## Brunswick 2 4Q/2006 Plant Inspection Findings

### **Initiating Events**

#### **Mitigating Systems**

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

#### Failure to Periodically Calibrate Service Water Pump Discharge Pressure Gages

An NRC-identified non-cited violation of 10CFR50, Appendix B, Criteria XII, Control of Measuring and Test Equipment, was identified for failing to periodically calibrate the Units 1 and 2 service water pump discharge pressure gages. As a result, the quality of the test data collected from the gages, used to satisfy ASME Section XI in-service test requirements and performed to demonstrate pump operability, was compromised. This issue was entered into the corrective action program for resolution.

The finding was more than minor because it was associated with service water pump equipment performance and affected the Mitigating System Cornerstone objective to ensure the capability of system that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected the finding could potentially become a more significant safety concern because the issue affected all the site's service water pumps and degraded pump performance could go undetected. The finding was determined to be of very low safety significance (Green) because it did not result in the loss of safety function of a service water pump (Section 1R22.2).

Inspection Report# : 2006005 (pdf)

Significance: N/A Jul 05, 2006

Identified By: NRC Item Type: FIN Finding

#### 95001 Supplemental Inspection

This supplemental inspection was conducted in accordance with Inspection Procedure 95001, to assess the licensee's evaluation associated with a Unit 2 performance indicator in the initiating events cornerstone. The Unplanned Power Changes per 7000 Critical Hours Performance Indicator crossed the threshold from Green (very-low risk significance) to White (low-to-moderate risk significance) in the fourth quarter of 2005. Specifically, the licensee experienced two unplanned power changes in the second quarter of 2005, one unplanned power change in the third quarter of 2005, and four unplanned power changes in the fourth quarter of 2005. The first unplanned power change, which occurred on April 20, was the result of a downpower initiated to remove the 2B reactor feed pump from service following an impeller failure which occurred on April 19. The second unplanned power change, which occurred on June 25, was the result of a downpower initiated to stabilize condenser vacuum following the trip of the 2B circulating water pump. The third unplanned power change, which occurred on August 5, was the result of placing Unit 2 in cold shutdown due to declaring all site emergency diesel generators (EDGs) inoperable. The fourth, fifth and sixth unplanned power changes, which occurred on November 8, 14, and 25, respectively, were the result of downpowers initiated to effect repairs on condenser tube leaks. The seventh unplanned power change, which occurred on December 13, was the result of a downpower caused by tripping of the 2B recirculation pump.

The licensee's problem identification, root cause and extent-of-condition evaluations, and corrective actions for the seven downpowers were adequate.

Inspection Report# : 2006007 (pdf)

Significance: Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Engineering Change Procedure Resulting in Inoperable Reactor Core Isolation Cooling System An NRC-identified non-cited violation was identified for failure to meet Technical Specification (TS) 5.4.1, Procedures. Specifically, the temporary modification process was not followed when implementing a temporary change to the Unit 2 reactor core isolation cooling keepfill system. As a result, appropriate reviews of the impact on reactor core isolation cooling system operability were not performed. This resulted in the Unit 2 reactor core isolation cooling system being inoperable due to the potential of voiding the reactor core isolation cooling pump discharge piping during certain scenarios.

This finding is more than minor because it is associated with operating equipment lineup and affected the Mitigating System Cornerstone objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance (Green) because it did not represent an actual loss of safety function for greater than the TS allowed outage time. The inspectors determined that the cause of this finding is a performance aspect of the human performance cross-cutting area, in that the cause was due to personnel failing to follow the temporary modification process (Section 1R04).

Inspection Report# :  $\underline{2006003}(pdf)$ 

#### **Barrier Integrity**

#### **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

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