

## Farley 1 1Q/2014 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** TBD Mar 31, 2014

Identified By: NRC

Item Type: AV Apparent Violation

**Failure to implement preventive maintenance on 4160V breaker mechanism operated cell switches**

An apparent violation (AV) of Technical Specification (TS) 5.4.1.a, "Procedures," was identified for the licensee's failure to perform preventive maintenance on safety-related 4160V breaker MOC switches in accordance with FNP-0-EMP-1313.12, "Maintenance of Siemens-Allis 4.16kv Metal-Clad Switchgear MOC Switch". Specifically, the licensee did not lubricate 4160V breaker MOC switches in accordance with station procedure FNP-0-EMP-1313.12. The licensee entered this issue into their corrective action program as CR 713134 and replaced the affected MOC switches.

The failure to perform preventive maintenance on safety-related 4160V breaker MOC switches in accordance with FNP-0-EMP-1313.12, "Maintenance of Siemens-Allis 4.16kv Metal-Clad Switchgear MOC Switch," was a performance deficiency. The performance deficiency was more than minor because it adversely affected the equipment performance attribute of 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 failure to perform preventive maintenance procedure FNP-0-EMP-1313.12 adversely affected the reliability and capability of safety-related 4160V MOC switches, as evidenced by the B1G sequencer MOC switch failure on October 4, 2013. The inspectors evaluated the finding using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012. A detailed risk analysis was required by a NRC Senior Reactor Analyst because the finding represented an actual loss of function of at least a single train for greater than its TS-allowed outage time. The finding could not be screened to Green and is pending a final significance determination. The inspectors determined the finding had a cross-cutting aspect of "teamwork" in the human performance area because the licensee did not communicate and coordinate activities within and across organizational boundaries to ensure nuclear safety is maintained. Specifically, the licensee did not coordinate implementation of MOC switch preventive maintenance procedure FNP-0-EMP-1313.12 and the appropriate preventive maintenance "rep-task" was not created for these MOC switches. [H.4] The associated cross-cutting aspect is conditional on the final significance determination being White, Yellow or Red. (Section 1R12)

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

**Significance:**  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

**Lack of acceptance criteria for nuclear instrument channel checks**

The inspectors identified an NCV of 10 CFR 50 Appendix B, Criterion V, "Instructions, Procedures and Drawings," was identified for the licensee's failure to include appropriate quantitative or qualitative acceptance criteria for

determining that important activities have been satisfactorily accomplished. Specifically, licensee procedures FNP-1-STP-1.0 and FNP-2-STP-1.0, "Operations Daily and Shift Surveillance Requirements," did not include acceptance criteria for the intermediate range (IR) neutron flux channel check required by technical specifications (TS). The licensee entered this issue into their corrective action program as CR 775544 and was evaluating corrective actions.

The failure to include appropriate qualitative or quantitative acceptance criteria for the IR nuclear instruments channel check surveillance was a performance deficiency. The performance deficiency was more than minor because it adversely affected the procedure quality attribute of the mitigating systems cornerstone to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the lack of qualitative or quantitative acceptance criteria for the IR channel check impacted the determination of continued operability of the NI-36 instrument channel during the reactor startup. This finding was evaluated using IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," issued June 19, 2012. This finding screened to Green because the questions listed under the Reactivity Control Systems in Exhibit 2, Mitigating Systems Screening Questions of IMC 0609, Appendix A, were answered "No". The inspectors determined the finding had a cross-cutting aspect of "resources" in the human performance area because procedures did not have adequate acceptance criteria to perform TS required IR neutron flux channel checks. [H.1] (Section 1R15)

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

**Significance:** G Sep 30, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

**Failure to implement fire protection program requirements**

A self-revealing NCV of TS 5.4.1.c, "Fire Protection Program Implementation," was identified, because the licensee failed to implement written procedures to cover activities of the Fire Protection Program as documented in Appendix 9B of the updated final safety analysis report (UFSAR). As a result, an inadvertent carbon dioxide (CO<sub>2</sub>) discharge occurred on August 3, 2013 which required evacuation of the Unit 1 auxiliary building and an Alert Emergency declaration. The licensee completed the low pressure (LP) CO<sub>2</sub> system maintenance, replaced the hazard pilot valve and verified it was left in the correct position. Performance of licensee procedure FNP-0-FSP-57.0 was planned for completion per technical evaluation (TE) 704305. This issue was captured in the licensee's CAP as CR 682967. This violation is applicable to Unit 1.

