Monticello 2Q/2008 Plant Inspection Findings

Initiating Events

Significance: 6 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)

Significance: Sep 30, 200 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)

Mitigating Systems

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 respons 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# : $\frac{2008006}{(pdf)}$

Significance:

Sep 30, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

UNOUALIFIED 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 safetyrelated 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)

Sep 30, 2007 Significance:

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 decisionmaking 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)

Barrier Integrity

Significance:

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 respons 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# : <u>2008007</u> (*pdf*)

Mar 31, 2008 Significance:

Identified By: NRC

Item Type: NCV NonCited Violation

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 asleft 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)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

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 <u>cover letters</u> to security inspection reports may be viewed.

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: August 29, 2008