

# Monticello

## 4Q/2008 Plant Inspection Findings

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### Initiating Events

**Significance:**  Nov 07, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

#### **FAILURE TO IDENTIFY A CONDITION ADVERSE TO QUALITY.**

The NRC identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to identify and correct a Condition Adverse to Quality (CAQ). Specifically, the licensee failed to capture in the CAP a concern with the potential corrosion of magnesium motor rotor fan blades associated with safety-related motor operated valves (MOV's). The MOV's were associated with the reactor recirculation and residual heat removal (specifically the low pressure core injection mode) systems. The concern was identified during an internal licensee review of OE. The failure to capture this item in the CAP resulted in the licensee not being able to utilize the CAP process to ensure that the CAQ had been properly evaluated and corrected. This finding has an associated cross cutting aspect associated in the area of PI&R, Corrective Action Program for the failure to properly evaluate the potential impact of the CAQ on the affected, safety related MOV's. [P.1(C)]

The finding is more than minor because it directly affected the Human Performance attribute of the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions while at power. The finding also directly affected the Equipment Performance attribute of the Mitigating System Cornerstone objective of ensuring the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The finding is of very low safety significance, because the issue only involved the potential degradation, but not the actual loss of a plant component (i.e., there was no actual initiating event nor loss of a mitigating system).

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

**Significance:**  Nov 03, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **INADEQUATE PROCEDURAL GUIDANCE FOR CONTROL ROD DRIVE SYSTEM VALVE OPERATION.**

A self-revealed finding of very low safety significance, associated with a NCV of 10 CFR 50, Appendix B, Criterion V, was identified for inadequate procedural guidance after operator response to the reactor scram and vessel isolation was complicated by rising water level. Specifically, the operating instructions for the control rod drive system were inadequate in that procedures did not provide direction to control the addition of water to the reactor pressure vessel when the operators determined it was necessary to restore level to the emergency operating procedure specified control band of +9 to +48 inches. Additionally, the inspectors determined that the performance deficiency affected the cross-cutting area of Problem Identification and Resolution, having Corrective Action Program (CAP) components, and involving aspects associated with timely resolution of identified problems when safety concerns are raised under alternative processes (i.e., a procedure change request initiated as a result of a self assessment)(P.1(e)). Operators took action to close the control rod drive valve that was causing water level to rise and used safety relief valve actuations to remove inventory to return water level to the band specified by the emergency procedure.

The finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it impacted the Initiating Events Cornerstone attribute of procedure quality with the objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. The finding was determined to be of very low safety significance because it did not result in an actual impairment of mitigating systems or the reactor coolant system boundary.

Inspection Report# : [2008009](#) (*pdf*)

**G****Significance:** Nov 03, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**FAILURE TO SCOPE INTO THE MAINTENANCE RULE MONITORING PROGRAM THE 34.5KV CABLES.**

The inspectors identified a finding of very low safety significance and NCV of 10 CFR 50.65 (a)(1) for the licensee's failure to establish an effective monitoring and corrective action plan that included the 34.5kV underground feeder cables routed from 2RS to 2R transformer in the scope of a monitoring program that met the requirements of 10 CFR 50.65 (a)(1). The inspectors determined that the preventive maintenance and testing methodology implemented for the 34.5 kV cables was not sufficient to establish the condition of the cables and therefore the exemption of paragraph (a) (2) of 10 CFR 50.65 was not applicable. Additionally, the preventive maintenance and testing methodology implemented for the 34.5 kV cables did not provide the necessary information needed to ensure that the 2R transformer was capable of fulfilling its intended function and therefore the performance goal was not effectively assessed prior to the functional failures of the cables on September 11, 2008. The inspectors determined that the preventive maintenance and testing methodology implemented for the 34.5 kV cables, to identify deteriorating cable insulation conditions prior to failure, was inadequate and therefore the exemption of paragraph (a)(2) of 10 CFR 50.65 was not applicable. Additionally, the finding was determined to be cross-cutting in the area Human Performance, Work Practices, in that supervision and management oversight of work activities did not identify that the periodic maintenance and performance monitoring of the cables did not appropriately support the Maintenance Rule credited function during the periodic evaluations performed for the systems (H.4(c)).

This finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix E, Example 7.d because a failure of the cables did occur resulting in a reactor scram and vessel isolation. In addition, it affected the Initiating Events Cornerstone attribute of equipment performance reliability. Specifically, the failure to establish an effective monitoring and corrective action plan that included the 34.5kV underground feeder cables in the scope of a monitoring program that met the requirements of 10 CFR 50.65 (a)(1) contributed to lack of effective monitoring and early identification of degradation of these cables. The inspectors evaluated the finding in accordance with IMC 0609.04, "Phase 1 - Initial Screening and Characterization of Findings." The 2RS to 2R transformer cable failures that occurred did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. Therefore, the finding screened as having very low safety significance.

Inspection Report# : [2008009](#) (*pdf*)**G****Significance:** Nov 03, 2008

Identified By: NRC

Item Type: FIN Finding

**INADEQUATE MEDIUM VOLTAGE CABLE TESTING PROGRAM.**

The inspectors identified a finding of very low safety significance with no associated violation of regulatory requirements for the licensee's failure to establish and implement an effective test control program that demonstrated that underground 34.5kV medium voltage cables subjected to submersion would perform satisfactorily in service. Specifically, prior to the September 11, 2008, cable failure, the licensee failed to establish and implement an adequate test control program, and failed to ensure that appropriate cable testing was being periodically performed and that test results were trended to identify adverse trends prior to cable failures. In addition, NMC Corporate Directive CD 5.33, "Underground Electrical Cable Management Program," dated April 6, 2006 required, in part, that Monticello Nuclear Generating Plant (MNGP) develop a site underground electrical cable management program to monitor and trend performance of underground electrical cables. The failure to conduct adequate cable testing potentially contributed to the failure of the underground submerged 34.5kV feeder cables routed from 2RS to 2R transformers. Additionally, the inspectors determined that the finding had a cross-cutting aspect in the area of Problem Identification and Resolution. Specifically, the licensee failed to incorporate known relevant internal and external operating experience related to numerous industry concerns and failures of similar underground submerged cables (P.2(a)).

This finding was determined to be more than minor because if left uncorrected the finding could become a more significant safety concern. The finding is of very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. An NCV was not issued because these cables were classified as non-safety related cables.

Inspection Report# : [2008009](#) (pdf)

**Significance:**  Nov 03, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**FAILURE TO CORRECTLY IMPLEMENT THE POST SCRAM CHECKLIST.**

A self-revealed finding of very low safety significance, associated with a NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified following a loss of shutdown cooling on September 20, 2008. Specifically, operators failed to complete the shutdown checklist following the scram on September 11, 2008, and did not close the reference leg fill valve from the control rod drive system. When the control rod drive pump was started on September 20, the reference leg experienced a pressure spike and the resulting full RPS actuation and Group 2 isolation signals resulted in a loss of shutdown cooling. Additionally, the finding was determined to be cross-cutting in the area of Human Performance, Work Practices, in that the licensee failed to ensure supervisory and management oversight of work activities such that nuclear safety is supported. In this instance, operations shift management did not track implementation of the shutdown checklist to ensure completion (H.4(c)).

This finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it impacted the Initiating Events Cornerstone attribute of configuration control with the objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown. Inspectors determined that this finding was of very low safety significance using IMC 0609, "Significance Determination Process," Appendix G, Attachment 3, "Phase 2 Significance Determination Process Template for BWR during Shutdown."

Inspection Report# : [2008009](#) (pdf)

**Significance:**  Sep 30, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

**IMPROPER INSTALLATION OF GROUNDING TRUCKS.**

. A finding of very low safety significance was self-revealed when plant operators attempted to install incorrect components (motor test devices instead of bus grounding trucks) into two 4160 volt breaker cubicles during the implementation of a clearance associated with planned maintenance on the 2R station auxiliary transformer. No violation of NRC requirements was identified. The licensee took immediate corrective actions and entered the issue into their corrective action program. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having work practices components, and involving aspects associated with ensuring supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported. [H.4(c)]

The finding was more than minor because it could reasonably be viewed as a precursor to a significant event. The finding is not suitable for SDP evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance because the repeated attempts to install the wrong components (motor test devices instead of bus ground trucks) into 4160 volt breaker cubicles did not adversely impact the operation of electrical buses 12 and 13, nor did it result in a significant plant transient. Therefore, the finding was considered to be of very low safety significance.

