

Monticello

4Q/2014 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH ASME CODE PIPING DESIGN REQUIREMENTS.

The inspectors identified a finding of very low safety significance and an associated non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," when the licensee failed to comply with the appropriate American Society of Mechanical Engineers (ASME) Code requirements during implementation of the temporary modification (TMOD) of the recirculation pump seal coolers. Specifically, the licensee failed to meet the ASME Code, Section III, Subsection NB 3671.3, Class I piping design requirements for the end cap joint design on the vent line in this TMOD.

The inspectors determined that the performance deficiency was more than minor, and a finding because it was associated with the Design Control attribute of the Initiating Systems Cornerstone and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the licensee inadequately designed the vent line end cap such that the design was non-compliant with ASME Code, Section III, Subsection NB 3671.3 requirements and, therefore, potentially challenged plant stability. The inspectors reviewed Attachment 0609.04, "Initial Characterization of Findings," Table 3—SDP Appendix Router. The inspectors answered 'Yes' to all of the questions in Sections A through E of Table 3, and, therefore, the finding was evaluated using the SDP in accordance with IMC 0609, "The Significance Determination Process (SDP) for Shutdown Operations," Appendix G, Attachment 1, Exhibit 2, "Initiating Events Screening Questions." The inspectors answered all the questions in Exhibit 2 and determined that this finding did not increase the likelihood of a plant initiating event during shutdown operations nor did it affect any shutdown safety functions. Therefore, the finding was determined to have very low safety significance. This finding has a cross-cutting aspect in the area of Human Performance, Avoid Complacency, because the licensee failed to recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Specifically, the licensee failed to recognize the latent issue concerning appropriate reactor coolant system pressure boundary identification and subsequent ASME Code piping design requirements for piping systems associated with this TMOD (H.12).

Inspection Report# : [2014003](#) (*pdf*)

Significance: G Mar 31, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

RCS PRESSURE BOUNDARY LEAKAGE OPERATION PROHIBITED BY TECHNICAL SPECIFICATIONS.

A finding of very low safety significance and a non-cited violation of Technical Specification (TS) 3.4.4, "RCS Operational Leakage," was self revealed when the licensee failed to comply with TS 3.4.4, Condition C, which required the plant to be in MODE 3 within 12 hours if pressure boundary leakage exists. Specifically, the licensee operated with reactor coolant system (RCS) pressure boundary leakage as a result of corrosion in the 12 recirculation pump upper seal cooler between August 9, 2013, and January 17, 2014, which is a condition prohibited by TS. The

site initiated a troubleshooting team, and following confirmation of the location of the leakage, the plant was shut down in accordance with TSs. The site performed an apparent cause evaluation; implemented a modification to remove the affected seal cooler from service; and developed a periodic replacement plan for heat exchangers in a similar configuration.

The inspectors determined that the licensee's operation with RCS pressure boundary leakage, a condition prohibited by TSs, due to recirculation pump seal cooler leakage, was a performance deficiency requiring evaluation. The inspectors determined that the finding was more than minor in accordance with IMC 0612, Appendix B, because it adversely impacted the Initiating Events Cornerstone attribute of equipment performance—barrier integrity, and affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors assessed the significance of this finding in accordance with IMC 0609 and determined this finding was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Problem Identification and Resolution, Evaluation area, because of the failure to thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance [P.2].

Inspection Report# : [2014002](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURE FOR RCS OPERABILITY DETERMINATION.

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to ensure that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances and be accomplished in accordance with these procedures. Specifically, the licensee failed to accomplish activities affecting quality in accordance with Fleet Procedure

FP-OP-OL-01, in that, on August 9, 2013, and January 3, 4, 7, and 17, 2014, the site failed to ensure that the operability determination for leakage into reactor building closed-cooling water (RBCCW) was sufficient to address the capability of a structure, system, and component (SSC) to perform its specified safety function and, as a result, the site failed to properly classify leakage from the recirculation system as reactor coolant system (RCS) pressure boundary leakage. Following NRC questions and actions by the site to confirm the location of the leakage, the site revised the operability determination and classified the leakage as reactor coolant pressure boundary (RCPB) leakage. This issue was entered into their corrective action program; a root cause evaluation was performed; and additional corrective actions were in development at the time of this report.

