

Monticello

4Q/2012 Plant Inspection Findings

Initiating Events

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: FIN Finding

BUS 12 LOCKOUT CAUSED BY INADEQUATE WORK PLAN.

A finding of very low safety significance was self-revealed on September 25, 2012, when a reactor scram occurred during planned testing of the 2R to Bus 12 local (switchgear cubicle A201) and remote (control room panel C-08) ammeter switches. As a result of the site's failure to effectively plan the work activity, the performance of the testing resulted in the lockout of Bus 12, and loss of 12 reactor feedwater pump and the 12 recirculation pump. During the ensuing plant transient, a main turbine trip occurred, followed immediately by a reactor scram, when reactor water level reached the Reactor Water Level Hi Hi setpoint (+48"). The licensee entered this issue into their CAP and is performing root cause evaluations to further evaluate the post-scram reactor water level control and the ineffective work planning associated with development of the work order used to conduct the testing. The inspectors determined that the most significant causal factor associated with the performance deficiency was associated with the cross-cutting area of Human Performance, having resources components, and involving aspects associated with procedures and work packages are available and adequate to assure nuclear safety [H.2(c)]. The inspectors determined that the licensee's failure to develop and implement work documents which adequately tested the 2R to Bus 12 ammeter switches was a performance deficiency because it was the result of the failure to meet a requirement or standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the procedural quality attribute of the Initiating Events Cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors applied IMC 0609, Appendix A, "The SDP for Findings At-Power," to this finding. The inspectors evaluated the issue under the Initiating Events Cornerstone, and utilized Exhibit 1, "Initiating Events Screening Questions," to screen the finding. Under Section B, "Transient Initiators," the inspectors answered "No" to the question "Did the Finding cause a reactor trip AND the loss of mitigation equipment relied upon to transition the plant from the onset of the trip to a stable shutdown condition?" and determined the finding to be of very low safety significance.

Inspection Report# : [2012004](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO MONITOR CONDENSATE FEEDWATER SYSTEM UNDER 50.65(a)(1) DUE TO INADEQUATE MAINTENANCE RULE FAILURE TRACKING.

The inspectors identified a finding of very low safety significance and non-cited violation (NCV) of 10 CFR 50.65(a)(2), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the licensee's failure to establish an a(1) action plan and associated goals when the condensate feedwater (CFW) system a(2) preventative maintenance demonstration became invalid. Specifically, in May 2011, the No. 12 CFW train exceeded its performance criteria when it experienced two maintenance preventable functional failures (MPFFs). The licensee failed to appropriately account for these failures in their Maintenance Rule Program and, as a

result, the site failed to monitor the equipment under 10 CFR 50.65(a)(1) as required. Corrective actions taken by the licensee to address this issue included performing a root cause evaluation of the site's Maintenance Rule programmatic deficiencies; performing an extent of condition which identified several other instances where MPFFs of other systems had not been accounted for; and creating an a(1) action plan for the CFW system. These issues were entered into the licensee's corrective action program as CAP 01321996, CAP 01324083, and CAP 01323429.

The inspectors determined that the licensee's failure to monitor the CFW system in accordance with the requirements of 10 CFR 50.65(a)(1) due to inadequately accounting for two MPFFs under 10 CFR 50.65(a)(2) was a performance deficiency, because it was the result of the failure to meet a requirement or a standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the equipment performance attribute of the Initiating Events Cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors applied IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," to this finding. The inspectors evaluated the issue under the Initiating Events Cornerstone, and utilized Column 1 of the Table 4a worksheet to screen the finding. For transient initiators, the inspectors answered "No" to the question, "Does the finding contribute to both the likelihood of a reactor trip AND the likelihood that

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mitigation equipment or functions will not be available?" and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross-cutting area of Problem Identification and Resolution, having corrective action program (CAP) components, and involving aspects associated with the licensee trending and assessing items from the CAP in the aggregate to identify programmatic and common cause problems, and communicating the results of the trending to applicable personnel [P.1(b)].

Inspection Report# : [2012002](#) (pdf)

Significance:  Mar 31, 2012

Identified By: Self-Revealing

Item Type: FIN Finding

INEFFECTIVE MANAGEMENT OF TURBINE LUBE OIL TANK VACUUM RESULTING IN FOULING OF GROUNDING BRAIDS.

A finding of very low safety significance was self-revealed on November 19, 2011, when a reactor scram occurred during planned turbine-generator testing, as a result of the site's failure to effectively monitor and control turbine lube oil (TLO) tank vacuum and perform turbine shaft voltage monitoring in accordance with vendor recommendations. The mismanagement of the ability to monitor and control TLO tank vacuum led to the fouling of turbine shaft grounding braids and subsequent degradation of the turbine speed governor drive gears through electrolysis.