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

**Significance:**  Apr 18, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**UNCONTROLLED TRANSIENT COMBUSTIBLES.**

A finding of very low safety significance and associated NCV of license condition 2.C.4 was identified by the inspectors for the presence of uncontrolled transient combustible material stored in the turbine building. Specifically, in response to an inspector's question, the licensee identified six buckets of resin (72 pounds) in the turbine building's Fire Zone 14C. The six buckets of resin exceeded the licensee's fire protection program's limit (i.e., 280,000 BTUs, the equivalent of two gallons of general purpose solvent) for transient combustible material. In addition, the six

buckets of resin were stored in the fire zone without an approved combustible source use permit (CSUP) and the additional fire load had not been included in the licensee's fire hazards analysis. On April 4, 2008, the licensee entered this finding into their corrective action program (CAP) as CAP 01133361, "Resin Stored in Turbine Building without Permit." The licensee's immediate corrective action was to perform an engineering analysis for Fire Zone 14C and issue a permanent combustible loading change request. The change request allowed for the permanent fire load storage of an additional 200 pounds of resin.

The finding was determined to be more than minor because the finding was similar to IMC 0612, Appendix E, Example 4.k, since the uncontrolled transient combustible materials were not reflected in the fire hazards analysis and the licensee failed to complete the fire protection program's required engineering evaluation. The finding was associated with the protection against external factors attribute of the initiating events cornerstone and adversely affected the cornerstone's objective of limiting the likelihood of events that upset plant stability. Specifically, the licensee failed to control transient combustible material, such that, the transient fire loading in Fire Zone 14C exceeded the fire hazards analysis's limit (i.e., not to exceed the equivalent of two gallons of general purpose solvent) and the required fire protection program's engineering evaluation was not performed. In addition, no CSUP was issued for the uncontrolled transient combustible material. A low degradation rating was assigned to the finding since the uncontrolled transient combustible material was in approved manufacturer's containers and was in a fire zone with low fire loading. Therefore, the finding was of very low safety significance. This finding has a cross cutting aspect in the area of human performance and within the cross cutting component of work practices because the licensee did not effectively communicate expectations regarding procedural compliance. Specifically, the licensee's failure to control transient combustible material was contrary to the licensee's fire protection program since the licensee failed to effectively communicate expectations regarding procedural compliance with the transient combustible process. [H.4 (b)]

Inspection Report# : [2008006](#) (*pdf*)

**Significance:**  Mar 31, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **UNPLANNED LOSS OF 345kV POWER SOURCE.**

A finding of very low safety significance and associated non-cited violation (NCV) of Technical Specification (TS) 5.4 was self-revealed for failing to establish procedures to adequately control work activities in the owner-controlled switchyard. Due to the lack of procedural guidance for review and concurrence of switchyard activities, intrusive maintenance activities were conducted within a protective relay cabinet resulting in the unplanned isolation of a risk-significant offsite power source. The licensee took immediate corrective actions and entered the issue into their corrective action program. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having decision-making components, and involving aspects associated with formally defining the authority and roles for decisions affecting nuclear safety, implementing these roles and authorities as designed, and obtaining interdisciplinary input and reviews on risk-significant decisions. [H.1(a)]

The inspectors determined that the finding was more than minor because it involved the configuration control attribute of the Initiating Events Cornerstone objective of limiting the likelihood of events that upset plant stability during power operations. The finding was of very low safety significance (Green) because it was not: (1) associated with the likelihood of initiating a loss of coolant accident; (2) did not contribute to both the likelihood of a scram and unavailability of mitigating systems; and (3) did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : [2008002](#) (*pdf*)

