

Monticello 2Q/2016 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Mar 31, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

FAILURE TO USE PROCEDURES WHILE PERFORMING ACTIVITIES AFFECTING QUALITY.

An NRC identified finding of very low safety significance (Green) and associated of 10 CFR 50, Appendix B, Criterion V; “Instructions, Procedures, and Drawings”, was identified on February 5, 2016, as a result of the licensee’s failure to use procedures while performing activities affecting quality. Specifically, the licensee failed to accomplish activities affecting quality in accordance with FP-G-DOC-03; “Procedure and Work Instruction Use and Adherence,” in that documented procedures were not used to install a conduit support on safety related Emergency Filtration Train (EFT) Division II conduits. Immediate corrective actions included removal of the support and entering the issue into the licensee’s Corrective Action Program (CAP) 1511349.

The finding was determined to be more than minor because if left uncorrected, the performance deficiency would have the potential to lead to a more significant safety concern. Specifically, the inspectors based this determination on the fact that performing activities affecting quality without using procedures has the potential to adversely affect the design/qualification of a Structure, System, and Component (SSC) or impact the operability or functionality of a system or component. The inspectors determined the finding to have very low safety significance (Green). 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, teamwork because of the licensee’s work group failures to communicate and coordinate their activities within and across organizational boundaries to ensure nuclear safety is maintained.

Inspection Report# : [2016001](#) (*pdf*)

Significance:  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:  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:  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:  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)

Barrier Integrity

Significance:  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*)

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 : August 29, 2016