

Brunswick 1

3Q/2006 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2006

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Follow Procedure Resulting in Condensate System Transient

A self-revealing non-cited violation of Technical Specification 5.4.1, Administrative Controls (Procedures), was identified for failure to properly implement requirements for procedure adherence when rinsing a Unit 1 condensate deep bed demineralizer. Procedure steps for starting a third condensate pump when rinsing a condensate deep bed demineralizer at high power were marked N/A (not applicable) and the procedure was performed prior to obtaining supervisor concurrence. As a result, performance of the rinsing procedure on January 4, 2006, resulted in a reduction in condensate system pressure and a plant transient which challenged control room operators. The licensee entered the issue into the corrective action program for resolution. Operators took immediate actions by entering the appropriate abnormal operating procedure and stabilized the plant. In addition, a root cause investigation was performed and the responsible individuals were coached relative to their performance.

This finding is greater than minor because it is associated with system configuration control and affected the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during power operations. Although the event contributed to the likelihood of a reactor trip, the finding is of very low safety significance because it did not contribute to the likelihood that mitigation equipment or functions would be unavailable. The cause of this finding is inadequate use of a condensate system procedure and inadequate adherence to an administrative procedure, and is therefore, identified as a performance aspect of the Human Performance cross-cutting area. (Section 4OA2.2).

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Dec 31, 2005

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Clearance Order Causes Condensate System Transient

Green. A self-revealing non-cited violation of Technical Specification 5.4.1, Administrative Controls (Procedures), was identified for failure to establish an adequate clearance order procedure in preparation for maintenance activities on the Unit 1 B condensate booster pump minimum flow valve. Implementation of this inadequate clearance order procedure on November 9, 2005 resulted in a reduction in condensate system pressure and a plant transient which challenged control room operators. The licensee entered the issue into the corrective action program for resolution. Immediate actions were the operators entered the appropriate abnormal operating procedure and stabilized the plant. In addition, a root cause investigation was performed and the responsible individuals were coached relative to their performance.

This finding is greater than minor because it is associated with system configuration control and affected the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during power operations. Although the event contributed to the likelihood of a reactor trip, the finding is of very low safety significance because it did not contribute to the likelihood that mitigation equipment or functions would be unavailable. The cause of this finding is identified as a performance aspect of the human performance cross-cutting area, in that personnel taking shortcuts to expedite the writing of the clearance order procedure contributed to the transient.

Inspection Report# : [2005005\(pdf\)](#)

Mitigating Systems

Significance:  Mar 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Appropriately Evaluate Core Spray Header Piping Flaw

An NRC-identified non-cited violation of Technical Specification 3.5.1, Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling System, was identified for failure to appropriately evaluate and take corrective measures for a pre-existing flaw on a Unit 1 core spray loop B pipe weld (in-vessel) in accordance with Boiling Water Reactor Vessel and Internals Project guidelines which was committed to by the licensee. This resulted in the Unit 1 core spray loop B subsystem being inoperable for an indeterminate amount of time. The licensee entered the issue into the corrective action program, reevaluated the flaw and implemented a permanent repair of the pipe weld.

This finding is greater than minor because it is associated with core spray system equipment performance and affected the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. This finding was determined to be of very low safety significance based on core spray loop B being conservatively assumed to be capable of mitigating all analyzed pipe breaks during the time period assumed, except the large break LOCA core damage sequence (Section 1R22).

Inspection Report# : [2006002\(pdf\)](#)

Significance:  Nov 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedural Controls for RHR System Venting

Green. A Green NRC identified, non-cited violation (NCV) of Technical Specification (TS) 5.4.1.a was identified for failure to establish written procedures to direct venting of the residual heat removal (RHR) system in response to increasing system pressure. Instead, system venting was directed through informal communications, such as e-mails and telephone calls. The licensee entered the deficiency associated with lack of procedural guidance into their Action Request Program for resolution.

This finding is more than minor because it affected the ability of the licensee to properly control the venting of the RHR system and was associated with the Mitigating Systems Cornerstone and the respective attribute of procedure quality. The finding is of very low safety significance because there was no actual loss of safety function. A contributing cause of the finding is related to the cross-cutting element of problem identification and resolution.

Inspection Report# : [2005007\(pdf\)](#)

Barrier Integrity

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Condenser Air Removal and Off-gas Recombiner System Procedure

An NRC-identified non-cited violation of Technical Specification 5.4.1, Administrative Controls (Procedures), was identified for the failure to adhere to procedure requirements when operators injected service air into the steam jet air ejectors and the offgas flowpath. The initial condition that the service air injection was needed for continued hydrogen water chemistry operation was not met. As a result of this procedure adherence deficiency, the licensee had reduced the ability to monitor for actual fuel cladding damage. The licensee entered the issue into the corrective action program, secured air injection to the steam jet air ejector, and deleted the instructions which allowed service air injection to the steam jet air ejectors.

This finding is more than minor because it involved adherence to procedures associated with fuel cladding integrity and affected the Barrier Integrity Cornerstone to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding was determined to be of very low safety significance because it was only associated with the ability to monitor fuel barrier integrity. This finding was related to the cross-cutting area of Human Performance because the cause was due to failure to adhere to procedures.

Inspection Report# : [2006004\(pdf\)](#)

Emergency Preparedness

Significance:  Sep 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Potential Reduction in Effectiveness of Emergency Plan

An NRC-identified non-cited violation of 10 CFR 50.54(q) was identified for the failure to determine if the introduction or the increasing of air into the offgas flowpath for the purpose of reducing steam jet air ejector radiation monitor readings would reduce the effectiveness of the site Emergency Plan. The deficiency associated with this finding is that a 50.54(q) review was not performed to determine if there would be a potential reduction in the effectiveness of the site Emergency Plan because emergency action level classifications for both an Unusual Event and an Alert are based on radiation level readings from the steam jet air ejector radiation monitor. The procedure change which allowed the introduction of air into the offgas flowpath, and the implementation of the procedure on June 1, 2006 did not have associated 50.54(q) reviews.

The finding was greater than minor because it is associated with the Emergency Preparedness Cornerstone and potentially affected the program elements of 10 CFR 50.54(b)(4). The finding was of very low safety significance because the licensee performed an analysis of the potential affects of the range of airflow rates on the radiation monitor readings which demonstrated that the emergency action level values would not have been detrimentally affected.

Inspection Report# : [2006004\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Significance: N/A Dec 16, 2005

Identified By: NRC

Item Type: FIN Finding

PROBLEM IDENTIFICATION AND RESOLUTION

The inspectors determined that the licensee was effective in identifying problems and entering them into the Corrective Action Program (CAP). One example was noted where new action requests/nuclear condition reports (ARs/NCRs) were not

written for current failures, instead the issue was tracked with an old NCR. Problem evaluation and corrective action implementation were generally effective with deficiencies noted in corrective action timeliness and in the quality and timeliness of investigations. The inspectors noted several examples where significant adverse conditions had recurred, indicating that all root/contributing causes had not been determined or that corrective actions had not provided timely resolution. Significant investigations were ongoing and recent CAP process changes were initiated by management to address these issues. The inspectors did not identify any new CAP problems not already being addressed by the licensee. The inspectors determined that the site staff felt free to raise issues and that management wanted issues placed into the CAP for resolution. Some engineering department staffing and CAP workload distribution concerns were noted in the employee concerns program (ECP). The ECP coordinator and management were already addressing the underlying issues related to these concerns and their potential affect on plant equipment. The inspectors did not identify any reluctance to report safety concerns.

Inspection Report# : [2005011\(pdf\)](#)

Last modified : December 21, 2006