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## **Mitigating Systems**

**Significance:**  Nov 07, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

## **FAILURE TO ADEQUATELY IDENTIFY A CONDITION ADVERSE TO QUALITY AND IDENTIFY CORRECTIVE ACTIONS TO PREVENT RECURRENCE.**

The NRC identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for the failure to identify a Condition Adverse to Quality (CAQ). Specifically, the licensee did not identify a maintenance preventable functional failure (MPFF) associated with the HPCI system. The MPFF was associated with the in-service test (IST) failure of the HPCI accumulator check valve (AI-611) during the 2007 refueling outage. The failure was caused by debris that was lodged in the valve seat. Of particular significance, was the fact that the issue was the subject of three licensee initiated action requests (ARs) between March 2007 to February 2008, regarding the test failure, the failure to evaluate past-operability and the failure to evaluate the maintenance rule aspects, none of which properly evaluated the issue. The licensee identified the MPFF after an NRC inspector questioned the adequacy of the previous evaluations, in particular, why the source of the debris had never been evaluated. This finding also has an associated cross-cutting aspect associated in the area of PI&R, Corrective Action Program for the failure to properly evaluate the HPCI accumulator check valve IST failure. [P.1(C)]

The finding is more than minor because it affects the Equipment Performance attribute of the Mitigating Systems Cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance, because the HPCI system remained operable and available.

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

**Significance:**  Nov 03, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **INADEQUATE/IMPROPER MAINTENANCE ON HPCI SV-1 VALVE.**

A self-revealed finding of very low safety significance, associated with a NCV of TS 5.4.1, was identified following a failure of the high pressure coolant injection (HPCI) System to trip when reactor pressure vessel (RPV) water level reached the trip setpoint of +48 inches. Investigation revealed that the normally de-energized HPCI trip solenoid valve, SV-1, failed to trip promptly when actuated and was degraded due to improper reassembly of the solenoid valve after refurbishment in 1996 and degraded elastomers. Follow-up investigation revealed that although a 2003 engineering evaluation recommended a periodic replacement of the elastomers in this valve as an enhancement action, no preventive maintenance activity was created or performed prior to the failure even though the recommended interval had been exceeded since the last overhaul. Additionally, the finding was determined to be cross-cutting in the area of Human Performance, Work Practices, in that supervision and management oversight of work activities did not identify that the preventive maintenance recommendation had not been resolved since 2003 (H.4(c)).

This finding was determined to be more than minor in accordance with IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening," because it impacted the Mitigating Systems Cornerstone attribute of equipment performance with the objective of ensuring the availability, reliability and capability of systems to prevent undesirable consequences. Inspectors determined that this finding was of very low safety significance after completing a Phase 1 evaluation of the Mitigating System Cornerstone in accordance with IMC 0609, Attachment 4, "Initial Screening and Characterization of Findings" and answering all questions "No" in the Table 4a worksheet.

Inspection Report# : [2008009](#) (*pdf*)

**Significance:**  Sep 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **INADEQUATE CORRECTIVE ACTIONS FOLLOWING REPETITIVE FAILURE OF LPCI RECIRCULATION RISER DIFFERENTIAL PRESSURE INSTRUMENT.**

A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was self-revealed for failing to appropriately correct a known condition adverse-to-quality associated with a low pressure coolant injection (LPCI) recirculation riser differential pressure instrument. Due to the lack of appropriate corrective action to replace the 'D' channel instrument microswitch prior to an anticipated failure, the instrument was found inoperable during a quarterly Technical Specification (TS) surveillance test. The licensee took immediate corrective actions and entered the issue into their corrective action program. The inspectors determined that

the performance deficiency affected the cross-cutting area of Problem Identification and Resolution, having corrective action program components, and involving aspects associated with taking appropriate corrective actions to address safety issues. [P.1(d)]

The inspectors determined that the finding was more than minor because it involved the equipment performance attribute of the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors applied IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings" to this finding. Under Column 2 of the Table 4a worksheet, the inspectors answered: "No" to Question 1 related to design or qualification deficiencies; "No" to Questions 2, 3 and 4 related to loss of train or system safety functions; and "No" to Question 5 related to seismic, flooding and severe weather. Therefore, the finding was considered to be of very low safety significance.

