

## Nine Mile Point 1 4Q/2015 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** G Aug 28, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Inadequate Maintenance Rule Monitoring of Unit 1 600 VAC Breaker Super System**

The inspectors identified a Green non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) 50.65, “Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants,” under section (a)(1) and (a)(2) for failing to properly monitor the 600 volt alternating current (VAC) system at Unit 1 in accordance with established maintenance rule reliability criteria to assure that breakers were capable of performing their intended function. Specifically, the inspectors identified four events that were not evaluated against the established (a)(2) reliability criteria. This resulted in a failure to evaluate the 600 VAC system for potential corrective actions in accordance with (a)(1) and did not ensure effective control through preventive maintenance to show the system was capable of performing its intended function in accordance with (a)(2). Exelon’s immediate corrective actions included evaluations of the failures and planning for a maintenance rule expert panel for consideration of placing the system into (a)(1) where corrective actions could be developed to return the system to (a)(2) monitoring. Exelon also noted that issue report (IR) 02416790 documented the challenge associated with overcurrent trip device drift and subsequent pump failures. This IR was open at the time of the inspection with actions to determine if a replacement is possible and to present any potential options to Plant Health Committee in October 2015.

This performance deficiency is more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the overcurrent trip devices associated with Unit 1 600 VAC General Electric (GE)-AK breakers were unreliable and resulted in the trip of five safety-related pumps between April 2013 and February 2014. Only one of the five functions was evaluated by Exelon. This impacted the ability of these pumps to be able to perform their function to provide cooling to their respective systems. In accordance with Inspection Manual Chapter (IMC) 0609.04, “Initial Characterization of Findings,” and IMC 0609, Appendix A, “The Significance Determination Process for Findings At-Power,” issued June 19, 2012, the inspectors determined this finding was of very low safety significance (Green) because this finding did not represent an actual loss of system safety function, did not represent an actual loss of function of at least a single train for greater than its technical specification (TS) allowed outage time, and did not represent an actual loss of function of one or more non-TS trains of equipment designated as high safety-significant in accordance with Exelon’s maintenance rule program for greater than 24 hours. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Evaluation, because Exelon failed to thoroughly evaluate the failures against the monitoring criteria specified for the Unit 1 600 VAC breaker super system. Specifically, between April 2013 and February 2014, four breaker failures were identified by the inspectors that were not evaluated against the Unit 1 600 VAC breaker super system, which prevented compliance with 10 CFR 50.65 (a)(1) to ensure corrective actions are established to return the system to (a)(2) monitoring. [P.2]

Inspection Report# : [2015009](#) (pdf)

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## Barrier Integrity

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### Emergency Preparedness

**Significance:**  Mar 31, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Failure to Declare Notice of Unusual Event Following Sodium Bisulfite Spill in Unit 1 Screenhouse**

The inspectors documented a Green NRC-identified NCV of 10 CFR 50.54(q)(2) when Exelon failed to declare a Notice of Unusual Event Emergency Action Level (EAL) (HU3.1) when entry conditions were met. Specifically, on February 4, 2015, between 9:55 a.m. and 11:15 a.m., access to the screen house was prohibited due to the release of a toxic gas that adversely affected normal plant operations following a spill of sodium bisulfite. Immediate corrective actions included Exelon entering the issue into their corrective action program (CAP) as issue report (IR) 02474142, formally evaluating the decision-making process used during the incident, and clarifying responsibilities for air sampling and the reporting of samples during incidents in the future.

This finding is more than minor because it was associated with the Emergency Preparedness cornerstone attribute of Emergency Response Organization Performance, and affected the cornerstone objective of ensuring that a licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Specifically, between 9:55 a.m. and 11:15 a.m., access to the Unit 1 screen house was prohibited due to the release of sodium bisulfite to the screen house, affecting normal plant operations of the station.

This finding was evaluated using IMC 0609, Appendix B, "Emergency Preparedness SDP," Section 4, "Failure to Implement." The performance deficiency is associated with the emergency classification planning standard and is considered a risk-significant planning standard (RSPS). The failure to declare a Notice of Unusual Event when directed by the EAL matrix is considered a lost or degraded RSPS in accordance with Section 4 of IMC 0609. Section 4.3.c and Attachment 1 of IMC 0609, Appendix B, provide the significance determination for a "Failure to Implement," and the performance deficiency was determined to be of very low safety significance (Green). The inspectors determined that the cross-cutting aspect that contributed most to the root cause is Human Performance, Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding. Specifically, during the event, an unknown substance was released and at no point was atmospheric analysis used in the EAL declaration decision-making process. Furthermore, although spill response personnel were experiencing symptoms that were not consistent with exposure to a spill of sodium bisulfite, this unexpected condition was not fully assessed by NMPNS for significance and reportability in accordance with procedures [H.11].

