Prairie Island 1
1Q/2004 Plant Inspection Findings

Initiating Events

Significance: G 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 anexisting exemption for the lack of a fire suppression system.
Inspection Report# : 2004002*(pdf)*

Significance: G 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: G Apr 11, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CORRECTLY TRANSLATE/MAINTAIN THE RHR DISCHARGE OVERPRESSURE INTERLOCK REMOVAL MODIFICATION'S DESIGN BASIS
Green. The inspection team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that, the design bases for the Units 1 and 2 residual heat removal (RHR) discharge overpressure interlock removal modification was not correctly translated into specifications, procedures, and instructions. Specifically, the modification's safety evaluation took credit for local operator action to manually open the RHR heat exchanger to safety injection pump suction valves during the transfer to recirculation in both units' emergency operating procedures (EOPs). However, on March 14, 2003, local operator action to manually open the valves was removed from the EOPs.

This finding was greater than minor because the lack of coordination between the modification's design requirements and EOP procedural guidance affected the mitigating systems' cornerstone objective. The cornerstone's objective of ensuring the availability, reliability, and capability of the emergency core cooling system to respond to initiating events was affected. The finding was of very low safety significance

because it did not represent an actual loss of a safety function. (Section 1R21.2b.1)
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 11, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO CONSIDER ALL CREDIBLE FAILURES DURING THE CHANGE IN CLASSIFICATION OF THE RHR HEAT EXCHANGER OUTLET CONTROL VALVE COMPONENTS
Green. The inspection team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," in that, the design bases for the residual heat removal (RHR) system was not correctly maintained in accordance with regulatory requirements. Specifically, a safety evaluation was written for the change in classification from safety related to non-safety related for the Units 1 and 2 RHR heat exchanger flow control valves' positioners, hand controllers and signal converters. However, the safety evaluation failed to consider all credible failures in evaluating the single failure criterion. For example, if a required open valve's hand controller were to fail high, the valve would close and block the emergency core cooling system (ECCS) flow path.

This finding was greater than minor because the change in classification from safety related to non-safety related for the Units 1 and 2 RHR heat exchanger flow control valve components affected the mitigating systems' cornerstone objective. The cornerstone's objective of ensuring the availability, reliability, and capability of the ECCS to respond to initiating events was affected. The finding was of very low safety significance because it did not represent an actual loss of a safety function. (Section 1R21.2b.2)
Inspection Report# : 2003003*(pdf)*

Significance: G Apr 11, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAINTAIN THE RHR PIT COVERS' DESIGN BASIS CONFIGURATION
Green. The inspection team identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," due to the licensee's failure to maintain the design basis configuration of the residual heat removal (RHR) pit covers. Specifically, the Units 1 and 2 auxiliary building's RHR pit covers were designed to be closed during plant operation to limit the radiological dose rates to vital plant areas during accident conditions. However, prior to April 4, 2003, the Units 1 and 2 RHR pit covers were maintained in an open position during plant operation.

This finding was greater than minor because the potential to affect the safety injection and RHR systems' design basis functions (i.e., degradation of long term heat removal) affected the mitigating systems' cornerstone objective. Specifically, local operator actions in the auxiliary building (e.g., area around the RHR pits) were required to transfer the emergency core cooling system (ECCS) to the recirculation mode. If the operator was prevented from performing the local operator actions during accident conditions due to high dose rates, then both trains of ECCS could be degraded. As a result, the cornerstone's objective of ensuring the availability, reliability, and capability of the ECCS to respond to initiating events was affected. The finding was of very low safety significance because it did not represent an actual loss of a safety function. (Section 1R21.2b.3)
Inspection Report# : 2003003*(pdf)*

Barrier Integrity

Significance: G 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

Miscellaneous

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