The inspectors determined that the failure to properly classify RCS pressure boundary leakage in accordance with the fleet operability determination process was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor because, if left uncorrected, the failure to perform a thorough operability evaluation for conditions where potential RCPB leakage exists could lead to a more significant safety concern. The inspectors assessed the significance of this finding in accordance with IMC 0609 under the Initiating Events Cornerstone, and determined that it was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Human Performance, Conservative Bias area, because of the licensee's failure to use decision-making practices that emphasize prudent choices over those that are simply allowable, and a failure to ensure that proposed actions are determined to be safe in order to proceed, rather than unsafe in order to stop [H.14].

Inspection Report# : [2014002](#) (*pdf*)

Mitigating Systems

Significance:  Dec 02, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO MAINTAIN PROCEDURES TO ENSURE DESIGN REQUIREMENTS WOULD BE MET DURING CONSTRUCTION OF THE EXTERNAL FLOODING PROTECTION LEVEE.

The inspectors identified a finding of very low safety significance with an associated NCV of Technical Specification 5.4.1.a for the licensee's failure to maintain adequate procedures to protect the plant from external flooding events. Specifically, the licensee failed to maintain Procedure 8300-02, "External Flooding Protection Implementation to Support A.6 Acts of Nature," in that it lacked sufficient instructions to ensure testing of materials necessary to its external flooding mitigation plan were adequately controlled. The licensee entered this violation into its corrective action program (CAP) to evaluate changes to its procedures to correct the problem.

The finding was of more than minor significance because it was associated with the Protection Against External Factors and Procedure Quality attributes and adversely affected the Mitigating Systems Cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the instructions for constructing the flood control levee lacked specific details on how the licensee would ensure it was constructed, compacted, and tested to at least 90 percent compaction. The finding was a licensee performance deficiency of very low safety significance because it did not involve a loss or degradation of equipment or function specifically designed to mitigate a seismic, flooding, or severe weather initiating event (e.g., seismic snubbers, flooding barriers, tornado doors). This determination was based on reasonable assurance the licensee could construct and compact the levee to at least 90 percent compaction. The inspectors determined this finding affected the cross-cutting area of human performance and the work management aspect due to the licensee's failure to implement a process of planning, controlling, and executing work activities such that safety is the overriding priority. Specifically, the licensee's process for developing and validating the work instructions for construction of the levee did not ensure appropriate quality control steps were incorporated for critical design attributes.

Inspection Report# : [2014009](#) (*pdf*)

Significance:  Dec 02, 2014

Identified By: NRC

Item Type: FIN Finding

SAFETY/SECURITY INTERFACE ASSESSMENT FAILURE.

The inspectors identified a finding of very low security significance for the licensee's failure to adequately assess and manage the potential for adverse effects on safety and security associated with the development and planned implementation of its external flooding mitigation plan. Specifically, 10 CFR 73.58(b)(3)(i) requires the licensee to have the capabilities to detect, assess, interdict and neutralize threats up to and including the design basis threat of radiological sabotage at all times. The failure to adequately review and evaluate the security measures and changes that would be implemented in response to a flooding event would have resulted in the requirements of 10 CFR 73.58(b)(3)(i) not being adequately maintained. This finding is not a violation of the regulatory requirements since the licensee had not actually implemented the changes that could have adversely impacted the site's security equipment, systems, and protective measures. The licensee entered the issue into its CAP to perform and document the assessments required to manage the planned changes, and to evaluate and develop potential corrective actions.

The finding was of more than minor significance because it adversely affected the Security Cornerstone objective to provide high assurance that the licensee's security system uses a defense-in-depth approach and can protect against the design basis threat of radiological sabotage from external and internal threats. Specifically, the licensee failed to assess and manage changes to security equipment, systems, and protective measures that would be required in the event of the implementation of its external flooding mitigation plan to determine whether these changes could adversely impact its ability to implement the site's protective plan, which could potentially lead to a loss of defense-in-depth. The finding was of very low security significance because the total point value of this performance issue was

determined to be one (1) when it was screened using the guidance provided in IMC 0609, “Significance Determination Process,” Appendix E, Part 1, “Baseline Security Significance Determination Process (SDP) for Power Reactors,” dated January 15, 2014. The inspectors determined this finding affected the cross-cutting area of human performance with a cross-cutting aspect of change management due to the licensee’s failure to use a systematic process for evaluating and implementing change so that nuclear safety remains the overriding priority. Specifically, the licensee did not provide validation of the security plan by conducting integrated tabletops and reviews and perform additional assessment based on feedback from its external reviewers to determine whether these changes could adversely impact its ability to implement the site’s protective plan.
Inspection Report# : [2014009](#) (*pdf*)

Significance:  Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE STANDBY LIQUID CONTROL QUARTERLY PUMP AND VALVE TEST DUE TO PROCEDURALIZED UNACCEPTABLE PRECONDITIONING.

