Quad Cities 1
4Q/2003 Plant Inspection Findings

Initiating Events

Significance: G 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: G 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: 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 Jun 30, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROVIDE A CORRECT PROCEDURE FOR VENTING EMERGENCY CORE COOLING SYSTEM TO DEMONSTRATE THE PIPING FULL OF WATER
The inspectors identified a Non-Cited Violation of Technical Specification Paragraph 5.4.1 for the licensee's failure to provide a correct procedure for venting emergency core cooling systems to ensure continued operability. As a result, 1B core spray operability was not properly evaluated after a large volume of gas was vented from the system.

This finding was greater than minor because it prevented a proper operability evaluation of the 1B core spray system after operators vented a large volume of gas from the system. It adversely affected the procedure quality attribute of the mitigating systems cornerstone. If left uncorrected, the finding could become a more significant safety concern. The finding was of very low safety significance because the failure to address the as-left operability of the 1B core spray system did not result in the actual loss of the 1B core spray safety function.
Inspection Report# : 2003005*(pdf)*

Significance: G Jun 30, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT ADEQUATE CORRECTIVE ACTION FOR A PREVIOUSLY IDENTIFIED EMERGENCY DIESEL GENERATOR PRECONDITIONING CONCERN
The inspectors identified a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI for the licensee's failure to implement adequate corrective action for a previously identified emergency diesel generator preconditioning concern. The inadequate corrective action contributed to the preconditioning of two emergency diesel generators and prevented proper preconditioning evaluations.

This finding was greater than minor because it contributed to the preconditioning of two emergency diesel generators and prevented a proper preconditioning evaluation. It adversely affected the procedure quality attribute of the mitigating systems cornerstone. If left uncorrected, the finding could become a more significant safety concern. The

finding was of very low safety significance because it did not result in the actual loss of the emergency diesel generator safety function.
Inspection Report# : 2003005*(pdf)*

Significance: G Mar 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MAINTAIN ADEQUATE SPATIAL SEPARATION OF FLAMMABLES FROM THE DIESEL DRIVEN FIRE PUMPS
The inspectors identified a finding involving a Non-Cited Violation for the licensee's failure to maintain 80 feet of spatial separation between a flammable liquids storage cabinet and the furthest diesel fire pump as required by the Quad Cities Operating Licenses and the Fire Protection Program.

The inspectors concluded that this finding was more than minor because the improper cabinet placement and potential storage of a large amount of flammable materials could lead to a fire which could engulf both fire pumps and cause a loss of the non safety-related service water system and the circulating water system. In addition, this finding was associated with the initiating events cornerstone attribute of protecting the plant against external factors and impacted the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions. The finding was of very low safety significance based on the determination that the actual stored flammable liquids, if inadvertently ignited, would not produce sufficient radiative heat flux to damage both fire pumps at the same time.
Inspection Report# : 2003003*(pdf)*

Significance: G Mar 31, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY LATCH FUSE DRAWERS CAUSING AUTOMATIC INITIATION AND LOADING OF EMERGENCY DIESEL GENERATOR
The inspectors identified a finding involving a Non-Cited Violation on Unit 1 for the failure to properly latch the potential transformer fuse drawers for bus 14 and bus 14-1. This resulted in the fuse drawers dropping open and causing the automatic initiation and loading of the emergency diesel generator due to loss of voltage on the emergency bus. Multiple operations department procedures failed to contain instructions to ensure that the potential transformer fuse drawers for the safety-related busses were properly latched. Unit 1 was unknowingly vulnerable to a loss of voltage condition on two safety-related busses during a seismic event.

The finding was more than minor because it was associated with attributes in both the mitigating systems and initiating events cornerstones and also affected each cornerstone objective. For example, a seismic event could cause both drawers to open resulting in a loss of both busses; a scram, and the loss of two residual heat removal service water pumps. The finding was of very low safety significance primarily due to the low initiating event frequency associated with a seismically induced loss of offsite power.
Inspection Report# : 2003003*(pdf)*

Barrier Integrity

Significance: G 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

Miscellaneous

Last modified : March 02, 2004