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

**Significance:**  Apr 18, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**This is a security Related Finding - see inspection report for details.**

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 - documentation, procedures, and component labeling. See inspection report for more details.

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

**Significance:**  Apr 18, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**SHUTDOWN PANEL REQUIREMENTS REMOVED FROM IMPROVED TECHNICAL SPECIFICATIONS.**

A finding of very low safety significance and associated NCV of license condition 2.C.4 was identified by the inspectors for the removal of the alternative shutdown system (ASDS) panel's administrative control requirements from the Improved Technical Specifications (ITS) without ensuring those requirements were maintained within the licensee's fire protection program. Specifically, since October 30, 2006, when the licensee implemented ITS, the compensatory measures required to ensure safe shutdown (SSD) capability while the ASDS panel was taken out-of-service or inoperable were deleted and this constituted a change to licensee's fire protection program. The licensee's fire protection program relied upon the ASDS panel's administrative controls contained in the CTS ensured that one train of SSD equipment and/or systems was free of fire damage and provided appropriate interim compensatory measures when the ASDS panel was taken out of service or was inoperable. As a result, the licensee entered this finding into their corrective action program as CAP 01134601, "Technical Specification Bases 3.3.3.2 Is Misleading," dated April 15, 2008, and CAP 01134747, "NRC Questioned Lack of Compensatory Measures When a Component Controlled from the ASDS Is Removed from Service," dated April 16, 2008. The licensee's immediate corrective action was to begin investigating changes to the administrative controls for the ASDS panel governing SSD.

The finding was determined to be more than minor because if left uncorrected, the finding would become a more significant safety concern. Specifically, the licensee's failure to maintain the ASDS panel's administrative control requirements within the licensee's fire protection program would adversely affect the ability to achieve and maintain SSD from outside the control room in case of a fire in the control room or the cable spreading room. The inspectors concluded this finding was associated with the protection against external factors attribute of the mitigating systems cornerstone and adversely affected the cornerstone's objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). A low degradation rating was assigned to the finding since the finding's deficiencies would in all probability be compensated by operator experience/familiarity. In addition, the availability and reliability of the manual (i.e., control room) and automatic suppression (i.e., cable spreading room) systems; and plant records that stated the ASDS panel had not been out of

service for more than 24 hours at a time since the implementation of ITS were additional reasons for the assigned rating. Therefore, the finding was of very low safety significance. This finding has a cross cutting aspect in the area of human performance and within the cross cutting component of resources because the licensee did not ensure that personnel and/or other resources were available and adequate to assure nuclear safety. Specifically, the licensee failed to ensure that the necessary interdisciplinary reviews and/or inputs needed for the up to date design documentation reviews occurred when deleting and/or changing the ASDS panel's administrative control requirements. [H.2(c)]  
Inspection Report# : [2008006](#) (pdf)

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## Barrier Integrity

**Significance:**  Jun 30, 2008

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **LICENSEE INADVERTENTLY ACTUATED AND RESET THE STANDBY GAS TREATMENT SYSTEM WHILE CONDUCTING ROUTINE CONTROL ROOM PANEL LAMP CHECKS.**

A finding of very low safety significance and NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed when the licensee failed to operate safety significant equipment in accordance with approved operating procedures. Specifically, during the conduct of routine control room panel lamp checks, the operator inadvertently actuated the standby gas treatment system, and then improperly reset the actuation signal. The inspectors determined that the performance deficiency affected the crosscutting area of Human Performance, having decision making components, and involving aspects associated with licensed operators making safety significant decisions using a systematic process to ensure safety is maintained. [H.1(a)]

The inspectors determined that the finding was more than minor because it could reasonably be viewed as a precursor to a more significant event. The finding was determined to be of very low safety significance (Green) because it only represented a degradation of the radiological barrier function provided for the reactor building and standby gas treatment system.

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

**Significance:**  Apr 18, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **This is a security Related Finding - see inspection report for details.**

This finding, affecting the Barrier Integrity 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 - documentation, procedures, and component labeling. See inspection report for more details.

