

## Prairie Island 1 2Q/2004 Plant Inspection Findings

---

### Initiating Events

**Significance:**  Jun 30, 2004  
Identified By: NRC  
Item Type: FIN Finding

#### **MISSILE HAZARDS IN THE SWITCH YARD**

The inspectors identified loose decking materials installed on several equipment access platforms in the Prairie Island Nuclear Generating Plant switchyard. Plant personnel failed to identify these discrepant conditions during the performance of a plant surveillance procedure with the purpose of identifying and removing potential missile hazards from areas where they could damage important plant electrical equipment during adverse weather conditions.

The finding was more than minor because it affected the protection against external factors attribute of the initiating events cornerstone designed to limit the likelihood of events that upset plant stability. The finding was determined to be of very low safety significance since the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator, nor did it contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, and the finding did not increase the likelihood of a fire or internal or external flooding. The inspectors determined that no violation of NRC requirements were associated with this finding.

Inspection Report# : [2004005\(pdf\)](#)

**Significance:**  Mar 05, 2004  
Identified By: NRC  
Item Type: NCV NonCited Violation

#### **Transient combustibles invalidated exemption for lack of a fire suppression system**

A finding of very low safety significance was identified by the inspectors in that a hazardous quantity of transient combustibles was present in fire areas 58 and 73. The hazardous quantity of transient combustibles present invalidated an existing exemption for the lack of a fire suppression system.

Inspection Report# : [2004002\(pdf\)](#)

**Significance:**  Sep 18, 2003  
Identified By: NRC  
Item Type: NCV NonCited Violation

#### **INADEQUATE CORRECTIVE ACTIONS TO PREVENT RECURRENCE FOR THE CONTROL OF MATERIAL THAT COULD POTENTIALLY BLOCK CRITICAL DRAIN PATHS**

Green. The inspectors identified a finding of very low safety significance for inadequate corrective actions to preclude repetition. Specifically, licensee actions taken in October and November 2002 to address inadvertent blocking of critical drainage paths associated with safety-related cooling water (CL) pumps were ineffective. This was evident when the inspectors identified, during the inspection, plastic caution signs on the floor of the 121 CL pump room with no measures to secure them from blocking critical drainage paths. Once identified, the licensee removed the material to ensure that the critical drain path could not be blocked. This finding also affected the cross-cutting area of Problem Identification and Resolution because the corrective actions for a significant condition adverse to quality were inadequate to preclude repetition.

This issue was more than minor because the design control and human performance attributes of initiating events cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations were affected. The materials identified in the 121 CL pump room changed the physical conditions assumed in the internal flooding analysis. The finding was of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary system loss of coolant accident, did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available, and did not increase the likelihood of a fire or internal/external flood. The issue was a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for failing to take actions to preclude repetition of a significant condition adverse to quality.

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

### Mitigating Systems

**Significance:**  Jun 30, 2004  
Identified By: NRC

Item Type: NCV NonCited Violation

### **INAPPROPRIATE ACCEPTANCE CRITERIA FOR DIESEL DRIVEN COOLING WATER PUMP HEAT EXCHANGERS**

The inspectors identified a finding of very low safety significance regarding inadequate acceptance criteria for the licensee's Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment" heat exchanger inspections. The inspectors identified this issue during observation and review of the licensee's inspection of cooling water system heat exchangers. The finding constituted a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

The inspectors determined that the finding was more than minor because it adversely affected the licensee's ability to ensure that safety-related heat exchangers would be available, reliable, and capable of responding to initiating events to prevent undesirable consequences. The finding was of very low safety significance because the as-found and as-left conditions of the heat exchangers did not reveal any actual concerns with the operability of the heat exchangers.

Inspection Report# : [2004005\(pdf\)](#)

**Significance:**  Mar 05, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

### **Cycling of Safety Injection Pumps for Fire Scenarios**

The inspectors identified a finding of very low safety significance regarding the licensee's failure to assure that the design basis of the plant was accurately translated and maintained in Attachment 1, "Inventory Control with a Safety Injection Pump," of Procedure F5, Appendix D, "Impact of Fire Outside Control/Relay Room." Specifically, limitations on the starting and stopping of the safety injection pump motors that prevent motor degradation were not translated from the vendor manual to the plant procedure. The finding constituted a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control."

The inspectors determined that the finding was more than minor because it affected the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The violation was determined to be of very low safety significance since the licensee was able to determine that any adverse effects to the pump motor would be long term in nature and would not affect immediate operability.

