Monticello
4Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Jun 30, 2015
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
INADEQUATE CLEARANCE ORDER RESULTS IN UNPLANNED OPDRV.
A self revealed finding of very low safety significance and an associated NCV of Technical Specification (TS) 5.4.1, "Procedures," was identified on May 16, 2015, when the licensee failed to implement procedure FP OP TAG 01, "Fleet Tagging," for equipment control activities associated with the Scram Discharge Volume (SDV). Specifically, the licensee failed to ensure that clearance order checklist 58972 03 restored valve I CRD R 26, an SDV instrument vent valve, to its normal position prior to returning the SDV system to service. As a result, during subsequent reactor coolant system (RCS) pressure boundary testing, RCS water leaked out onto the reactor building floor through the open vent line, creating an unplanned operation with a potential for draining the reactor vessel (OPDRV). This issue was entered into the licensee's corrective action program (CAP 1479307). Immediate corrective actions included termination of the leakage by closing and capping the SDV vent line and resetting the scram. The site initiated an apparent cause evaluation (ACE), which was in progress at the end of the inspection period.

The inspectors determined that the failure to adequately restore the SDV system to service in accordance with fleet tagging 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 Initiating Events Cornerstone attributes of Configuration Control and Procedure Quality, 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 evaluated the finding using IMC 0609, Attachment 4, Phase 1 – Initial Screening and Characterization of Findings, which required an analysis using IMC 0609 Appendix G, the Shutdown Operations significance determination process (SDP) since the reactor was in Mode 4 (cold shutdown). The finding was assessed in accordance with IMC 0609 Appendix G, Attachment 1, Exhibit 2 for Initiating Events. Using IMC 0609 Appendix G, Attachment 3, for a Phase 2 analysis, the inspectors determined it to have very low safety significance. The inspectors concluded that this finding was cross cutting in the Human Performance, Challenge the Unknown aspect because of the failure of individuals to stop when faced with uncertain conditions, and the failure to ensure that risks are evaluated and managed before proceeding [H.11].

Inspection Report# : 2015002 *(pdf)*

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
LOSS OF ELECTRICAL BUSES AND SHUTDOWN COOLING (SDC) DUE TO INADEQUATE PROCEDURE ADHERENCE.
A self revealed finding of very low safety significance and an associated NCV of Title 10, Code of Federal Regulations (CFR) Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was identified due to the failure to properly implement Procedure 0304 01, "Safeguard Bus Loss of Voltage Protection Relay Unit Calibration – Safeguards Bus No. 15." Specifically, electrical maintenance workers failed to comply with Step 20

which directed the installation of a jumper between terminals ZX10 and ZX11 in an electrical panel, when they incorrectly installed the electrical jumper between terminals ZX11 and ZX12. This resulted in the loss of the Division I safety related 4160 Volts AC (Vac), 480 Vac, and 125 Volts DC (Vdc) electrical buses, which subsequently led to the loss of shutdown cooling for approximately 3 hours and 15 minutes. Initial corrective actions for this issue included immediately invoking strict plant status controls to focus efforts on recovery, restoring the electrical buses and shutdown cooling to operation, and reinforcing risk recognition and human performance tools. This issue was entered into the licensee's corrective action program (CAP 1477351) and a root cause evaluation was in progress at the time this inspection period concluded.

The inspectors determined that the issue was more than minor because it adversely impacted the Initiating Events Cornerstone attribute of Human Performance and Configuration Control, 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 utilized IMC 0609, Appendix G for shutdown operations and determined that the issue was 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, Avoid Complacency aspect because of the failure of licensee individuals to implement error reduction tools and the failure of the organization to plan for the possibility of mistakes, latent issues, and inherent risk, even while expecting successful outcomes [H.12].

