Quad Cities 2
2Q/2004 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2004
Identified By: NRC
Item Type: FIN Finding
FAILURE TO APPROPRIATELY IMPLEMENT TURBINE THRUST BEARING WEAR DETECTOR CALIBRATION AND SURVEILLANCE TESTING PROCEDURES
A finding of very low safety significance was self-revealed when the Unit 2 main turbine and reactor automatically tripped during thrust bearing wear detector testing. The turbine trip was a result of the licensee's failure to implement the thrust bearing wear detector test program as described in the vendor manual. The inspectors determined that the licensee had modified their test program to gain efficiencies in plant operation, work control, and radiation protection. However, the licensee did not recognize that the increased efficiencies also increased the likelihood of a plant transient during thrust bearing wear detector testing.

This finding was more than minor because it was viewed as a precursor to a significant event (a transient). This finding was of very low safety significance because Unit 2 responded to the turbine trip and reactor trip as designed and all mitigating systems equipment was available following the reactor trip. The finding was not considered a violation of regulatory requirements since the main turbine thrust bearing wear detector was a non-safety related component.
Inspection Report# : 2004005*(pdf)*

Significance: G Sep 30, 2003
Identified By: NRC
Item Type: FIN Finding
FAILURE TO PERFORM THOROUGH EXTENT OF CONDITION REVIEW AND INTERNAL DRYER INSPECTION FOLLOWING FIRST STEAM DRYER FAILURE
Green. The inspectors determined that the failure to perform visual inspection of the dryer's internal surfaces and complete an extent of condition review which evaluated the full spectrum of frequencies acting on the Unit 2 steam dryer following a June 2002 failure contributed to a repetitive failure in June 2003.

This finding was more than minor because it impacted the equipment performance attribute of the initiating events cornerstone and affected the cornerstone objective of limiting the likelihood of events that upset plant stability. The inspectors determined that this finding was of very low risk significance because the failed steam dryer did not contribute to a loss of safety function for any mitigating system. The licensee's corrective actions included repairing the steam dryer and implementing additional measures to ensure that appropriate extent of condition reviews were completed when required. (Section 4OA2.3)
Inspection Report# : 2003009*(pdf)*

Mitigating Systems

Significance: G May 28, 2004
Identified By: NRC
Item Type: FIN Finding
Failure to Provide Adequate Minimum Flow Protection for the RCIC Pump
Green. The inspectors identified a finding of very low safety significance involving inadequate design control of the reactor core isolation cooling system. Specifically, the design of the reactor core isolation cooling system and plant operating procedures did not provide adequate minimum flow protection for the reactor core isolation cooling pump. As a result, the reactor core isolation cooling flow could be reduced below the minimum flow requirements for the pump, potentially resulting in pump damage. This finding applies to both units.

This finding was more than minor since it could have affected the mitigating system cornerstone objective of ensuring the availability of systems required to respond to initiating events. This finding was of low safety significance because it did not represent an actual degradation of the reactor core isolation cooling system. The licensee initiated appropriate corrective actions, including implementing a procedure change and obtaining formal minimum flow information from the pump vendor, to ensure continued operability. No violation of NRC requirements occurred.
Inspection Report# : 2004004*(pdf)*

Significance: G Mar 31, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
AUTOMATIC DEPRESSURIZATION SYSTEM VALVE 1-0203-3B WAS INOPERABLE WHEN REQUIRED TO BE OPERABLE
Technical Specification 3.4.3.A requires that with one relief valve inoperable, restore the valve to operable status within 14 days or be in mode 3 within 12 hours and in mode 4 within 36 hours. In addition, Technical Specification 3.5.1.G requires that with one automatic depressurization system valve inoperable, restore the valve to operable status within 14 days or be in mode 3 within 12 hours and reduce reactor dome pressure to 150 psig or below within 36 hours. Contrary to the above, the licensee discovered on November 15, 2003, that automatic depressurization system valve 1-0203-3B was inoperable when required to be operable from July 23 until November 11, 2003.
Inspection Report# : 2004002*(pdf)*

Significance: G Dec 31, 2003
Identified By: NRC
Item Type: FIN Finding
FAILURE OF STEAM DRYER MONITORING PLAN TO DETECT SIGNIFICANT DRYER DEGRADATION IN THE EARLY STAGES TO PRECLUDE FAILURE WHICH COULD IMPACT SAFETY-RELATED EQUIPMENT.
A self-revealing finding was identified due to the failure of the steam dryer monitoring plan to detect significant Unit 1 dryer degradation in the early stages. As a result, actions which could have been taken to preclude the generation of loose parts, and minimize potential damage to mitigating systems equipment, were unable to be taken.

