee's engineering staff had to recalculate the maximum flood level in Room 3302 because Calculation FL-08, Revision 0, improperly credited drainage under doors. The team considered this finding to be of very low safety significance because it did not represent an actual loss of safety function since the new analysis demonstrated that the maximum flood level in Room 3302 (approximately 5 inches) would not damage the vital electrical equipment located in that room. The capability to safely shut down the plant, therefore, would not be compromised.

Inspection Report# : [2003007\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Significance:  Jun 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Critique an Exercise Performance Deficiency relating to Protecting Nonessential Workers

The inspectors identified a non-cited violation of 10CFR50.47(b)(14) for failure to critique an exercise performance deficiency associated with implementation of a planning standard. The licensee did not identify failures to completely implement [simulated] station assembly and site evacuation during an exercise as a performance deficiency.

This finding is greater than minor because had the performance deficiency occurred during an actual event the health and safety of non-essential workers would not have been adequately protected. The finding is of very low safety significance because it occurred during an exercise simulation, did not involve the risk-significant aspects of planning standard 10CFR 50.47(b)(10), and was not a failure of the planning standard function. This finding is a non-cited violation of 10CFR50.47(b)(14). The licensee has entered this issue into their corrective action system as Problem Identification Request 2003-1553.

Inspection Report# : [2003004\(pdf\)](#)

Occupational Radiation Safety

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Control Access to a Very High Radiation Area

The inspector identified a noncited violation of 10 CFR 20.1602 because the licensee failed to institute measures to ensure that an individual is not able to gain unauthorized access to a very high radiation area. Specifically, on October 28, 2003, the inspector observed that the area surrounding a locked ladder leading down to the reactor under-vessel area, a very high radiation area, was not provided with a physical barrier that completely enclosed the area. Radiation levels at the bottom of the ladder, one meter away from the withdrawn in-core instrument thimbles, were approximately 640 Rads per hour. An individual could have climbed over the handrail and climbed down the outside of the ladder using the fall protection cage. The finding is in the licensee's corrective action program as Performance Improvement Request 2003-3220.

The finding was greater than minor because it affected the Occupational Radiation Safety cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation and the finding was associated with the cornerstone attribute (program & process). The finding involved an individual's potential for unplanned or unintended dose. When processed through the Occupational Radiation Safety Significance Determination Process the

finding was determined to be of very low safety significance because the finding was not associated with as low as reasonably achievable planning or work controls, there was no overexposure nor a substantial potential for overexposure, and the ability to assess dose was not compromised.

Inspection Report# : [2003006\(pdf\)](#)



Significance: Dec 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Four Examples of the Failure to Perform Radiological Surveys

The inspectors identified four examples of a noncited violation of 10 CFR 20.1501(a), because the licensee failed to perform required radiological surveys to ensure compliance with 10 CFR 20.1204(a) and 10 CFR 20.1902(b). On October 19, 2003, the licensee did not perform adequate surveys to assess changes in radiological conditions during chemical cleaning of the reactor coolant system. On October 22, 2003, the licensee did not perform an adequate survey of the workers breathing zone while decontaminating of the reactor cavity seal ring. These findings are in the licensee's corrective action program as Performance Improvement Requests 2003-3069 and -3136 respectively.

The finding is greater than minor because it affected the Occupational Radiation Safety cornerstone objective to ensure adequate protection of worker health and safety from exposure to radiation and the finding is associated with the cornerstone attribute (program & process). The finding involved an individual's potential for unplanned or unintended dose. When processed through the Occupational Radiation Safety Significance Determination Process the finding was determined to be of very low safety significance because the finding was not associated with as low as reasonably achievable planning or work controls, there was no overexposure or a substantial potential for overexposure, and the ability to assess dose was not compromised.

Inspection Report# : [2003006\(pdf\)](#)

Public Radiation Safety

Physical Protection

Significance: N/A Feb 04, 2003

Identified By: NRC

Item Type: FIN Finding

Verification of compliance with interim compensatory measures order

On February 25, 2002, the NRC imposed by Order, Interim Compensatory Measures to enhance physical security. The inspectors determined that, overall, the licensee appropriately incorporated the Interim Compensatory Measures into the site protective strategy and access authorization program; developed and implemented relevant procedures; ensured that the emergency plan could be implemented; and established and effectively coordinated interface agreements with offsite organizations.

Inspection Report# : [2003002\(pdf\)](#)

Miscellaneous

Last modified : March 02, 2004