Inspection Report# : 2015002 *(pdf)*

Significance: G Mar 31, 2015
Identified By: Self-Revealing
Item Type: NCV Non-Cited Violation
FAILURE TO MAINTAIN FIRE PROTECTION PROGRAM PROCEDURES FOR CONTROL OF PORTABLE HEATER/EXTENSION CORD FIRE HAZARDS.
A finding of very low safety significance and an associated NCV of Technical Specification (TS) 5.4.1.d was self-revealed when the licensee failed to maintain procedures for Fire Protection Program Implementation to ensure that ignition sources (space heaters) were properly controlled to prevent plant fires. Specifically, on January 26, 2015, the licensee failed to maintain Fire Protection Program implementation procedures to include controls to ensure space heaters used in the plant stayed within allowable load ratings and were plugged directly into outlets without the use of extension cords. This resulted in a fire in the plant recombiner building which was extinguished within 13 minutes, nearing the 15 minute time limit at which a Notification of Unusual Event (NOUE) would have needed to be declared. It also resulted in a space heater causing an overloaded outlet at a location in the reactor building, near 'A' residual heat removal (RHR) equipment. Upon discovery of the recombiner area fire, the licensee dispatched the fire brigade to ensure the fire was extinguished, performed extent of condition walkdowns in the plant, and took action to improve controls on extension cord and portable heater use in the power block. This issue was entered into the licensee's corrective action program (CAP 1463506).
The inspectors determined that the failure to maintain fire program procedures to ensure ignition sources (space heaters) were appropriately controlled was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor because, if left uncorrected, the failure to adequately control portable heater related fire hazards in the plant could lead to more significant safety concerns. In addition, the finding was more than minor because it was associated with the Initiating Events Cornerstone attribute of Protection Against External Factors—including fire, 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 that it was 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, Evaluation aspect 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# : 2015001 *(pdf)*

Mitigating Systems

Significance: G Sep 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO PERFORM HIGH RADIATION AREA PORTABLE FIRE EXTINGUISHER SURVEILLANCES.
The inspectors identified a finding of very low safety significance and an NCV of Technical Specification (TS) 5.4.1.d when the licensee failed to implement procedures associated with Fire Protection Program Implementation, to ensure that required refueling outage surveillances were performed for fire extinguishers located in high radiation areas (HRAs). Specifically, between March 2007 and May 2015, the licensee failed to implement steps 9 and 10 of 1123, "Portable Fire Extinguishers," which required weighing and verifying adequate hydrostatic testing of the fire extinguishers in HRAs on a refueling outage frequency. Corrective actions included surveillance process changes and evaluation of the current status of the high radiation area fire extinguishers which resulted in the determination that outside of the surveillance process, a separate work activity had exchanged all the affected extinguishers with ones that were current on their surveillances in May 2015. This issue was entered into the licensee's corrective action program (CAP 1484257).
The inspectors determined that the failure to implement HRA fire extinguisher surveillances was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor in accordance with IMC 0612 Appendix B because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors—including fire, and affected the 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 assessed the significance of this finding using IMC 0609, Attachment 4, "Initial Characterization of Findings," and IMC 0609, Appendix F, Fire Protection significance determination process, and determined that it had 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, Work Management aspect because of the failure to implement a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority and the failure to identify the need for coordination with different groups or job activities [H.5].

Inspection Report# : 2015003 *(pdf)*

Significance: G Sep 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO IDENTIFY SAFE SHUTDOWN EQUIPMENT IMPACTS IN FIRE STRATEGY PROCEDURES.
The inspectors identified a finding of very low safety significance and an NCV of Technical Specification (TS) 5.4.1.d when the licensee failed to maintain procedures associated with Fire Protection Program Implementation, consistent with the Updated Safety Analysis Report (USAR), to ensure that fire strategy procedures accurately indicated safe shutdown (SSD) equipment. Specifically, on June 25, 2015, the licensee failed to maintain A.3-12-C, "Condenser Room Fire Strategy," to ensure SSD equipment was appropriately identified. In this case, fire strategy A.3-12-C failed to identify any SSD equipment in the room, despite the fact that SSD cabling ran through the room and was included

in the USAR Fire Hazards Analysis. Corrective actions included performance of an extent of condition review which identified 40 other fire strategies where safe shutdown cabling was not identified, and initiation of procedure changes to include the appropriate SSD equipment. This issue was entered into the licensee's corrective action program (CAP 1484142).

