

McGuire 1

4Q/2014 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2014

Identified By: Self-Revealing

Item Type: FIN Finding

Failure to implement adequate design control measures for rod control power supply replacement resulting in reactor trip

A self-revealing finding (FIN) was identified for the licensee's failure to implement adequate design control measures for the rod control power supply modification which resulted in the loss of 24VDC power in the 1AC rod control power cabinet.

The inspectors determined that the licensee's failure to implement adequate design control measures was more than minor because it affected the Design Control attribute of the Initiating Events Cornerstone and adversely affected the cornerstone objective, in that, the insufficient margin in the rod control power supply OVP function caused a multiple drop rod event which resulted in a reactor trip. This finding was determined to have very low safety significance (Green) because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. A cross-cutting aspect was not assigned because the performance deficiency does not reflect current licensee performance. (Section 40A3)

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

Mitigating Systems

Significance:  Dec 31, 2014

Identified By: NRC

Item Type: NCV NonCited 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:  Dec 31, 2014

Identified By: NRC

Item Type: NCV NonCited 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*)

Significance:  Jun 26, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequately Sealed Safety Related Electrical Cabinet

An NRC-identified NCV of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Action, was identified when the licensee failed to promptly identify a condition adverse to quality associated with the inadequate sealing for safety related cabinet 1FWPNRWLP (Unit 1 Refueling Water Storage Tank (RWST) Channel 4 Level Instrumentation

loop). Specifically, the licensee did not identify that the seal around a cable bundle entering the top of 1FWPNRWLP had degraded to the point where it would no longer protect against water intrusion into the cabinet. The licensee placed this issue into their CAP as PIP M-14-05643 and took corrective action by replacing the seal. The inspectors determined that the failure to promptly identify a condition adverse to quality associated with the inadequate sealing of 1FWPNRWLP was a performance deficiency.

This performance deficiency was more than minor because it was associated with the equipment performance attribute of the Mitigating System Cornerstone and adversely affected the cornerstone objective of ensuring the capability of the automatic RWST swap over function to respond to initiating events to prevent undesirable consequences. Using IMC 0609, Significance Determination Process, Appendix A, Exhibit 2 - Mitigating Systems Screening Questions, dated June 19, 2012, the inspectors determined this finding was of very low safety significance (Green) because the finding was not a deficiency affecting the design or qualification and did not represent an actual loss of system and/or function. The finding had a cross-cutting aspect of Procedure Adherence, as described in the Human Performance cross-cutting area because the licensee failed to adequately implement the walkdown process outlined in EDM-203 and promptly identify this degradation (H.8).

Inspection Report# : [2014007](#) (*pdf*)

Significance:  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to adequately control the use of self-extinguishing fire lids

An NRC-identified NCV of the McGuire Unit 1 and Unit 2 Renewed Facility Operating License Condition 2.C.4, FPP, was identified for the licensee's failure to adequately control the storage of transient combustibles in waste receptacles equipped with self-extinguishing fire lids in accordance with the FPP requirements. The licensee took actions to correct all waste receptacles in the plant that were filled beyond the manufacturer's specification or had loosely fitted lids. This condition was placed in the licensee's corrective action program.

The licensee's failure to control the storage of transient combustibles in accordance with the requirements of NSD-313 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 the self-extinguishing function was not retained which could allow the spread of the fire and adversely affect mitigating system equipment in the area. 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 conditions. A cross-cutting aspect was not assigned because the performance deficiency does not reflect current licensee performance. (Section 1R05.2)

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

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

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

Miscellaneous

Last modified : February 26, 2015