McGuire 1
3Q/2015 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 05, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Verify Protection System DC Molded Case Circuit Breaker Ratings
•Green: The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," consisting of two examples. In one example, the licensee failed to verify the adequacy of GE model TED molded case circuit breaker (MCCB) design. In the second example, the licensee failed to verify the adequacy of Eaton model HFB MCCB design. The licensee initiated Action Request (AR) 01929605 and AR 193674, which determined the systems were operable because upstream protective devices provided protection from a failed HFB and/or TED MCCBs, and that the HFB and TED MCCBs would be replaced with MCCBs that have adequate ratings.

The licensee's failure to design the Class 1E electric system MCCBs in accordance with IEEE 308-1971 Sections 4.1 and 5.3.5 was a performance deficiency. The team determined that the performance deficiency was more than minor because it was associated with the Design Control attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance (Green) because the deficiency affected the design or qualification of a mitigating structure, system, or component (SSC), but the SSC maintained its operability or functionality. No cross-cutting aspect was applicable because the finding was not indicative of current licensee performance.

Inspection Report# : 2015007 *(pdf)*

Significance: G Jun 05, 2015
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Perform Adequate Periodic Testing of Molded Case Circuit Breakers
•Green: The team identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," consisting of two examples. In one example, the licensee failed to scope some Class 1E molded case circuit breakers (MCCBs) into the Class 1E MCCB testing program. In the second example, the licensee's test procedure pre-conditioned the Class 1E MCCBs before testing their safety function. The licensee initiated Action Request (AR) 1936760 and AR 01934403, which determined the systems were operable because an engineering review of previous TED breaker testing and PM's has not shown a trend of degradation of the breakers ability to perform its function. In addition, the licensee planned develop a more extensive and adequate testing program.

The licensee's failure to perform adequate MCCB testing in accordance with IEEE 308-1971, Section 6.3, "Periodic Equipment Tests," was a performance deficiency. The team determined that the performance deficiency was more

than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was determined to be of very low safety significance (Green) because the deficiency affected the design or qualification of a mitigating structure, system, or component (SSC), but the SSC maintained its operability or functionality. No cross-cutting aspect was applicable because the finding was not indicative of current licensee performance.
Inspection Report# : 2015007 *(pdf)*

Significance: G Dec 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Control Transient Combustible Materials and Ignition Sources in Accordance with the Fire Protection Program
•Green: An NRC-identified Green NCV of the McGuire Unit 1 and Unit 2 Renewed Facility Operating License Condition 2.C.4, "Fire Protection Program (FPP)," was identified for the licensee's failure to adequately control fire ignition sources in the Unit 1 and Unit 2 exterior doghouses in accordance with the FPP requirements of Nuclear System Directive (NSD)-313, "Control of Transient Fire Loads." Specifically, temporary electric portable heaters were energized for several days without implementing required hourly fire watches, locating the energized heaters greater than prescribed separation distances from safety-related equipment, and preventing other transient combustible materials from being located near the heaters. The licensee placed this issue into their corrective action program (CAP) and took corrective actions to de-energize the heaters, distance the heaters away from safety-related feedwater isolation valve electrical cables, and remove unnecessary transient combustibles from the area.

The failure to control fire ignition sources in accordance with NSD-313 was a performance deficiency (PD) . The PD was more than minor because it was associated with the mitigating systems cornerstone attribute of protection against external factors (fire) and adversely affected the cornerstone objective in that, a fire could have affected nearby safety-related feedwater isolation valve electrical cables which provide a shutdown mitigation function. The finding was determined to be of very low safety significance (Green) because it did not affect the ability of the reactor to reach and maintain cold shutdown condition. This finding had a cross cutting aspect of teamwork in the human performance area because individuals failed to effectively communicate and coordinate their activities to ensure that the temporary heaters were energized following prescribed fire protection control measures and written instructions (H.4). (Section 1R05)

Inspection Report# : 2014005 *(pdf)*

Significance: G Dec 31, 2014
Identified By: NRC
Item Type: NCV Non-Cited Violation
Failure to Adequately Implement Containment Closeout Resulting in Loose Debris and Unanalyzed Materials Left in Containment
•Green: An NRC-identified Green NCV of Technical Specification 5.4.1.a, "Procedures," was identified for the failure to properly implement containment cleanliness and material control closeout procedures in accordance with procedure PT/1A/4600/003F, "Containment
Cleanliness and ECCS Operability Inspection," prior to entering Mode 4, following the Unit 1 refueling outage. Specifically, a large amount of unanalyzed general loose debris, as well as scaffolding with aluminum walkboards and fibrous lead blankets, were left in containment that could either contribute to emergency core cooling system (ECCS) recirculation sump screen blockage or containment hydrogen generation during design basis accidents. The licensee placed this issue into their CAP and took corrective actions to remove the loose debris and unanalyzed materials and performed re-inspections of containment to identify any additional loose debris or unanalyzed materials left in

containment.

The failure to perform an adequate containment cleanliness and material control closeout following the Unit 1 refueling outage in accordance with procedure PT/1/A/4600/003F was a PD. The PD was more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone, and adversely affected the cornerstone objective in that, loose debris in containment could result in the debris being transported to the ECCS recirculation sump screens in the event of design basis accident and adversely affect the sump performance. In addition, the PD was associated with the configuration control attribute of the barrier integrity cornerstone and adversely affected the cornerstone objective in that, the failure to control scaffolding that contained unanalyzed amounts of aluminum in containment challenged the existing analysis for containment aluminum inventory limitations. The finding was determined to be of very low safety significance (Green) because it did not result in an actual loss of safety function of the ECCS sumps, was not safety significant due to external events, and no actual open pathway in the physical integrity of containment occurred. The finding had a cross-cutting aspect of field presence in the human performance area because the licensee failed to ensure that adequate supervisory and management oversight of the containment closeout process was conducted to ensure proper performance of procedure PT/1/A/4600/003F prior to entering Mode 4 (H.2). (Section 1R20)
Inspection Report# : 2014005 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the cover letters to security inspection reports may be viewed.

Miscellaneous

Last modified : December 15, 2015