The inspectors determined that the failure to maintain fire strategy procedures to ensure that SSD equipment was identified was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor in accordance with IMC 0612 Appendix B because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors—including fire, and affected the 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 assessed the significance of this finding using IMC 0609, Attachment 4, "Initial Characterization of Findings," and IMC 0609, Appendix F, Fire Protection significance determination process, and determined that it had 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, Self-Assessment aspect because of the licensee's failure to conduct self-critical and objective assessments of its programs and practices [P.6].
Inspection Report# : 2015003 *(pdf)*

Significance: N/A Sep 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO PROVIDE COMPLETE AND ACCURATE INFORMATION IN LER 05000263/2015-002-00.
The inspectors identified a Severity Level IV NCV of Title 10 of the Code of Federal Regulations (10 CFR) 50.9 due to the licensee's failure to provide information to the NRC that was complete and accurate in all material respects in accordance with the NRC's reporting requirements in 10 CFR 50.73(a)(1), "Licensee Event Report (LER) System." Specifically, on June 29, 2015, the licensee failed to include an accurate assessment of the safety consequences and implications of a loss of shutdown cooling event when they issued LER 05000263/2015-002-00. This LER included an inaccurate assessment of safety implications, stating that engineering calculations show a potential worst case maximum temperature of 115 degrees Fahrenheit. The inspectors identified that engineering models actually showed potential worst case temperatures of 25-26 degrees F higher, which could have challenged or exceeded fuel pool cooling design specifications. Corrective actions included issuance of a revision to LER 2015-002-00 which contained the correct engineering modeling results and associated discussion of safety implications. The licensee entered this issue into its corrective action program (CAP 1484633).
This issue was of more than minor significance under the Traditional Enforcement Process because the NRC relies on licensees to identify and correctly report conditions or events meeting the criteria specified in the regulations in order to perform its regulatory function. Because this issue affected the NRC's ability to perform its regulatory function, the inspectors evaluated it using the traditional enforcement process. The underlying technical issue (i.e., loss of shutdown cooling) was evaluated separately and determined to be a finding of very low safety significance as documented in Quarterly Inspection Report 05000263/2015002. In accordance with Section 2.2.2.d, and consistent with the examples included in Section 6.9.d of the NRC Enforcement Policy, this violation was categorized as Severity Level IV because it was of more than minor concern with relatively inappreciable potential safety significance and is related to a finding that was determined to be a more than minor issue. Consistent with Example 6.9.d.1, this represented an example where the licensee submitted inaccurate information in a required report, which resulted in expansion of the scope of the next regularly scheduled inspection and required LER revision. Because there was no finding evaluated with this violation, the inspectors did not assign a cross-cutting aspect to this issue.
Inspection Report# : 2015003 *(pdf)*

Significance: G Jul 24, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation

Inadequate Quality Assurance Controls for Nitrogen Supply for the AN2 System (Section 1R21.3.b.(1))
Green. The inspectors identified a finding having very low safety significance, and an associated NCV of Title 10, Code of Federal Regulations (CFR), Part 50, Appendix B, Criterion III, "Design Control," for the failure to assure the nitrogen supply for the alternate nitrogen (AN2) system was controlled as safety-related in system specifications, drawings, procedures, and instructions. Specifically, the licensee did not confirm effective quality assurance controls were in place to ensure the bottled nitrogen was acceptable to support the safety-related functions of this system. The licensee entered this finding into the Corrective Action Program (CAP), and subsequently contacted the commercial nitrogen gas supplier to confirm that the vendor's quality controls provided a sufficient basis to conclude that the AN2 system was operable.
The finding was determined to be more than minor because if left uncorrected, the issue had the potential to lead to a more significant safety concern. Specifically, if the commercial (e.g., non-safety) gas supply vendor quality controls were not adequate to ensure contaminants such as moisture or particulates were excluded from the nitrogen gas bottles, it could potentially disable the AN2 system's capability to support manual operation of safety relief valves during post loss-of-coolant-accident mitigation. The inspectors did not identify a cross-cutting aspect associated with this finding as it did not reflect current performance. (Section 1R21.3.b.(1))