The inspectors identified a finding of very low safety significance and a non cited violation of 10 CFR 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings,” on May 7, 2014, for the licensee’s failure to ensure that activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances. Specifically, the site changed Procedure 0255–02–III, “SBLC [standby liquid control] Quarterly Pumps and Valve Test,” to include allowances for starting the safety-related SBLC pumps and adjusting a throttle valve to achieve the desired pump discharge pressure prior to performance of in service testing, actions which, without evaluation, constituted unacceptable preconditioning.

The inspectors determined that the licensee’s failure to ensure the SBLC pump and valve test surveillance procedure was appropriate to the circumstances was a performance deficiency requiring evaluation. The inspectors screened the performance deficiency and determined that the issue was more than minor because it adversely impacted the Mitigating Systems Cornerstone attribute of Procedure Quality, and affected the cornerstone objective to ensure the availability, reliability, and capability that respond to initiating events to prevent undesirable consequences (i.e., core damage). In addition, if left uncorrected, it had the potential to lead to a more significant safety concern. Specifically, proceduralizing actions which could constitute unacceptable preconditioning, such as manipulating the physical condition of a structure, system or component (SSC) before or during TS surveillance or ASME Code testing, could mask the actual as-found condition of the SSC and result in an inability to verify the operability of the SSC.

The inspectors determined that this finding was of very low safety significance because each question listed in IMC 0609, Appendix A, Exhibit 2, “Mitigating Systems Screening Questions,” was answered ‘No’. The inspectors concluded that this finding was cross-cutting in the Human Performance, Change Management aspect, because the licensee did not use a systematic process for evaluating and implementing change so nuclear safety remains the overriding priority. Specifically, revising procedures to allow the SBLC pump to be started for test configuration flow adjustments immediately prior to a surveillance test, without an evaluation of preconditioning acceptability, could mask the ability to detect degraded equipment performance (H.3).

Inspection Report# : [2014003](#) (*pdf*)

Significance:  Mar 28, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Shorting Switch Modification Failed to ensure Drywell Spray Valves would not Spuriously Open.

The inspectors identified a finding of very-low-safety significance and associated NCV of 10 CFR Part 50, Appendix R, Section III.G.2 for the licensee's failure to ensure that safe shutdown (SSD) equipment were not susceptible to fire induced failures. Specifically, the licensee failed to ensure that the Drywell Spray Motor Operated Valves MO-2020 and MO-2021 would not spuriously open due to fire induced failures (i.e., open circuit and hot shorts) when they installed shorting switch modifications for these valves. The licensee entered the issue into their Corrective Action Program and established hourly fire tours in all affected fire areas.

The performance deficiency was determined to be more than minor because the multiple spurious operations of the drywell spray valves could affect safe shutdown of the plant in the event of fire. The finding affected the Mitigating Systems cornerstone. These valves were required to stay in their closed position during a fire event to ensure adequate net positive suction head (NPSH) for safe shutdown pumps. Fire induced circuit failures (i.e., open circuits and hot shorts) on their control cables could result in these valves spuriously opening. The finding represented a low degradation; and therefore, the inspectors determined that the finding screened as having very-low-safety significance (Green) in Task 1.3.1 of IMC 0609, Appendix F. The inspectors determined that the finding had a cross-cutting aspect in the area of Problem Identification and Resolution because the licensee did not thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance. Specifically, the licensee's evaluation incorrectly concluded that the shorting switch modification would preclude multiple spurious operations of the Drywell Spray valves.

Inspection Report# : [2014008](#) (*pdf*)

Significance: G Mar 28, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Both Redundant Safe Shutdown Trains of Nitrogen Bottles were Found Located In the Same Fire Area.