This finding was determined to be more than minor because it impacted the equipment performance attribute of the mitigating systems cornerstone and impacted the objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined that this finding was of very low safety significance as the dryer failure did not result in the loss of safety function of any mitigating systems equipment.
Inspection Report# : 2003013*(pdf)*

Significance: G Dec 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
PROCEDURES FOR PLACING RESIDUAL HEAT REMOVAL PUMP IN SHUTDOWN COOLING NOT APPROPRIATE TO THE CIRCUMSTANCES
A self-revealing event occurred on April 17, 2003, due to the failure to have procedures appropriate to the circumstances for placing a residual heat removal pump in the shutdown cooling mode of operation. When taken in conjunction with a degraded relief valve, the inadequate procedural guidance increased the pressure in the residual heat removal piping to a level which exceeded the relief valve setpoint. The discharge from the relief valve traveled to the reactor building floor drain sump and was unnoticed by control room and radwaste operations personnel for more than 10 hours due to weaknesses in control room and radwaste panel monitoring. By the time this condition was identified, the floor drain sump had overflowed and approximately one-half inch of water had accumulated on portions of the reactor building basement floor. The failure to have a procedure appropriate to the circumstance was determined to be a violation of NRC requirements. The inspectors considered the weakness in panel monitoring by both control room and radwaste operations personnel to be a human performance issue since this delayed the identification of this self-revealing condition. Lastly, the failure of the licensee to identify the weaknesses in operator performance prior to prompting by the inspectors was considered a problem identification and resolution issue.

This finding was more than minor because it was associated with the procedure quality and protection against external factors attributes of the mitigating systems cornerstone. In addition, this finding impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences such as flooding. The inspectors determined that this finding was of very low safety significance as adequate decay heat removal and mitigating systems capability was maintained.
Inspection Report# : 2003013*(pdf)*

Significance: G Dec 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO DEMONSTRATE PERFORMANCE OR CONDITION OF REACTOR BUILDING FLOOR DRAIN SUMP HIGH LEVEL ALARMS WERE EFFECTIVELY CONTROLLED THROUGH PERFORMANCE OF PREVENTIVE MAINTENANCE
The inspectors identified a Green finding involving a Non-Cited Violation for the failure to demonstrate effective control of the condition of the reactor building floor drain sump high level alarms through the performance of preventive maintenance. As a result, the licensee had not set goals or monitored the performance of the alarms as required by 10 CFR Part 50.65(a)(1).

This finding was determined to be more than minor because if left uncorrected the failure to perform appropriate preventive maintenance would become a more significant safety concern. Due to the nature of this finding, it was unable to be assessed using the Significance Determination Process. However, the details of this finding were reviewed by Region III management, maintenance rule personnel in the Office of Nuclear Reactor Regulation, and Office of Enforcement personnel and determined to be of very low risk significance.
Inspection Report# : 2003013*(pdf)*

Significance: G Sep 30, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
CONDITION ADVERSE TO QUALITY NOT IDENTIFIED AND CORRECTED DUE TO FAILURE TO FOLLOW TROUBLESHOOTING AND EQUIPMENT DEFICIENCY PROCEDURES
Green. The inspectors identified a Green finding and a Non-Cited Violation due to the failure to follow procedures after discovering that a shutdown cooling suction valve would not operate from the control room. The failure to follow procedures resulted in several human performance issues including: the failure to initiate a work request when required, the performance of troubleshooting activities prior to developing a formal troubleshooting plan, the use of repetitive cycling to resolve equipment deficiencies, and the use of the equipment cycling results as a basis for continued component operability. The deficiencies in work request initiation subsequently contributed to the licensee's failure to correct this equipment deficiency.

The inspectors determined that the failure to follow procedures after discovering this equipment deficiency was more than minor because if left uncorrected, this practice could lead to the failure to appropriately identify and correct subsequent deficiencies. The inspectors determined that the finding was of very low safety significance because the shutdown cooling suction valve could be manually operated if needed and adequate decay heat removal could be maintained using the remaining residual heat removal equipment. The licensee's corrective actions included maintaining the ability to manually open the suction valve, performing preventive maintenance on the valve's breaker, and re-enforcing the actions to be taken upon discovering an equipment deficiency. (Section 4OA2.2)
Inspection Report# : 2003009*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : September 08, 2004