

Quad Cities 1

2Q/2004 Plant Inspection Findings

Initiating Events

Significance:  Dec 31, 2003

Identified By: NRC

Item Type: FIN Finding

FAILURE TO ENSURE TERMINAL CONNECTIONS TIGHTENED FOLLOWING WORK LEADS TO REACTOR RECIRCULATION RUNBACK

A self-revealing reactor recirculation runback occurred on October 7 due to a loose screw on terminal BB-13 in control room panel 901-18. The screw was likely loosened during modification work conducted in November 2002. The runback and associated control room operator actions resulted in lowering Unit 1 reactor power approximately 70 percent.

This finding was determined to be more than minor because it was a precursor to a significant event (the runback). The inspectors determined that this finding was of very low safety significance because the finding did not contribute to the likelihood of a primary or secondary loss of coolant accident initiator, the likelihood of a reactor trip and that mitigating equipment would not be available, or the increase in the likelihood of a fire or an internal or external flooding event.

Inspection Report# : [2003013\(pdf\)](#)

Significance:  Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

UNEXPECTED HALF SCRAM OCCURRED DUE TO FAILURE TO EVALUATE CHANGE IN EQUIPMENT CONFIGURATION VIA THE PROCEDURE CHANGE PROCESS PRIOR TO INSTALLATION

A self-revealing half scram occurred on July 10, 2003, due to the failure to fully evaluate a change to the test equipment configuration specified in surveillance procedure QCIS 0500-01, "Unit 1 Division 1 Low Condenser Vacuum Scram Calibration and Functional Test." The failure to properly evaluate the configuration change was considered a human performance issue and a Non-Cited Violation of Technical Specification 5.4.1.

This finding was more than minor because it impacted the procedure quality, configuration control, and design control attributes of the initiating events cornerstone, and affected the cornerstone objective of limiting the likelihood of events that upset plant stability. The inspectors determined that the finding was of very low safety significance because the exposure time was short, all other mitigating systems were available, and the condenser could have been recovered if needed. The licensee's immediate corrective actions included removing the test equipment, restoring the low condenser vacuum circuitry, and properly determining an alternate means to perform the surveillance test.

Inspection Report# : [2003009\(pdf\)](#)

Mitigating Systems

Significance:  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:  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\(pdf\)](#)

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Significance: 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\(pdf\)](#)

Barrier Integrity

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Significance: Sep 30, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

OPERATION OF UNIT 1 WITH REACTOR COOLANT PRESSURE BOUNDARY LEAKAGE WHICH EXCEEDED TECHNICAL SPECIFICATION REQUIREMENTS

The inspectors identified a Green finding and a Non-Cited Violation due to the discovery of a reactor coolant pressure boundary leak on the Unit 1 reactor pressure vessel head vent piping in May 2003.

The inspectors determined that the presence of a reactor coolant system pressure boundary leak was more than minor because it impacted the equipment performance attribute and the objective of the initiating events cornerstone and the reactor coolant system and barrier performance attribute and objectives of the barrier integrity cornerstone. The inspectors determined that this finding was of very low safety significance because additional equipment not credited in the Probabilistic Risk Assessment was available to mitigate the leak and the contribution of this type of event to the baseline core damage frequency was small. Corrective actions included cutting out the weld defect which caused the leak and repairing the pipe.

Inspection Report# : [2003009\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : September 08, 2004