

Byron 2

Initiating Events



Significance: Dec 28, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

FAILURE OF THE GOVERNOR SIDE TURBINE COUPLING WINDAGE SHIELD COVER ON THE UNIT 2 A LOW PRESSURE TURBINE COUPLING NUMBER FOUR

A finding of very low significance was identified through a self-revealing event. Inadequate installation instructions led to an improperly installed turbine coupling windage shield cover on the Unit 2A low pressure turbine. This resulted in a windage shield cover failing and coming off of the coupling causing vibrations over the trip value. This resulted in a manual turbine trip and reactor shutdown. This finding was more than minor because it increased the likelihood of a reactor trip event due to a turbine trip. This finding was of very low safety significance because the finding did not contribute to a loss of coolant accident, did not affect mitigating equipment functions and did not increase the likelihood of a fire or external event. No violations of NRC requirements occurred.

Inspection Report# : [2002007\(pdf\)](#)



Significance: Sep 30, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

FAILURE TO MANAGE SHUTDOWN RISK ASSOCIATED WITH SWITCHYARD ACTIVITIES DURING REDUCED RCS INVENTORY

A finding of very low safety significance was identified through a self-revealing event. Specifically, the licensee failed to assess and manage the increase in risk associated switchyard maintenance activities that commenced prior to restoring reactor coolant system (RCS) inventory to greater than 5 percent pressurizer level as required by the licensee's preestablished contingency plan. This was identified when the outage manager contacted the switchyard coordinator to inform him that the prerequisite regarding RCS inventory was about to be met, at which time the outage manager was informed that work already commenced. The primary cause of this finding was related to the cross-cutting area of Human Performance. Although administrative controls were in place to prevent switchyard work the RCS was at reduced inventory, the controls were not implemented. The finding was more than minor because it increased the likelihood of those events that upset plant stability and challenge a critical safety function, specifically electric power control, during shutdown operations. The finding was of very low safety significance because both emergency diesel generators were subsequently determined to be available; therefore, providing sufficient redundancy such that the licensee's ability to cope with a loss of offsite power was not degraded during the switchyard activities. This was determined to be a Non-Cited Violation of 10 CFR 50.65 (a)(4).

Inspection Report# : [2002006\(pdf\)](#)

Mitigating Systems



Significance: Dec 28, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

FAILURE TO ADEQUATELY EVALUATE THE OPERABILITY OF THE 2B SX DUE TO THE 30 DROP/MINUTE OIL LEAK.

The inspectors identified a finding of very low safety significance regarding the licensee's failure to adequately evaluate the operability of the 2B essential service water pump following the identification of a 30 drop per minute lube oil leak. The primary cause of this finding was related to the cross-cutting area of human performance. Despite the fact that the 2B essential service water pump was degraded due to a 30 drop per minute lube oil leak, the licensee declared the pump operable without sufficient justification. This finding was more than minor because it involved an inadequate operability evaluation of the essential service water, which was associated with a human performance attribute of the Mitigating Systems cornerstone. This finding is of very low safety significance because it did not represent an actual loss of function of the essential service water system nor did it involve a potential risk significance due to external events. No violations of NRC requirements occurred.

Inspection Report# : [2002007\(pdf\)](#)

G**Significance:** Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

ADEQUATE ACCEPTANCE CRITERIA FOR GENERIC LETTER 89-13 HEAT EXCHANGER INSPECTIONS

The inspectors identified a finding of very low safety significance regarding inadequate acceptance criteria for the licensee's Generic Letter 89-13 heat exchanger inspections. The inspectors identified this issue during observations and review of the licensee's inspection of an auxiliary feedwater system heat exchanger. 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 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. This was determined to be a Non-Cited Violation of 10 CFR 50 Appendix B, Criteria V.

Inspection Report# : [2002006\(pdf\)](#)**Significance:** SL-IV Jun 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE 50.59 EVALUATION RESULTED IN THE CCW SYSTEM NOT MEETING SINGLE FAILURE CRITERIA FOR A THERMAL BARRIER HEAT EXCHANGER RUPTURE EVENT

The inspectors identified a Severity Level IV Non-Cited Violation. In July 1998, the licensee implemented a change to the Updated Final Safety Analysis Report (UFSAR) that involved an unreviewed safety question and for which prior NRC approval was not obtained per the requirements of 10 CFR 50.59 in effect at the time. Specifically, the licensee changed the UFSAR and failed to adequately evaluate: 1) an elimination of performance requirements for valve 1/2CC-9438 associated with isolation of a loss of coolant accident following a thermal barrier heat exchanger rupture; 2) a decrease in the number, from two to one, of valves in the component cooling water return line that were relied upon to meet the performance requirements of General Design Criteria 44 and 54, and; 3) a substitution of operator manual actions for a remote manual valve closure. This change to the facility, as described in the UFSAR, created the possibility for a new accident not previously evaluated in the UFSAR. Because the Significance Determination Process (SDP) is not designed to assess the significance of violations that potentially impact or impede the regulatory process, this issue was dispositioned using the traditional enforcement process in accordance with Section IV of the NRC Enforcement Policy. However, the results of the violation, that is, the elimination of performance requirements for one of two valves relied upon to isolate a loss of coolant accident involving a thermal barrier heat exchanger rupture, were assessed using the SDP. The severity level of the violation was then based upon the SDP assessment for the results of the violation. The results of the violation were considered to have more than minor safety significance, in that, the results of the violation had a credible impact on safety by affecting the operability, availability, reliability, or functioning of the component cooling water system. However, the results of the violation did not cause a loss of function of the component cooling water system per the guidance of Generic Letter 91-18, "Resolution of Degraded and Non-Conforming Conditions." Therefore, the results of the violation were determined to be of very low safety significance, a Green finding, and the violation of 10 CFR 50.59 was classified as a Severity Level IV violation. Because this non-willful violation was non-repetitive, and was captured in the licensee's corrective action program, this issue is being treated as a Non-Cited Violation, consistent with the NRC Enforcement Policy.

Inspection Report# : [2002005\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : March 25, 2003