The degradation of the front standard components ultimately resulted in control oil pressure oscillations during speed load changer testing, which activated the load rejection pressure switches and scrambled the plant. Corrective actions taken by the licensee to address this issue included repairing the speed governor gear drive and main shaft oil pump components; installing a more robust shaft grounding strap; improving the instrumentation on the TLO tank and adjusting the control bands on the operator logs; and developing a revised testing methodology for generator electrical checks to include vendor recommendations.

The inspectors determined that the licensee's failure to effectively monitor and control TLO tank vacuum and perform turbine shaft voltage monitoring in accordance with

vendor recommendations was a performance deficiency because it was the result of the failure to meet a requirement or standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented.

The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the procedure adequacy attribute of the Initiating Events Cornerstone's objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors applied IMC 0609, Attachment 4, "Phase 1 – Initial Screening and Characterization of Findings," to this finding. The inspectors evaluated the issue under the Initiating Events Cornerstone, and utilized Column 1 of the Table 4a worksheet to screen the finding. For transient initiators, the inspectors answered "No" to the question, "Does the finding contribute to both the likelihood of a reactor trip AND the likelihood that mitigation equipment or functions will not be available?" and determined the finding to be of very low safety significance. The inspectors determined that the most significant causal factor associated with the performance deficiency was associated with the cross-cutting area of Human Performance, having resources components, and involving aspects associated with procedures are available and adequate to assure nuclear safety [H.2(c)].

Inspection Report# : [2012002](#) (*pdf*)

Mitigating Systems

Significance: G Dec 31, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

MANIPULATION OF SAFETY RELATED EQUIPMENT WITHOUT APPROPRIATE GUIDANCE OR APPROVAL OF SHIFT SUPERVISION.

A self-revealed finding of very low safety significance and non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when the licensee failed to properly restore the reactor core isolation cooling (RCIC) system to an operable status subsequent to completing planned maintenance on the system. Specifically, to facilitate the removal of foreign material from the breaker cubicle, operators manipulated two electrical breakers, (D311-11 and D311 12), without procedural guidance or approval of shift supervision, subsequent to closing those breakers in accordance with clearance restoration instructions. Once identified, the licensee took prompt action to ensure that the affected breakers were in their appropriate positions. Additional immediate corrective actions taken by the licensee included disqualification of the operators that were involved and conducting an operations department standdown. As part of the standdown and prior to performing equipment manipulations, all operators participated in a discussion, lead by shift supervision, associated with the requirements and expectations contained in Fleet Procedure FP-OP-COO-17, "Conduct of Operations: Equipment Manipulations and Status Control." The licensee will also perform a root cause evaluation to review this event in more detail. This event was entered into the licensee's corrective action program (CAP 01358924).

The inspectors determined that operators manipulating safety related equipment without the appropriate procedures or guidance was a performance deficiency, because it was the result of the failure to meet the requirements of FP-OP-COO-17, "Conduct of Operations," a procedure affecting quality; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the Human Performance attribute of the Mitigating Systems Cornerstone and 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). The inspectors applied IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At Power," to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Exhibit 2, "Mitigating Systems Screening Questions," to screen the finding. The inspectors answered "No" to all the questions in Section A,

“Mitigating SSCs and Functionality,” and Section B, “External Event Mitigating Systems,” and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with 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 or unexpected plant conditions, to ensure safety is maintained [H.1(a)].

Inspection Report# : [2012005](#) (pdf)

Significance:  Sep 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO CONTROL THE CONFIGURATION OF DOOR 45 DURING MODIFICATION.

The inspectors identified a finding of very low safety significance and an associated non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” when the licensee failed to properly implement work instructions during the modification of reactor building doors which have both secondary containment and high energy line break (HELB) mitigation functions. Specifically, the licensee failed to ensure that the work documents used to perform the modification and the level of supervision of the performance of the work tasks were adequate to ensure that the HELB function of the doors remained available, as required by existing plant conditions, during the implementation of the modification. The licensee entered this issue into their corrective action program (CAP), and corrective actions for this issue included performing a root cause evaluation, resetting their site event clock, and revising the work documents associated with door 45 and door 46 modifications to include multiple barriers to ensure that the doors remain capable of performing their required functions during a HELB event. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting area of Human Performance, having work practices components, and involving aspects associated with the licensee ensuring supervisory and management oversight of work activities, including contractors, such that nuclear safety is supported [H.4(c)].