The inspectors identified a finding of very-low-safety significance and associated NCV of 10 CFR Part 50, Appendix R, Section III.G.1 for the licensee's failure to ensure one of the redundant SSD trains located in the same fire area was free of fire damage. Specifically, both trains of redundant nitrogen bottles used to open and maintain open Safety Relief Valves (SRVs) to depressurize and cooldown the reactor were found located in the same fire area. The licensee entered the issue into their Corrective Action Program and established hourly fire tours in the affected fire areas.

The performance deficiency was determined to be more than minor because the finding was associated with the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to fire events prevent undesirable consequences (i.e., core damage). Specifically, the licensee failed to ensure that one train of nitrogen to supply credited SRVs to achieve and maintain shutdown conditions would be free of fire damage because both trains of nitrogen bottles were located in the same fire area. The finding represented a low degradation and therefore the inspectors determined that the finding screened as having very-low-safety-significance (Green) in Task 1.3.1 of IMC 0609, Appendix F. The finding was not associated with a cross-cutting aspect because the finding was not representative of current performance.

Inspection Report# : [2014008](#) (*pdf*)

Significance: G Mar 28, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Repairs Credited for Hot Shutdown Conditions.

The inspectors identified a finding of very-low-safety significance and associated NCV of 10 CFR Part 50, Appendix R, Section III.G.1 for the licensee's failure to provide one train of systems necessary to achieve and maintain hot shutdown conditions. Specifically, the licensee failed to ensure that a sufficient quantity of nitrogen existed from the alternate nitrogen system to supply credited SRVs for the duration that the plant is expected to be in hot shutdown

following a fire. Instead, the licensee relied on replacing the nitrogen bottles using a repair procedure. Similarly, the licensee failed to ensure one train of diesel fuel oil transfer system for the emergency diesel generator (EDG) was free of fire damage in the event of a fire. Instead the licensee relied upon repair activities for fuel transfer. The licensee entered the issue into their Corrective Action Program and established hourly fire tours in the affected fire areas.

The performance deficiency was determined to be more than minor because the licensee failed to ensure that safe shutdown equipment and circuits (i.e., alternate nitrogen system and EDG fuel oil) were free of fire damage for the duration that could be expected to maintain hot shutdown conditions following a fire. These repair activities could have potentially affected the plant and operators' activities during a challenging fire event. The finding affected the Mitigating Systems cornerstone. The finding represented a low degradation and therefore the inspectors determined that the finding screened as having very-low-safety significance (Green) in Task 1.3.1 of IMC 0609, Appendix F. The inspectors determined that the finding has a cross-cutting aspect in the area of Human Performance because the licensee did not recognize and plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes. Individuals did not implement appropriate error reduction tools.

Inspection Report# : [2014008](#) (pdf)

Barrier Integrity

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO COMPLY WITH ASME CODE AND MAINTAIN CONFIGURATION APPROVED BY IST RELIEF REQUEST.

The inspectors identified a finding of very low safety significance and NCV of 10 CFR 50.55a(f)(4) for the licensee's failure to test main steam line drain containment isolation valves MO-2373 and MO-2374 in accordance with the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) code requirements or maintain the valves in the alternative configuration specified in an NRC-approved Relief Request (VRR-05). Specifically, on October 17, 2014, the NRC identified that the licensee had failed to maintain the approved alternative configuration which had been accepted by the NRC in lieu of the required quarterly stroke testing of MO-2373 and MO-2374. Corrective actions for this event included immediate restoration of the NRC-approved configuration specified in the relief request, cancellation of the noncompliant procedure temporary revisions, and cancellation of the associated 10 CFR 50.59 screening. The licensee also initiated an apparent cause evaluation, which was in progress at the end of this inspection period.

The inspectors determined that the failure to test MO-2373 and MO-2374 in accordance with the ASME OM code or maintain the relief request approved plant configuration was a performance deficiency. The inspectors evaluated the issue and determined that the finding was more than minor in accordance with IMC 0612, Appendix B, because it adversely impacted the Barrier Integrity Cornerstone attributes of Design Control and Configuration Control, and affected the cornerstone objective to provide reasonable assurance that physical design barriers, including containment, protect the public from radionuclide releases caused by accidents or events. The inspectors assessed the significance of this finding in accordance with IMC 0609, and determined that this finding was of very low safety significance because it did not represent an actual open pathway in the physical integrity of reactor containment, and did not involve an actual reduction in function of hydrogen igniters in the reactor containment. The inspectors concluded that this finding was cross-cutting in the Human Performance Decision making aspect because of the failure to use a consistent, systematic approach to make decisions and a failure to ensure that risk insights are incorporated as appropriate.