Inspection Report# : 2015007 *(pdf)*

Significance: G Jul 24, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Review for Suitability of Application of Safety Related Relays Installed Beyond Their Service Life (Section 1R21.3.b.(2))
Green. The inspectors identified a finding of very low safety significance, and an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the failure to assure measures were established for the selection and review for suitability of application of materials, parts, equipment and processes that were essential to the safety-related functions of structures, systems and components. Specifically, the licensee failed to review for suitability of application of safety-related Agastat and General Electric relays that had exceeded their service life, a condition non-conforming to their design basis, to justify their continued service considering in-service deterioration. The licensee previously entered this finding into the CAP, and completed corrective actions to replace or evaluate some relays and implemented a program to address the remaining relays in a timely manner.
The finding was determined to be more than minor because, if left uncorrected, the issue had the potential to lead to a more significant safety concern. Specifically, these safety related relays were installed in protective circuits such as reactor protection system, etc., and their failure could impact the proper operation of these protective schemes. The inspectors did not identify a cross-cutting aspect associated with this finding as it was not reflective of the licensee's current performance. (Section 1R21.3.b.(2))

Inspection Report# : 2015007 *(pdf)*

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO MAINTAIN PORTABLE FIRE EXTINGUISHERS IN ACCORDANCE WITH FIRE STRATEGY.
The inspectors identified a finding of very low safety significance and an NCV of TS 5.4.1.d when the licensee failed to implement procedures associated with Fire Protection Program Implementation to ensure that portable fire extinguishers were maintained in accordance with the fire strategy. Specifically, on May 1, 2015, the licensee failed to implement fire protection plan procedures when they failed to control three portable fire extinguishers in the condenser room, a room housing safe shutdown cabling, in accordance with Fire Strategy A.3 12 C. In this case,

inspectors found that of the four dry chemical extinguishers required to be stationed in the condenser room, two indicated that they were partially depleted and needed to be recharged, and a third extinguisher was missing entirely. Immediate corrective actions included recharging the partially depleted extinguishers and procuring a portable extinguisher to replace the missing one. This issue was entered into the licensee's corrective action program (CAP 1477246).
The inspectors determined that the failure to implement the fire strategy procedure to ensure that condenser room portable fire extinguishers were maintained was a performance deficiency requiring evaluation. The inspectors determined the issue was more than minor in accordance with IMC 0612 Appendix B because it was associated with the Mitigating Systems Cornerstone attribute of Protection Against External Factors—including fire, and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Because the plant was shut down, the inspectors assessed the significance of this finding in accordance with IMC 0609, Appendix G, the Shutdown Operations SDP, and determined that it had 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, Identification aspect because of the failure to implement a corrective action program with a low threshold for identifying issues, and failure to ensure that individuals identify issues completely, accurately, and in a timely manner in accordance with the program [P.1].