The inspectors determined that the licensee’s failure to adequately control the configuration of door 45 during the modification work was a performance deficiency, because it was the result of the failure to meet a requirement; the cause was reasonably within the licensee’s ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per Inspection Manual Chapter (IMC) 0612, “Power Reactor Inspection Reports,” Appendix B, and determined that the issue was more than minor because it impacted 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 (i.e., core damage). The inspectors applied IMC 0609, Appendix A, “The Significance Determination Process (SDP) for Findings At-Power,” to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Exhibit 2, “Mitigating Systems Screening Questions,” to screen the finding.

The inspectors answered “No” to all the questions in Section A, “Mitigating Structures, Systems, and Components (SSCs) and Functionality,” and Section B, “External Event Mitigating Systems,” and determined the finding to be of very low safety significance.

Inspection Report# : [2012004](#) (pdf)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO MONITOR RESIDUAL HEAT REMOVAL SYSTEM UNDER 10 CFR 50.65(a)(1) DUE TO INAPPROPRIATE a(2) TRANSITION.

The inspectors identified a finding of very low safety significance and non cited violation (NCV) of 10 CFR 50.65(a) (1)/(a)(2), “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” for the licensee’s failure to establish a(1) goals for the residual heat removal (RHR) system when the a(2) preventative maintenance demonstration became invalid. Specifically, in June 2011, the No. 13 RHR pump exceeded its performance criteria when it experienced a second maintenance preventable functional failure (MPFF). In February 2012, the inspectors identified both of these and a third MPFF, and while the licensee determined that the system

required a(1) classification, the site failed to create goals for effective monitoring of the equipment when they inappropriately applied a(1) status exit criteria to the system. As a result, the site failed to monitor the equipment under 10 CFR 50.65(a)(1) as required. Corrective actions taken by the licensee to address this issue included revision of the a(1) action plan for the RHR system and retraining of Maintenance Rule Expert Panel members. This issue was entered into the licensee's corrective action program as CAP 01341703.

The inspectors determined that the licensee's failure to monitor the RHR system in accordance with the requirements of 10 CFR 50.65(a)(1), due to inappropriately transitioning the system from a(1) to a(2) status, was a performance deficiency because it was the result of the failure to meet a requirement or a standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted 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 (i.e., core damage). The inspectors applied IMC 0609, Attachment 4, to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Column 2 of the Table 4a worksheet to screen the finding. The inspectors answered "No" to all five questions, and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting area of Human Performance, having resources components, and involving aspects associated with the licensee having personnel, procedures, and other resources adequate to maintain long term plant safety by maintenance of design margins and minimizing of long standing equipment issues [H.2(a)].

Inspection Report# : [2012003](#) (pdf)

Significance:  Jun 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO MONITOR SSF PLANT LEVEL PERFORMANCE CRITERION EQUIPMENT UNDER 10 CFR 50.65(a)(1) DUE TO INADEQUATE SSF DATA TRACKING.

The inspectors identified a finding of very low safety significance and non cited violation (NCV) of 10 CFR 50.65(a)(1)/(a)(2), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the licensee's failure to evaluate a(1) goals for equipment tracked under the Safety System Failure (SSF) Plant Level Performance criterion when the plant level a(2) preventative maintenance demonstration became invalid. Specifically, in October 2011, the SSF plant level indicator exceeded its performance criterion when the plant experienced a fourth SSF in a two year period. The licensee failed to appropriately account for these failures in their Maintenance Rule program and, as a result, the site failed to evaluate the affected equipment under 10 CFR 50.65(a)(1) as required. Corrective actions taken by the licensee to address this issue included performing an apparent cause evaluation of the equipment that caused the plant to exceed its plant level performance criterion. This issue was entered into the licensee's corrective action program as CAP 01339425 and CAP 01339429.

The inspectors determined that the licensee's failure to evaluate goal setting for the equipment that caused the plant to exceed its SSF performance criteria in accordance with the requirements of 10 CFR 50.65(a)(1), due to inadequately accounting for SSF data under 10 CFR 50.65(a)(2), was a performance deficiency because it was the result of the failure to meet a requirement or a standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted 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 (i.e., core damage). The inspectors applied IMC 0609, Attachment 4, to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Column 2 of the Table 4a worksheet to screen the finding. The inspectors answered "No" to all five questions, and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross cutting area of Human Performance, having work practices components, and involving aspects associated with the licensee communicating human error prevention techniques, such as self and peer checking and proper documentation of activities [H.4(a)].