Inspection Report# : [2014005](#) (pdf)

Significance: G Sep 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW REACTIVITY MANAGEMENT PROCEDURE.

A finding of very low safety significance and a NCV of Technical Specification (TS) 5.4.1, "Procedures," was self-revealed when the licensee failed to implement requirements specified in FP-OP-RM-01, "Reactivity Management Program." Specifically, the licensee failed to ensure that the licensed operators were aware of the consequences of the reactivity changes they were making, as required by FP-OP-RM-01. As a result, the licensed operators were unaware that their actions to increase recirculation flow would result in the plant exceeding the minimum critical power ratio (MCPR) operating limit. This issue was entered into the licensee's corrective action program (CAP) 1446848. Immediate corrective actions included restoration of the plant to within the MCPR operating limit, halting of power changes, disqualification of individuals directly involved, increased management oversight, a detailed review of the reactivity plan and procedures planned for use during the reactivity plan, and site-wide communication of the event. The site initiated a root cause evaluation (RCE), which was in progress at the end of the inspection period.

The inspectors determined that the failure to perform reactivity manipulations in accordance with reactivity management requirements was a performance deficiency requiring evaluation. The inspectors determined that the finding was more than minor in accordance with IMC 0612, Appendix B, because it adversely impacted the Barrier Integrity Cornerstone attributes of Configuration Control and Procedure Quality, and affected the cornerstone objective to provide reasonable assurance that physical design barriers, including fuel cladding, protect the public from radionuclide releases caused by accidents or events. The inspectors assessed the significance of this finding in accordance with IMC 0609 Appendix M, "Significance Determination Process Using Qualitative Criteria" and determined this finding was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Human Performance, Documentation aspect because of the failure to ensure that the procedures being used to make the reactivity manipulations were complete, accurate, and up-to-date.

Inspection Report# : [2014004](#) (pdf)

Significance: G Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

DRYWELL-TORUS VACUUM BREAKER INADEQUATE POST-MAINTENANCE AND RETURN-TO-SERVICE TEST.

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," for the licensee's failure to assure that all testing required to demonstrate that SSCs will perform satisfactorily in service are identified and performed in accordance with written test procedures, which incorporate the requirements and acceptance limits contained in applicable design documents. Specifically, on May 22, 2013, the licensee failed to ensure that post-maintenance and return-to-service testing was performed on all eight safety-related drywell-torus vacuum breakers after refueling outage maintenance, to ensure that surveillance requirements for the valves' opening setpoints were met prior to the valve being returned to service and prior to entry into MODE 2. The licensee entered this issue into their CAP, and additional corrective actions were in development at the time of this report.

The inspectors determined that the licensee's failure to perform required PMTs for vacuum breakers prior to their return-to-service and making a mode change was a performance deficiency requiring evaluation. The inspectors determined that the finding was more than minor in accordance with IMC 0612, Appendix B, because it adversely impacted the Barrier Integrity Cornerstone attribute of SSC and Barrier Performance, and affected the cornerstone objective to provide reasonable assurance that physical design barriers, including containment, protect the public from

radionuclide releases caused by accidents or events. The inspectors assessed the significance of this finding in accordance with IMC 0609 and determined this finding was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Human Performance, Work Management area, because of the failure to implement a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority, and to ensure that the work process includes the identification and management of risk commensurate to the work and the need for coordination with different groups or job activities [H.5].

Inspection Report# : [2014002](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW PROCEDURE FOR DRYWELL-TORUS VACUUM BREAKER OPERABILITY DETERMINATION.

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to ensure that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances, and be accomplished in accordance with these procedures. Specifically, the licensee failed to accomplish activities affecting quality in accordance with Fleet Procedure FP-OP-OL-01, in that, on February 28, 2014, and March 5, 2014, the site failed to ensure that the operability determination for all eight safety-related drywell-torus vacuum breakers was sufficient to address the capability of the SSCs to perform their specified safety function. Following NRC questions, the site revised the operability determination to include newly discovered information of an instance where the equipment in question had been observed opening at the required setpoint during a plant evolution and, subsequently changing the operability evaluation final conclusion from "operable but nonconforming" to "operable." This issue was entered into their corrective action program (CAP), and additional corrective actions were in development at the time of this report. The inspectors determined that the failure to properly justify vacuum breaker operability in accordance with the fleet operability determination process was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor because, if left uncorrected, the failure to perform a thorough operability evaluation for conditions where a required post-maintenance testing (PMT) was not performed for all eight drywell-torus vacuum breakers could lead to a more significant safety concern. The inspectors assessed the significance of this finding in accordance with IMC 0609 under the Barrier Integrity Cornerstone, and determined the finding was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Human Performance, Conservative Bias area, because of the licensee's failure to use decision-making practices that emphasize prudent choices over those that are simply allowable, and a failure to ensure that proposed actions are determined to be safe in order to proceed, rather than unsafe in order to stop [H.14].