Inspection Report# : 2015002 *(pdf)*

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO MEASURE INTERPASS TEMPERATURE.
The inspectors identified a Green NCV of Title 10, CFR Part 50, Appendix B, Criterion IX, "Control of Special Processes," for a failure to measure the interpass temperature while performing welding on diesel generator fuel oil modification supports. Consequently, welding was performed without the Code and Procedure required interpass temperature being monitored on a number of welds, a parameter which can affect the mechanical properties of the material being welded. To restore compliance, the welder proceeded to measure the interpass temperatures on the balance of the welds and verified that the interpass temperature did not exceed that allowed by procedure. The licensee entered this issue into its corrective action program (CAP 1475767).
The inspectors determined that this issue was more than minor in accordance with IMC 0612, Appendix B, "Issue Screening," dated September 7, 2012, because the inspectors answered "yes" to the more than minor question, "If left uncorrected, would the performance deficiency have the potential to lead to a more significant safety concern?" Specifically, absent NRC intervention, the welder would have completed all of the welds without having measured the interpass temperature, a welding parameter which can affect the mechanical properties (e.g., impact properties) of some materials being welded, and if left uncorrected could lead to a potential failure of the weld in service.
In accordance with Table 2, "Cornerstones Affected by Degraded Condition or Programmatic Weakness," of IMC 0609, Attachment 4, "Initial Characterization of Findings," issued June 19, 2012, the inspectors checked the box under the Mitigating Systems Cornerstone because leakage on the Emergency Diesel Generator (EDG) fuel oil system could cause core decay heat removal to be degraded. The inspectors determined this finding was of very low safety significance (Green) based on answering "yes" to the question in Part A of Exhibit 2, "Mitigating Systems Screening Questions," in IMC 0609, Appendix A, "The Significance Determination Process for Findings At Power," issued on June 19, 2012. Specifically, the inspectors answered "yes" to the screening question "If the finding is a deficiency affecting the design or qualification of a mitigating System, Structure, or Component (SSC), does the SSC maintain its operability or functionality"? The welder proceeded to measure the interpass temperatures on the balance of the welds and verified that the interpass temperature did not exceed that allowed by procedure, and the issue did not result in the actual loss of the operability or functionality of a safety system.
The inspectors determined that the primary cause of the failure to monitor the interpass temperature procedure was related to the cross cutting component of Problem Identification and Resolution, Operating Experience (P.5).

Specifically, the organization failed to effectively implement external operating experience in a timely manner.
Inspection Report# : 2015002 *(pdf)*

Significance: G Mar 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO IDENTIFY HIGH PRESSURE COOLANT INJECTION (HCPI) SEISMIC SUPPORT NONCONFORMANCE.
The inspectors identified a finding of very low safety significance and an NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for the licensee's failure to promptly identify conditions adverse to quality, such as deficiencies, deviations, and nonconformances. Specifically, on February 11, 2015, the inspectors identified a safety related seismic support for high pressure coolant injection (HPCI) turbine trip instrumentation that was not rigidly attached, supported, and restrained in accordance with plant construction code and installation specifications, a nonconformance which the licensee had failed to identify since initial plant construction. Corrective actions for this issue included repairs to the seismic support to rigidly connect the instrument line restraint and installation of a standalone support for the instrument tray. This issue was entered into the licensee's corrective action program (CAP 1465906).
The inspectors determined that the failure to promptly identify an HPCI instrument line support nonconformance was a performance deficiency requiring evaluation. The inspectors determined that the issue was more than minor because it adversely impacted the Mitigating Systems Cornerstone attribute of Protection Against External Factors, and affected the 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 assessed the significance of this finding in accordance with IMC 0609 and determined that it was 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, and the aspect of Identification because the licensee failed to implement a CAP with a low threshold for identifying issues [P.1].

Inspection Report# : 2015001 *(pdf)*

Significance: G Mar 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
TWO EMERGENCY DIESELS INOPERABLE DUE TO HUMAN ERROR.
A self-revealing finding of very low safety significance and an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was identified on December 28, 2014, due to the failure to properly implement Procedure 0187-02B, "12 Emergency Diesel Generator /12 ESW [Emergency Service Water] Monthly Pump and Valve Tests." Specifically, operations personnel failed to comply with Step 42 which directed the 12 EDG local governor control switch to be lowered to idle setting. The failure to implement the actions directed by Step 42 resulted in the 11 EDG being inoperable. Corrective actions for this issue included procedure revisions to require: protection/flagging of redundant equipment when technical specification equipment is declared inoperable for any reason, including planned maintenance and surveillance; peer checking or concurrent verification for manipulation of operable technical specification related equipment; and all equipment manipulations require a hard match (between procedure and equipment labeling). This issue was entered into the licensee's corrective action program (CAP 1460675).
The issue was more than minor because if left uncorrected, the failure to properly implement procedures associated with safety-related equipment would have the potential to lead to a more significant safety concern. Specifically, the failure to follow procedure resulted in the 11 EDG being made inoperable coincident with the 12 EDG being inoperable. The inspectors utilized IMC 0609 and determined that the issue was 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, Avoid Complacency aspect because of a failure of individuals to implement error reduction tools [H.12].