Inspection Report# : [2012003](#) (pdf)

Significance:  May 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Station Battery Capacity Test Procedure

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawing," for the licensee's failure to ensure the bases for sizing of the 250 Vdc safety-related batteries was incorporated into the battery capacity test procedure. Specifically, the licensee did not incorporate the commitment to replace the 250 Vdc batteries when battery capacity drops more than 10 percent of rated capacity from its capacity on the previous test. The licensee verified current operability and entered this issue into their corrective action process as Action Requests 01333346 and 01334083.

The finding was determined to be more than minor because it was associated with the Mitigating Systems cornerstone attribute of procedure quality, and affected the cornerstone objective to ensure the availability, reliability, and capability of 250 Vdc batteries that are essential for the proper functioning of systems that respond to initiating events to prevent undesirable consequences. The finding screened as having very low safety significance because it did not represent an actual loss of safety function. The inspectors determined there was no cross-cutting aspect associated with this finding because it was not reflective of licensee's current performance due to the age of the issue.

Inspection Report# : [2012007](#) (pdf)

Significance:  May 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Analyze Voltage Requirements for Operability of Non-Motor Loads and 120 Vac Instrument Panels.

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to evaluate the operability of safety-related 120 Vac instrument bus loads and 480 Vac non-motor loads under degraded voltage conditions. The inspectors determined several loads and panels did not have the minimum required voltage specified in station procedures, USAR or the manufacturer's specifications. The licensee entered this issue into their corrective action program as Action Requests 01332429, 01334571, and 01334562. The licensee performed testing and analyses, and implemented operating restrictions to obtain reasonable assurance of operability.

The finding was more than minor because it affected the Mitigating Systems Cornerstone attribute of Design Control, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, there was reasonable doubt as to whether 480 Vac non-motor loads and equipment supplied by 120 Vac instrument buses had adequate voltage to operate during degraded voltage conditions. The finding was considered to be of very low safety significance (Green) since this was a design deficiency confirmed not to have resulted in a loss of operability or functionality because of licensee's compensatory actions. The inspectors determined the finding had a crosscutting aspect in the area of problem identification and resolution in that the licensee failed to perform a thorough extent of condition review and an assessment of reasonable assurance of operability when similar issues were identified in the 2009 NRC CDBI and a self-assessment performed in 2011.

Inspection Report# : [2012007](#) (pdf)

Significance:  May 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain the Degraded Voltage Function Time Delay Design

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III for the licensee's failure to translate the actual time delay of the degraded voltage relay scheme under all circumstances into the station procedures and Technical Specifications.

Specifically, a modification which introduced a five second time delay to the degraded voltage scheme resulted in inconsistencies in Technical Specification Table 3.3.8.1-1 and functionality of the degraded voltage relay scheme when the safety buses are aligned to Transformer 1AR. The licensee entered this issue into their corrective action program as Action Request 01334146, and removed Transformer 1AR from service to match the design with the Technical Specifications.

The finding was more than minor because it affected the Mitigating Systems Cornerstone attribute of Design Control, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, there was reasonable doubt as to whether the degraded voltage scheme would perform as required by Technical Specifications during design basis conditions. The finding was considered to be of very low safety significance (Green) since the total degraded voltage protection scheme time delay of 15 seconds was commensurate with the current accident analysis in the Updated Safety Analysis Report (USAR). The inspectors determined there was no cross-cutting aspect associated with this finding because it was not reflective of licensee's current performance due to the age of the issue.

Inspection Report# : [2012007](#) (*pdf*)

Significance:  May 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Analyze Effect of Degraded Voltage on Proper Operation of Thermal Overload Relays

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to properly analyze thermal overload relays (TOLs) for Motor Operated Valves (MOVs) and continuous duty motors under degraded voltage conditions. The licensee entered this issue into their corrective action program as Action Requests 01332373, 01332567, and 01334042 and initiated modifications to ensure TOLs would perform as required.

The finding was more than minor because it affected the Mitigating Systems Cornerstone attribute of Design Control, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, there was reasonable doubt as to whether safety-related MOVs and continuous duty motors would continue to operate without tripping during degraded voltage conditions. The finding was considered to be of very low safety significance (Green) since this was a design deficiency confirmed not to have resulted in a loss of operability or functionality because of licensee's compensatory actions. The inspectors determined there was no cross-cutting aspect associated with this finding because it was not reflective of licensee's current performance due to the age of the issue.

