

# Monticello

## 1Q/2008 Plant Inspection Findings

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### Initiating Events

**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*)

**Significance:**  Sep 30, 2007

Identified By: Self-Revealing

Item Type: FIN Finding

#### **FEEDWATER PERTURBATION DUE TO INSTRUMENT AIR PRESSURE REDUCTION TO FEEDWATER HEATER DRAIN VALVE POSITIONER.**

A finding of very low safety significance was self-revealed when the 12B low pressure feedwater heater drain valve unexpectedly closed, causing a feedwater temperature perturbation. Specifically, the drain valve closed when technicians attached calibration equipment to the instrument air supply line to the control valve, causing air pressure to decrease to the control valve actuator. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having resources components, and involving aspects associated with the failure to correctly label plant components. [H.2(c)]

This finding was more than minor because the performance deficiency affected the procedure quality attribute of the Initiating Events cornerstone's objective of limiting the likelihood of events that upset plant stability. The inspectors determined that the finding was of very low safety significance 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) was not associated with a fire or flood. No violation of NRC requirements was identified.

Inspection Report# : [2007004](#) (*pdf*)

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### Mitigating Systems

**Significance:**  Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

### **UNQUALIFIED PROCEDURE FOR DETECTION OF PITTING.**

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR 50, Appendix B, Criterion IX, "Control of Special Processes," associated with the licensee's failure to use a nondestructive examination (NDE) procedure qualified in accordance with Codes and Standards for detection of pitting in safety-related service water systems. Specifically, the ultrasonic (UT) examinations were conducted by the licensee in accordance with UT Procedure PEI-02.03.12 "Ultrasonic Detection of Pitting," which was not qualified for detection of discontinuities in accordance with ASME Section V, "Nondestructive Examination." As a result, the licensee entered the issue into their corrective action program. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having resources components and involving aspects associated with maintaining long-term plant safety by the maintenance of design margins and the minimization of long-standing equipment issues. [H.2(a)]

The finding was more than minor because the performance deficiency affected the procedure quality 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 the Inspection Manual Chapter (IMC) 0609, Appendix A, "Significance Determination of Reactor Inspection Findings for the At-Power Situations" to this finding. Under Column 2 of the Phase 1 worksheet "Mitigating Systems Cornerstone," 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# : [2007004](#) (pdf)

**Significance:**  Sep 30, 2007

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **OPERATORS FAILED TO PERFORM TEST PROCEDURE IN ACCORDANCE WITH PROCEDURE.**

A finding of very low safety significance was self-revealed for a violation of 10 CFR 50, Appendix B, Criterion V, when licensed operators failed to perform Procedure OSP-RHR-0545-02, "RHR Containment Spray/Cooling Logic Test - Division II," in accordance with the written instructions of the procedure. Specifically, the licensed operators landed a test jumper in the wrong electrical cabinet during the conduct of the test. Additionally, after identifying the error, the operators took actions to remove the incorrectly landed test jumper, install the test jumper at the correct location, and proceed with the test, without first notifying management. These actions were not allowed by the test procedure, nor were they in accordance with operations department standards and expectations. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having decision-making components and involving aspects associated with making safety-significant or risk-significant decisions using a systematic process, especially when faced with uncertain plant conditions, to ensure safety is maintained. [H.1(a)]

The finding was more than minor because it affected the configuration control 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 determined that the finding was of very low safety significance because it was not associated with a design or qualification deficiency, did not result in the loss of a train or safety system function, and was not related to a seismic, flooding, or severe weather event.

Inspection Report# : [2007004](#) (pdf)

**Significance:**  Jun 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

### **FAILURE TO ACCOMPLISH SERVICE WATER INSPECTION PROGRAM REQUIREMENTS.**

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," associated with the licensee's failure to perform portions of Fleet Procedure FP-PE-SW-01, "Service Water and Fire Protection Inspection Program." Contrary to the requirements of the procedure, the licensee did not increase monitoring or determine degradation mechanisms when emergency service water (ESW) system pipe wall thickness indications were found to meet thresholds that required additional monitoring. As a result of an apparent cause evaluation and service water focused self-assessment, several corrective actions were developed to correct procedural and equipment deficiencies associated with the ESW and other raw

water systems at Monticello. The inspectors determined that the performance deficiency affected the cross-cutting area of Human Performance, having resource components and involving aspects associated with maintaining long-term plant safety by the maintenance of design margins and the minimization of long-standing equipment issues [H.2 (a)].

The finding was more than minor because the performance deficiency affected the procedure quality 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 evaluated the finding using Inspection Manual Chapter (IMC) 0609, Appendix G, "Phase 1 Screening," and determined that Checklist 8, "Boiling Water Reactor (BWR) Cold Shutdown or Refueling Operation Time to Boil > 2 Hours: Reactor Coolant System (RCS) Level < 23 Feet Above Top of Flange," applied. However; because all qualitative criteria within the Core Heat Removal, Inventory Control, Power Availability, and Containment guidelines were met; because the finding did not meet the Checklist 8 criteria for Phase 2 or Phase 3 quantitative analysis; and because no event occurred that could be characterized as a loss of control as listed in Table 1 of IMC 0609, Appendix G, the finding was considered to be of very low safety significance.

Inspection Report# : [2007003](#) (pdf)

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## Barrier Integrity

**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:** 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 : June 05, 2008