Inspection Report# : 2015001 *(pdf)*

Barrier Integrity

Significance: G Sep 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
INADEQUATE EVALUATION OF REFUELING FLOOR STRUCTURAL STEEL BEAMS.
The inspectors identified a finding of very low safety significance, and an associated NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for the licensee's failure to provide for verifying or checking the adequacy of design, such as by the performance of design reviews, by the use of alternate or simplified calculational methods, or by the performance of a suitable testing program. Specifically, on September 3, 2008, licensee personnel failed to verify the adequacy of design when they failed to use correct section properties in their calculation of stresses on structural steel beams supporting the refueling floor for the increased spent fuel cask loading. Reevaluation of the beams using correct methodology resulted in the conclusion that the beams would not meet the design basis stress limits. Immediate corrective actions for this issue included initiation of a CAP, performance of a functionality assessment which concluded that the refueling floor remained functional but non-conforming, and creating compensatory measures which limited the refueling floor live load in the cask loading area (CAP 1492837).

The inspectors determined that the licensee's calculational methodology was contrary to the standard engineering principles applicable for determination of stresses in structural members, which resulted in a failure to meet Criterion III, "Design Control,' and was a performance deficiency. The finding was determined to be more than minor in accordance with IMC 0612 because it was associated with the Design Control attribute of the Barrier Integrity Cornerstone and adversely affected the cornerstone objective of providing reasonable assurance that physical barriers (reactor building) protect the public from radionuclide releases caused by accidents or events. Additionally, More than Minor Example 3.j of IMC 0612, Appendix E, "Examples of Minor Issues," was used to inform the more than minor screening. Inspectors used IMC 0609, "Significance Determination Process," Attachment 4, "Initial Characterization of Findings," and Appendix A of IMC 0609 to screen this finding. The inspectors answered "No" to questions C.1 and C.2 in Exhibit 3, "Barrier Integrity Screening Questions." As a result, the inspectors concluded that the finding was of very low safety significance (Green). The inspectors did not identify a cross cutting aspect associated with this finding because the finding was not representative of current performance.

Inspection Report# : 2015003 *(pdf)*

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO MAINTAIN SECONDARY CONTAINMENT AND STANDBY GAS TREATMENT SYSTEM OPERABLE DURING OPDRV ACTIVITIES.
The inspectors identified a finding of very low safety significance and an associated NCV of TS 3.6.4.1, Secondary Containment and TS 3.6.4.3, Standby Gas Treatment System (SBGT) because the licensee did not maintain secondary containment and the standby gas treatment system operable as required during activities considered OPDRVs. Specifically, on April 14, and again on May 13, 2015 the licensee failed to classify activities associated with draining

reactor inventory as OPDRVs while relying on an automatic isolation function for the drain path, and as a result failed to maintain required equipment operable during these activities. Once questioned by the inspectors, the licensee took action to control other outage related draining activities as OPDRVs and placed this issue into its corrective action program (CAP 1479284).
The inspectors determined that the failure to maintain secondary containment and SBGT operable while an OPDRV was in progress was a performance deficiency. The performance deficiency was more than minor because it was associated with the configuration control attribute of the Barrier Integrity Cornerstone, and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events because the secondary containment boundary and the SBGT were not maintained operable during an OPDRV activity. The inspectors evaluated the finding using IMC 0609, Attachment 4, Phase 1 – Initial Screening and Characterization of Findings, which required an analysis using IMC 0609 Appendix G, the Shutdown Operations SDP since the reactor was shut down. The finding was assessed in accordance with IMC 0609 Appendix G, Attachment 1, Exhibit 4 and Appendix H for containment integrity findings. Using Appendix H, the inspectors concluded the finding had very low safety significance (Green) because decay heat was low and containment was deinerted. 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, Documentation aspect because of the failure of the licensee to create and maintain complete, accurate and up to date documentation [H.7].