Inspection Report# : [2012007](#) (*pdf*)

Significance:  May 30, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Procedures for Alignment of 120 Vac Instrument Buses

The inspectors identified a finding of very low safety significance (Green) and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to ensure single failure criterion is not violated by the procedure for simultaneously aligning both divisions of 120 Vac uninterruptible instrument power to their alternate, non-battery backed power sources. The licensee entered this issue into their corrective action program as Action Request 01334510 and implemented restrictions to prevent simultaneous alignment of both Divisions 1 and 2 instrument buses to their alternate sources, pending resolution.

The finding was more than minor because it affected the Mitigating Systems Cornerstone attribute of Procedure Quality, and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the uninterruptible instrument power system and the systems supported by it would not be able to perform their required functions during events such as a loss of power or station blackout. The finding was considered to be of very low safety significance (Green) because it

did not represent an actual loss of safety function since the licensee had not placed the equipment in this configuration. The inspectors determined there was no cross-cutting aspect associated with this finding because it was not reflective of licensee's current performance due to the age of the issue.

Inspection Report# : [2012007](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO MONITOR RESIDUAL HEAT REMOVAL SYSTEM UNDER 50.65(a)(1) DUE TO INADEQUATE MAINTNENACE RULE EVALUATIONS.

The inspectors identified a finding of very low safety significance and non-cited violation (NCV) of 10 CFR 50.65(a)(2), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," for the licensee's failure to establish an a(1) action plan and associated goals when the residual heat removal (RHR) system a(2) preventative maintenance demonstration became invalid. Specifically, in June 2011, the No. 13 RHR pump exceeded its performance criteria when it experienced a second maintenance preventable functional failure (MPFF). The licensee failed to appropriately evaluate these failures in their Maintenance Rule Program and, as a result, the site failed to monitor the equipment under 10 CFR 50.65(a)(1) as required. Corrective actions taken by the licensee to address this issue included performing a root cause evaluation of the site's Maintenance Rule programmatic deficiencies, and creating an a(1) action plan for the RHR system. The issue was entered into the licensee's corrective action program as CAP 01325200.

The inspectors determined that the licensee's failure to monitor the RHR system in accordance with the requirements of 10 CFR 50.65(a)(1) due to inadequately evaluating three MPFFs under 10 CFR 50.65(a)(2) was a performance deficiency, because it was the result of the failure to meet a requirement or a standard; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted 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 (i.e., core damage). The inspectors applied IMC 0609, Attachment 4, to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Column 2 of the Table 4a worksheet to screen the finding. The inspectors answered "No" to all five questions, and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross-cutting area of Human Performance, having work practices components, and involving aspects associated with the licensee ensuring supervisory and management oversight of work activities, such that nuclear safety is supported [H.4(c)].

Inspection Report# : [2012002](#) (pdf)

Significance:  Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE EVALUATION OF COMPENSATORY MEASURE.

The inspectors identified a finding of very low safety significance and violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to identify and properly evaluate a compensatory measure imbedded in an operability recommendation associated with MO-2020 [RHR Division I Drywell Spray – Outboard] and MO-2021 [RHR Division II Drywell Spray – Outboard] in accordance with

licensee procedure FP-OP-OL-01, “Operability/Functionality Determination.” Specifically, the operability recommendation directed operators, upon receipt of a dual indication on MO-2020/MO-2021, to perform actions documented in an operational decision making instruction (ODMI), which were not identified or evaluated as compensatory measures, nor were they conducted in accordance with an approved procedure. Corrective actions taken by the licensee included revising the applicable operability recommendation, in part to eliminate the imbedded compensatory measure, eliminating the applicable ODMI, and preparing and implementing an Operations Manual procedure change, which provides operators instructions on actions to take if an unexpected dual indication should occur on MO-2020 or MO-2021.

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The inspectors determined that the failure to identify and appropriately evaluate a compensatory measure imbedded in OPR 01323839-01 was a performance deficiency, because it was the result of the failure to meet a requirement or standard; the cause was reasonably within the licensee’s ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per IMC 0612, “Power Reactor Inspection Reports,” Appendix B, and determined that the issue was more than minor because it impacted configuration control 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 (i.e., core damage). The inspectors applied IMC 0609, Attachment 4, “Phase 1 – Initial Screening and Characterization of Findings,” to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Column 2 of the Table 4a worksheet to screen the finding. The inspectors answered “No” to all five questions and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross-cutting area of Problem Identification and Resolution, having corrective action components, and involving aspects associated with the licensee thoroughly evaluating problems such that the resolutions address the causes and extent conditions, as necessary. This includes properly evaluating for operability conditions adverse to quality [P.1(c)].

Inspection Report# : [2012002](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission

has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Last modified : February 28, 2013