Inspection Report# : [2014002](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE DRYWELL-TORUS MONTHLY VACUUM BREAKER TEST PROCEDURE DUE TO PROCEDURALIZED UNACCEPTABLE PRECONDITIONING.

The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," on February 14, 2014, for the licensee's failure to ensure that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances. Specifically, the site changed Procedure 0143, "Drywell-Torus Monthly Vacuum Breaker Check," to include allowances for multiple cyclings on the safety-related drywell-torus vacuum breaker valves to ensure they met their surveillance requirements to close, which constituted unacceptable

preconditioning. The licensee entered this issue into their CAP, and corrective actions were still in development at this time of this report.

The inspectors determined that the licensee's failure to ensure the vacuum breaker monthly testing surveillance procedure was appropriate to the circumstances was a performance deficiency requiring evaluation. 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 adversely impacted the Barrier Integrity Cornerstone attribute of Procedure Quality, and affected the cornerstone objective to provide reasonable assurance that physical design barriers, including containment, protect the public from radionuclide releases caused by accidents or events. In addition, if left uncorrected, the proceduralized unacceptable preconditioning has the potential to lead to a more significant safety concern. The inspectors assessed the significance of this finding in accordance with IMC 0609 and determined this finding was of very low safety significance. The inspectors concluded that this finding was cross-cutting in the Human Performance, Conservative Bias area, because of the licensee's failure to use decision-making practices that emphasize prudent choices over those that are simply allowable, and a failure to ensure that proposed actions are determined to be safe in order to proceed, rather than unsafe in order to stop [H.14].

Inspection Report# : [2014002](#) (pdf)

Emergency Preparedness

Occupational Radiation Safety

Significance:  Mar 31, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

UNCONTROLLED HIGH RADIATION AREA FOLLOWING SHUT-DOWN COOLING RE-ALIGNMENT.

A finding of very low safety significance and an associated non-cited violation of Technical Specification (TS) 5.7.1 was self-revealed following a worker's unexpected electronic dosimeter alarm, which resulted in the identification of an unbarricaded and unposted high radiation area. The inspectors determined a performance deficiency occurred when the licensee failed to perform radiological surveys following the implementation of noble metals chemistry which changed plant radiological conditions, and prior to authorizing entry into the 924' torus area. Specifically, on January 19, 2014, a fire watch entered this area when posted as a radiation area and received a dose rate alarm. Follow-up radiological surveys identified a high radiation area of 120 mrem/hr at 30 cm from the residual heat removal piping. This issue was entered into the licensee's corrective action program as CAP 01415285. The licensee immediately barricaded and posted the area as a high radiation area. Additionally, the licensee is performing a review of radiation protection fundamentals as the result of this event.

The finding was more than minor because it impacted the program and process attribute of the Occupational Radiation Safety Cornerstone and adversely affected the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation, in that, the worker's entry into an unsurveyed high radiation area placed the worker at increased risk for unnecessary radiation exposure. Additionally, the inspectors reviewed the guidance in IMC 0612, Appendix E, "Examples of Minor Issues," and identified Example 6(h) as similar to the performance deficiency. The finding was assessed using IMC 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," and was determined to be of very low safety significance because the problem was not an as-low-as-reasonably-achievable planning issue; there were no overexposures nor substantial potential for overexposures given the highest dose rate present in the room and the scope of work; and the licensee's ability to assess dose was not compromised. The inspectors concluded that the cause of this event involved a cross-cutting component in the Problem Identification and Resolution, Operating Experience area, because the licensee failed to implement known

industry concerns regarding changing radiological conditions as the result of implementation of noble metals chemistry (P.5).

Inspection Report# : [2014002](#) (*pdf*)

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 26, 2015