Inspection Report# : [2015001](#) (pdf)

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## Occupational Radiation Safety

**Significance:**  Jun 30, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

**Failure to Notify Changes to Work Scope**

The inspectors identified a self-revealing non-cited violation of Unit 1 Technical Specification (TS) 6.4, "Procedures," for failure to follow the planned scaffold erection work scope that resulted in two personnel receiving unplanned internal exposures. Specifically, on January 6, 2015, workers erecting scaffolding changed the work scope that specified the use of new equipment and used unsurveyed highly contaminated scaffold parts instead, without notifying radiation protection staff of the change in work scope that resulted in two workers receiving unplanned, unintended internal radiation exposures.

The failure to follow the planned work scope is a performance deficiency. The performance deficiency constitutes a finding that is more than minor because the performance deficiency was associated with the Occupational Radiation Safety attribute of program and process and adversely affected the cornerstone objective in the protection of workers from exposure to radioactive material. Specifically, failure to follow the planned work scope resulted in two personnel receiving unplanned internal exposures. The finding is not subject to traditional enforcement, because it did not affect the regulatory process or result in actual safety consequences. Using Inspection Manual Chapter 0609, Appendix C, "Occupational Radiation Safety Significance Determination Process," the finding is of very low safety significance (Green) because it did not involve as low as reasonably achievable occupational collective exposure planning and controls, an overexposure, a substantial potential for overexposure, or an impaired ability to assess dose. The cause of the finding is related to the cross-cutting area of Human Performance, Challenge the Unknown, because when workers discovered potentially contaminated scaffold materials in the work area, they did not question whether or not it was appropriate to use the material in their job and did not raise the question to their supervisors or Exelon Generation Company, LLC radiation protection technicians prior to deviating from the planned and briefed work scope. As a result, the radiological risks were not evaluated before proceeding to utilize the unsurveyed highly contaminated components, which resulted in unintended internal radiation exposures to the workers.

Inspection Report# : [2015002](#) (*pdf*)

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## Public Radiation Safety

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### 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

**Significance:** N/A Sep 15, 2015

Identified By: NRC

Item Type: FIN Finding

**Biennial PI&R Assessment**

The inspectors concluded that Exelon Generating Company, LLC (Exelon) was generally effective in identifying, evaluating, and resolving problems. Exelon personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. Exelon appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Exelon typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner. However, the inspectors identified two violations of NRC requirements in the area of evaluation of problems.

The inspectors concluded that, in general, Exelon adequately identified, reviewed, and applied relevant industry operating experience to NMPNS operations. In addition, based on those items selected for review, the inspectors determined that Exelon's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

Inspection Report# : [2015009](#) (*pdf*)

**Significance:** N/A Apr 10, 2015

Identified By: Licensee

Item Type: VIO Violation

**Incomplete/Inaccurate Medical Information Resulted in Issuance of Multiple Operator Licenses without Required Medical Restrictions and Failure to Report Permanent Changes in Medical Status**

On April 10, 2015, the U.S. Nuclear Regulator Commission (NRC) issued a Severity Level (SL) III Notice of Violation (NOV) to Exelon Generation Company, LLC (Exelon) for an issue involving two related violations identified during an inspection at Nine Mile Point Nuclear Station (ML15100A341). The first violation involved Exelon's failure, on multiple occasions, to notify the NRC within 30 days as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.74 (c) of medical conditions of licensed reactor operators and senior reactor operators involving permanent disabilities/illnesses. The second violation involved the submittal by Exelon of information to the NRC that was not complete and accurate in all material respects as required by 10 CFR 50.9. Subsequently, the NRC, based, in part, on this inaccurate information, issued reactor operator licenses without the required restricting license conditions. The NRC concluded that both violations resulted from Exelon's failure to oversee the licensed operator medical examination process and to train the medical staff involved with the process on the requirements of American National Standards Institute/American Nuclear Society 3.4-1983, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants," and 10 CFR Part 55. Accordingly, these violations were categorized collectively as one SL III problem to emphasize the importance of providing suitable training, oversight, and focus on licensed operator medical requirements. In December 2015, an Inspection Procedure 92702 follow-up inspection was conducted closing the NOV in the fourth quarter inspection report.

Inspection Report# : [2015004](#) (*pdf*)

Inspection Report# : [2015008](#) (*pdf*)

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