

# Summer 1Q/2009 Plant Inspection Findings

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## Initiating Events

**Significance:**  Jun 30, 2008

Identified By: NRC

Item Type: FIN Finding

### **Untimely Corrective Actions To Resolve Feedwater Regulating Valve Malfunction Resulted In Reactor Trip**

A Green self-revealing finding was identified for the failure to implement effective and timely corrective actions to prevent failure of a main feedwater regulating valve IFV000498 that resulted in a reactor trip. This valve failed due to previously identified pneumatic positioner pilot valve malfunction caused by either pilot valve stem fretting and/or foreign material intrusion from various internal air supply sources. All three loop feedwater regulating valve positioners and air supply components subject to potential sources of contamination were replaced prior to startup from the reactor trip. During Refueling Outage 17, modifications were completed to reduce vibration induced wear of control air system components and improve air quality to the positioners until the current positioner models can be replaced with a new design. This finding was entered into the licensee's corrective action program as Condition Report 08-00292.

This finding is greater than minor because it is associated with the Initiating Event Cornerstone attribute of equipment performance, and adversely affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during at-power operations. The finding was evaluated using Phase 1 of the At-Power SDP, and was determined to be of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigating equipment or functions were not available. The cause of this finding was directly related to the aspect of appropriate and timely corrective action in the cross-cutting area of Problem Identification and Resolution (Corrective Action component) because actions to address previously identified feedwater regulating valve positioner pilot valve fretting and foreign material intrusion were not implemented in a timely manner (P.1.d).

Inspection Report# : [2008003](#) (*pdf*)

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## Mitigating Systems

**Significance:**  Dec 10, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **Inadequate Motor Starting Analysis**

Green. The inspectors identified a NCV of 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, the licensee failed to verify the adequacy of the degraded voltage relay voltage setpoints by performing motor starting analyses based on voltage afforded by the relays. The failure resulted in several safety related motors having less margin than originally calculated. The licensee assessed the calculations to ensure the motors would start and entered the issue into their corrective action program to address this concern.

This finding is more than minor because it affects the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and operability of the safety related motors to perform their intended safety function during a design basis event and the cornerstone attribute of Design Control, i.e. initial design. The inspectors determined that the finding was of very low safety significance because the deficiency did not result in any motor being inoperable, after additional licensee analysis showed that the motors would have adequate voltage to start based on actual field setpoints. This finding was reviewed for cross-cutting aspects and none were identified since the performance

deficiency is not indicative of current licensee performance.

Inspection Report# : [2008007](#) (*pdf*)

**G**

**Significance:** Dec 10, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**EDG Exceeded Technical Specification Allowable Outage Time**

This finding is more than minor because exceeding a Technical Specification Limiting Condition of Operation affects the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and operability of the EDGs to perform their intended safety function during a design basis event, and the cornerstone attribute of Equipment Performance:, i.e. availability. Following a Phase 3 analysis under the Significance Determination Process (SDP) the finding was determined to be of very low safety significance. The cause of this finding was related to the cross-cutting area of problem identification and resolution, specifically with respect to corrective action, because the licensee did not thoroughly evaluate the anomalous operation of the Parr generator voltage regulators and the reverse power relay in November 2006, such that the resolution adequately addressed causes and extent of condition. (P.1.c)

Inspection Report# : [2008007](#) (*pdf*)

**G**

**Significance:** Dec 10, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Follow Procedure for Analyzing the Impact of Updated Vendor Technical Manual**

This finding is more than minor because it affects the Mitigating Systems Cornerstone objective to ensure the reliability, availability, and capability of systems that respond to initiating events and is associated with the attribute of procedure quality, in that inconsistencies were identified in Procedure EMP-135.004, Reactor Trip Breaker Testing, Revision 2, where the licensee routinely failed to evaluate differences between vendor recommendations and the procedure. The finding was determined to be of very low safety significance, because there was no loss of the reactor trip breaker safety function to open on a reactor trip signal. The cause of this finding was related to the cross-cutting area of operating experience, specifically with respect to including vendor recommendations in procedures to support plant safety. (P.2.b)

Inspection Report# : [2008007](#) (*pdf*)

**G**

**Significance:** Dec 10, 2008

Identified By: NRC

Item Type: FIN Finding

**Failure to Maintain a Vendor Interface Program**

This finding is more than minor because it affects the Mitigating Systems Cornerstone objective to ensure the reliability, availability, and capability of systems that respond to initiating events and is associated with the attribute of equipment performance, in that the data in the vendor technical information files necessary to ensure reliable equipment operation was obsolete.