Inspection Report# : [2004002\(pdf\)](#)

Inspection Report# : [2004005\(pdf\)](#)

## **Barrier Integrity**

**Significance:**  Jun 30, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

### **MISSED UT EXAMINATIONS FOR SG 12 AND SG 21 W-A WELDS**

The inspectors identified a finding of very low safety significance regarding the licensee's failure to perform ultrasonic examinations on additional tubesheet-to-head welds in steam generators 12 and 21 following identification of indications on similar welds. The finding constituted a Non-Cited Violation of 10 CFR 50.55a(g)(4).

The inspectors determined that the finding was more than minor because it affected the barrier integrity cornerstone objective of maintaining the reactor coolant system barrier integrity and if left uncorrected, could allow unacceptable piping system weld flaws to remain in-service. The finding was of very low safety significance because the welds were subsequently ultrasonically examined and the affected welds did not have flaws greater than that allowed by the American Society of Mechanical Engineers Code.

Inspection Report# : [2004005\(pdf\)](#)

**Significance:**  Mar 31, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

### **FAILURE TO MEET TS LIMITING CONDITION FOR RCS PRESSURE AND TEMPERATURE LIMITS**

Green. A finding of very low safety significance associated with exceeding Technical Specification (TS) and Pressure Temperature Limits Report (PTLR) limits was self-revealed. Technical Specification 3.4.3 requires that reactor coolant system (RCS) temperature be maintained within the limits of the PTLR. Section 3.0 of the PTLR requires that RCS temperature remain above 86 degrees Fahrenheit when the RCS is not vented. On December 1, 2002, with Unit 1 in Mode 5, and the RCS not vented, the reactor coolant pumps were started causing RCS temperature to drop below 86 degrees Fahrenheit. Action statement C.2 of TS 3.4.3 requires that the RCS be evaluated for acceptability for continued operation prior to entering Mode 4. Operators placed Unit 1 in Mode 4 without completing the required evaluation. Upon identification of the failure to meet the criteria contained in action statement C.2 of TS 3.4.3, the licensee performed the required evaluation to demonstrate the acceptability of continued operation. This finding also affected the cross-cutting areas of human performance and problem identification and resolution. Operators and engineers failed to recognize the violation of TS 3.4.3 and PTLR limits associated with RCS temperatures, and failed to recognize and implement the TS-required actions prior to a change in Mode. Additionally, supervisors and plant managers failed to recognize the significance of the event and assign an appropriate priority during the corrective action screening process.

This issue was more than minor since the finding could be reasonably viewed as a precursor to a significant event such as the degradation or failure of the reactor pressure vessel. The finding was determined to be not suitable for significance determination process evaluation. NRC management reviewed the finding for significance and determined it to be of very low safety significance based on engineering evaluation conclusions that the limiting vessel baseline material stresses remained within allowable limits. Therefore, the deficiency was confirmed not to result in loss of function per Generic Letter 91-18. This finding resulted in a Non-Cited Violation of TS 3.4.3 which required the RCS be evaluated for acceptability for continued operation prior to entering Mode 4 when temperature limits contained in the PTLR are exceeded.

Inspection Report# : [2004003\(pdf\)](#)

**Significance:**  Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **FAILURE TO ESTABLISH APPROPRIATE QUANTITATIVE/QUALITATIVE ACCEPTANCE CRITERIA**

Green. A finding of very low safety significance was identified by inspectors during a plant status review of scheduled surveillance testing and daily work. The licensee concurrently scheduled the performance auxiliary building special ventilation system surveillance tests while conducting painting in areas of the auxiliary building that communicated with the ventilation system. The primary cause for the finding was inadequate procedural guidance in the licensee's procedure for the protection of pre-, absolute, and charcoal ventilation filters from contamination.

The finding was determined to be more than minor since if left uncorrected the condition would become a more significant safety concern as additional operation of the auxiliary building special ventilation system occurred concurrently with painting activities and would eventually have resulted in the inoperability of the auxiliary building special ventilation system filter units. The finding only represents a degradation of the radiological barrier function provided for the auxiliary building and has been determined to be a finding of very low safety significance. The finding was determined to be a violation 10 CFR Part 50, Appendix B, Criterion V, for a failure to include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

Inspection Report# : [2003005\(pdf\)](#)

---

## **Emergency Preparedness**

---

## **Occupational Radiation Safety**

---

## **Public Radiation Safety**

---

## **Physical Protection**

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

---

## **Miscellaneous**

Last modified : September 08, 2004