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

**Significance:**  Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

### **IMPROPER PROCEDURE IMPLEMENTATION RESULTS IN UNEVALUATED PRECONDITIONING OF MSIV'S.**

A finding of very low safety significance and NCV of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" was identified by the inspectors for the failure to accomplish inservice TS surveillance testing in accordance with documented instructions. Specifically, an evaluation was not performed to demonstrate the acceptability of stroking and performing maintenance activities on main steam isolation valves (MSIVs) prior to stroke time testing during shutdown for the March-April 2007 Refueling Outage (RFO) 23. The licensee reviewed as-

left test data to support current operability of the MSIVs and entered the issue into their corrective action program. The inspectors determined that the performance deficiency affected the cross cutting area of Human Performance, having work control components, and involving aspects associated with appropriately coordinating work activities by incorporating actions to address plant conditions that affect work activities. [H.3(b)]

The inspectors determined that the finding was more than minor because it involved the containment barrier performance attribute of the Barrier Integrity Cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The finding was of very low safety significance (Green) because it did not represent an actual open pathway in the physical integrity of reactor containment.

Inspection Report# : [2008002](#) (*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

**Significance:** N/A Nov 07, 2008

Identified By: NRC

Item Type: FIN Finding

### **2008 Biennial PI&R Inspection Summary**

The licensee was effective at identifying problems and incorporating them into the corrective action program (CAP). In general, issues were appropriately prioritized, evaluated, and corrected. Licensee audits and self-assessments were generally thorough, probing, and made good use of outside resources to maintain independence. Operating Experience (OE) was appropriately screened and disseminated and was considered as a potential precursor during cause evaluations. Plant staff was aware of the importance of having a strong safety conscious work environment (SCWE) and expressed a willingness to raise safety issues. No one interviewed had experienced retaliation for safety issues raised, or knew of anyone who had failed to raise issues. All persons interviewed had an adequate knowledge of the CAP and the employee concerns program (ECP).

However, the inspectors identified several concerns that were similar to those noted during prior PI&R inspections. The licensee had a continued lack of sensitivity to internal CAP performance indicators, in that some of these indicators, which showed potential deficiencies in the program, had not been evaluated. There were also continued concerns with the proper documentation of issues. Specifically, the inspectors found several examples where the

documentation of an issue was insufficient to verify whether it had been appropriately evaluated or resolved. There were also continued problems with the handling of issues identified through the licensee's Differing Professional Opinion (DPO) process. The inspectors also observed that the station had not taken appropriate corrective action to address an adverse trend in Human Performance.

There were two Green findings identified during this inspection. One finding was for failing to properly identify and evaluate a Maintenance Rule Functional Failure associated with the High Pressure Coolant Injection (HPCI) system. The second finding was for failing to capture a Conditions Adverse to Quality (CAQ) in the CAP, during a licensee review of OE. Both findings also had associated NCVs.

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

**Significance: SL-IV** Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

**IMPROPER OVERTIME RESTRICTION DEVIATIONS.**

A finding of very low safety significance and NCV of TS 5.2.2.d, was identified by the inspectors for the failure to properly implement procedures for controlling plant staff work hours for personnel performing safety related activities. Specifically, several approved overtime deviations in calendar year (CY) 2007 did not conform to the guidelines contained in TS-required Administrative Procedure 4 AWI 08.10.01, "Overtime Restrictions and Fitness for Duty Requirements." The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having resource components, and involving aspects to ensure that personnel and other resources are available and adequate to assure nuclear safety; specifically, those necessary for sufficient qualified personnel to maintain work hours within working hour guidelines. [H.2(b)]

The inspectors determined that the finding was more than minor because, if left uncorrected, approval of work hour deviations under improper circumstances could increase the likelihood of human errors and would become a more significant safety concern. The finding is not suitable for Significance Determination Process (SDP) evaluation, but has been reviewed by NRC management and is determined to be a finding of very low safety significance because no significant events or human performance issues were a direct result of personnel fatigue from excessive hours worked. The licensee entered the issue into their corrective action program. In accordance with NRC Enforcement Policy, Supplement I.D, the issue is a Severity Level IV Violation.

Inspection Report# : [2008002](#) (*pdf*)

Last modified : April 07, 2009