Failure to verify proper operation of hazard pilot valve N1V43G076 following maintenance as required in work order (WO) SNC 54604 was a performance deficiency. The performance deficiency was determined to be more than minor because it was associated with the protection against external events (fire) attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the inadvertent discharge of CO<sub>2</sub> into the Unit 1 auxiliary building resulted in an atmosphere that was determined to be an immediate danger to life and health (IDLH). Respirators would be required in this area which would cause an undue burden on the operators' ability to respond to events requiring manual operator actions. The inspectors evaluated this finding using the NRC's SDP and IMC 0609 Attachment 4, "Initial Characterization of Findings." Because the finding involved a fixed fire protection system, an evaluation using IMC 0609 Appendix F, Attachment 1, "Fire Protection SDP Worksheet," was required. The finding screened to Green because it would not affect the ability to reach and maintain safe shutdown conditions. The inspectors concluded that the time critical operator actions needed to support safe shutdown could be achieved with the use of respirators and operators are properly trained and qualified to use respirators. The cause of this finding was directly related to the cross-cutting aspect of maintenance scheduling in the work control component of the human performance area, because the licensee deferred the performance of procedure FNP-0-FSP-57.0 which would have identified the hazard pilot valve was partially open following completion of maintenance on the valve. [H.3(b)]. (Section 4OA2.2)

Inspection Report# : [2013004](#) (pdf)

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## Barrier Integrity

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### Emergency Preparedness

**Significance:** **W** Dec 31, 2013

Identified By: Licensee

Item Type: VIO Violation

#### Calculation Error Results in Significantly non-Conservative EAL Threshold Values

White: A finding and associated violation of 10 CFR 50.54(q)(2) was identified by the licensee for the failure to follow and maintain the effectiveness of emergency plans which use a standard emergency classification and action level scheme. Specifically, the licensee's emergency plan emergency action level (EAL) Category R – Abnormal Radiological RG1 (General Emergency) and RS1(Site Area Emergency) specified threshold values which were sixty times too high due to a calculation error. As immediate corrective action, the licensee provided the corrected threshold values to appropriate management and decision-makers (shift managers/emergency directors). The licensee entered this issue into the corrective action program as CR 648187.

The performance deficiency was determined to be more than minor because it was associated with the emergency preparedness cornerstone attribute of procedure quality. It impacted the cornerstone objective because it was associated with inappropriate EAL and emergency plan changes and their adequacy to protect the health and safety of the public in the event of a radiological emergency. Specifically, the licensee's ability to declare a Site Area and General Emergency based on effluent radiation monitor values was degraded in that event classification using these radiation monitors would be delayed. The finding was assessed for significance in accordance with NRC Manual Chapter 0609, Appendix B, "Emergency Preparedness Significance Determination Process," which states, "FAILURE TO COMPLY means that a program is noncompliant with a REGULATORY REQUIREMENT." The inspector determined that the situation constituted a degraded rather than failed risk-significant planning standard (RSPS). The issue of concern was similar to the example in Table 5.4.1 (Degraded RSPS) and was determined to be of low to moderate safety significance (White). The violation was determined to meet the IMC 0305 criteria for enforcement discretion as an old design issue. A cross-cutting aspect was not assigned based on the elapsed time since the performance deficiency occurred and because the inspectors determined it was not reflective of current licensee performance. (Section 40A2)

Inspection Report# : [2013005](#) (pdf)

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## Occupational Radiation Safety

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### 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.

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## Miscellaneous

Last modified : May 30, 2014