The finding was determined to be of very low safety significance because there was no loss of the reactor trip breaker safety function to open on a reactor trip signal. There was no cross-cutting aspect identified with this finding.

Inspection Report# : [2008007](#) (*pdf*)

**G**

**Significance:** Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Perform ECG Tests During the Biennial Medical Exam for Licensed Operators**

On August 11, 2008, while reviewing licensed operator medical records, the inspectors identified two operators who had not received an ECG test as part of their biennial medical exam. The inspectors then reviewed additional licensed operator medical records and identified a third operator who had not received an ECG test. When the inspectors

notified the licensee about the missing ECG tests, the licensee conducted an extent of condition review and verified that licensed operators for the oncoming shift had received a complete biennial medical exam. Additionally, the licensee scheduled the operators who had not received the full physical examination an appointment to receive the ECG test by the contract physician.

Inspection Report# : [2008004](#) (*pdf*)

**Significance:**  Jun 27, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **B.5.b Phase 2 and 3 Mitigating Strategy**

This finding, affecting the Mitigating Systems Cornerstone, is related to mitigative measures developed to cope with losses of large areas of the plant; in response to Section B.5.b. of the February 25, 2002, Interim Compensatory Measures (ICM) Order (EA-02-026) and related NRC guidance. This finding has been designated as "Official Use Only - Security-Related Information;" therefore, the details of this finding are being withheld from public disclosure. This finding has a cross-cutting aspect in the area of Human Performance (H.2.d). See inspection report for more details.

Inspection Report# : [2008008](#) (*pdf*)

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## **Barrier Integrity**

**Significance:**  Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Effectively Monitor the Performance of the Control Room Normal and Emergency Air Handling System per the Maintenance Rule**

- Green. The inspectors identified an NCV of 10 CFR 50.65 (Maintenance Rule) with two examples for failing to demonstrate that the performance of the control room normal and emergency air handling (control room ventilation) system was being effectively controlled through the performance of appropriate preventive maintenance. Specifically, the licensee failed to: 1) properly categorize a control room ventilation system pressure boundary breach due to maintenance activities as a maintenance preventable function failure (MPFF) against the 'B' train, and 2) properly consider the unavailability time incurred by the functional failure against the 'A' train. These failures to adequately assess the Maintenance Rule (MR) implications of a control room ventilation system functional failure resulted in the system not being placed under the goal setting monitoring requirements of 10 CFR 50.65(a)(1). The licensee entered these issues into their corrective action program as CR-08-00944, CR-09-00107, and CR-09-01056, and placed the control room ventilation system in MR (a)(1) goal setting status.

This finding is more than minor because it is similar to the non-minor maintenance rule example 7.b. provided in Manual Chapter 0612, Appendix E, "Examples of Minor Issues," which states that violations of Paragraph 10 CFR 50.65(a)(2), failure to demonstrate effective control of performance or condition and not putting the affected structures, systems, and components (SSCs) in (a)(1), are not minor because they necessarily involve degraded SSC performance or condition. This finding was determined to be of very low safety significance (Green) because the incorrect functional failure and unavailability hour assessments did not, by themselves, result in an actual degradation of the barrier function provided for the control room or additional operability or functionality concerns. The finding directly involved the cross-cutting area of Human Performance, component of Resources, and aspect of Personnel Training and Qualifications, in that, the licensee engineering staff did not fully understand MR evaluation requirements for systems with common components or the counting of unavailability hours for systems that are out of service for reasons other than a formal tag-out program (H.2.b).

Inspection Report# : [2009002](#) (*pdf*)

**Significance:**  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Maintain the Control Room Pressure Boundary Operable and Complete the Required TS Actions**

A Green non-cited violation of Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.6, "Control Room Normal and Emergency Air Handling System," was identified by the inspectors for failure to maintain the control room boundary intact and operable, and complete the required TS actions. Specifically, the control room pressure boundary (CRPB) was discovered to be inoperable for approximately 17 days due to a breach in non-safety related air handler ductwork that defined a portion of the Control Room (CR) envelope. The licensee completed repairs to the non-safety related air handler ductwork, restored compliance with the TS, and documented this issue in their corrective action program as CR-08-00944 and CR-08-00972

Inspection Report# : [2008004](#) (*pdf*)

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## **Emergency Preparedness**

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## **Occupational Radiation Safety**

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## **Public Radiation Safety**

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## **Physical Protection**

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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## **Miscellaneous**

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