Inspection Report# : 2015002 *(pdf)*

Significance: G Jun 30, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO FILL THE REACTOR CAVITY IN ACCORDANCE WITH REFUELING PREPARATION PROCEDURE.
The inspectors identified a finding of very low safety significance and an associated NCV of TS 5.4.1, “Procedures,” on April 15, 2015, when the licensee failed to implement procedure 9001, “Reactor Well & Dryer Separator Storage Pool Filling Procedure,” for refueling preparation activities. Specifically, when faced with indications that the condensate storage tanks did not contain enough water inventory to complete outage critical path reactor pressure vessel (RPV) flooding activities, the licensee failed to implement 9001 procedure steps for using prescribed equipment and methods to fill the reactor cavity. With the proceduralized methods unavailable, operators used the site decision making process to utilize demineralizer water hoses to fill the cavity rather than processing required 9001 procedure changes. This issue was entered into the licensee’s corrective action program (CAP 1474891). Immediate corrective actions included action to initiate the procedure change process for 9001 and department communication to Operations regarding the incident, emphasizing that the decision making process is not a substitute for the procedure change process.
The inspectors determined that the failure to fill the reactor cavity in accordance with the 9001 reactor well filling procedure was a performance deficiency requiring evaluation. The inspectors evaluated IMC 0612, Appendix E, and did not find any similar examples of minor issues. The inspectors determined that the finding was more than minor in accordance with IMC 0612, Appendix B, because if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. Specifically, the operations crew’s use of the decision making process to support outage critical path by bypassing proceduralized steps and performing activities using methods contrary to the procedure could lead to a more significant safety concern. In addition, if performed incorrectly (i.e. without flushing the hoses prior to use), the use of demineralizer hoses could introduce foreign material into the core and challenge the integrity of the fuel cladding barrier. The inspectors evaluated the finding using IMC 0609, Attachment 4, Phase 1 – Initial Screening and Characterization of Findings, which required an analysis using IMC 0609 Appendix G, the Shutdown Operations SDP since the reactor was in Mode 5 (refueling). The finding was assessed in accordance with IMC 0609 Appendix G, Attachment 1, Exhibit 4 for Barrier Integrity and determined to have very low safety significance.

The inspectors concluded that this finding was cross cutting in the Human Performance, Conservative Bias aspect because of the failure of the individuals to use decision making practices that emphasize prudent choices over those that are simply allowable, and the 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# : 2015002 *(pdf)*

Emergency Preparedness

Significance: G Mar 31, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
FAILURE TO MAINTAIN A STANDARD EMERGENCY ACTION LEVEL SCHEME FOR FLOODING.
The inspectors identified a finding of very low safety significance and an NCV of Title 10 CFR 50.54(q)(2) and 10 CFR 50.47(b)(4) for the licensee's failure to maintain the effectiveness of the emergency plan. Specifically, from May 28, 2014, until February 26, 2015, the HA1.6 Emergency Action Level (EAL) threshold was in conflict with the EAL basis for the alert classification. Additionally, both the revised EAL threshold and original NRC-approved safety evaluation report EAL threshold were later found to be greater than the actual river level that could lead to damage of safe shutdown equipment. The licensee's corrective actions documented that the current river level was 906' and if flooding were to occur the licensee would have relied on Procedure A.6, "Acts of Nature," and that an event response team would have been formed to monitor river level during the duration of a flood event. The licensee concluded that the shift manager, Event Response team, and plant management would have monitored for indication of degraded performance of equipment or structures necessary for safe shutdown for event classification escalation to the Alert level. The licensee entered this issue into the Corrective Action Program (CAP 1454593).
The inspectors determined that establishing a flooding EAL threshold that was in conflict with approved EAL basis as required by 10 CFR 50.47(b)(4), and subsequent failure to determine the actual level that could lead to damage of safe shutdown equipment for the alert classification High River Level EAL HA1.6 was a performance deficiency. The inspectors determined that the issue was more than minor because it is associated with the Procedure Quality attribute of the Emergency Preparedness (EP) cornerstone and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The inspectors assessed the significance of this finding in accordance with IMC 0609 and determined that it was 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, Evaluation aspect because the licensee did not thoroughly evaluate the identified engineering error issue to ensure that resolutions address causes and extent of conditions commensurate with their safety significance [P.2].

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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

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