

## Nine Mile Point 1 3Q/2014 Plant Inspection Findings

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### Initiating Events

**Significance:** G Jun 30, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Correct a Significant Condition Adverse to Quality in a Timely Manner**

The inspectors identified a non-cited violation of Title 10 of the Code of Federal Regulations Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to ensure that corrective actions to preclude repetition for a significant condition adverse to quality were not implemented in a timely manner. Specifically, corrective actions to preclude repetition for the April 16, 2013, loss of shutdown cooling event to revise two inadequate Unit 1 procedures had not been completed over a year later. If left uncorrected, the inspectors determined there was the potential for 10 different pumps and breakers to unexpectedly trip upon restoration of a direct current (DC) bus. The loss of several of these pumps and loads would result in an unexpected plant transient or require a manual reactor trip. Exelon Generation (Exelon) wrote condition report (CR)-2014-005693 in response to the inspectors' questions and determined that inadequate resources were assigned to this corrective action to preclude repetition. Procedures N1-OP-47A, "125 VDC Power System," and N1-SOP-47A.1, "Loss of DC," were subsequently reviewed and issued on June 12, 2014.

This finding is more than minor because it impacted the procedure quality attribute of the Initiating Events cornerstone and adversely affected the associated cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, if left uncorrected, there was the potential for 10 different pumps and breakers to unexpectedly trip upon restoration of a DC bus. Several of these pumps and loads would result in an unexpected plant transient or require a manual reactor trip. In accordance with Inspection Manual Chapter (IMC) 0609.04, "Initial Characterization of Findings," and Exhibit 1 of IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," the inspectors determined that this finding is of very low safety significance (Green) because the finding did not involve the complete or partial loss of a support system that contributes to the likelihood of, or cause, an initiating event and affected mitigation equipment. This finding has a cross-cutting aspect of in the area of Problem Identification and Resolution, 'Resolution', because Exelon did not take effective corrective actions to address an issue in a timely manner commensurate with its safety significance. Specifically, Exelon failed to implement corrective actions to preclude repetition (CA#1 from CR-2013-002926) to revise procedures N1-SOP-47A.1 and N1-OP-47A to ensure recovery from a loss of a DC bus would not result in an unexpected plant transient a year after the event had occurred (P.3).

Inspection Report# : [2014003](#) (*pdf*)

**Significance:** G Dec 01, 2013

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **Improper Bus Restoration Results in a Loss of Shutdown Cooling**

The inspectors documented a violation of Unit 1 Technical Specification (TS) 6.4.1, "Procedures," because Constellation Energy Nuclear Group (CENG) failed to properly restore from a loss of a vital direct current (DC) bus in accordance with station

off-normal procedures resulting in an unplanned loss of all shutdown cooling (SDC) when time to boil was less than 2 hours. Specifically, operators failed to recognize a potential for loss of SDC during battery bus 12 restoration in accordance with N1-SOP-47A.1, "Loss of DC," Revision 00101, and N1-OP-47A, "VDC Power System," Revision 02500.

Inspection Report# : [2013010](#) (*pdf*)

**Significance:**  Dec 01, 2013

Identified By: NRC

Item Type: FIN Finding

#### **Configuration Control error results in loss of a vital DC Bus**

The inspectors documented a self-revealing Green finding of CENG's Conduct of Maintenance procedure, CNG-MN-1.01-1000, because CENG personnel failed to verify they were on the proper equipment prior to commencing maintenance activities. Additionally, Risk Management Activities recommended by CNG-OP-4.01-1000, "Integrated Risk Management," such as temporary barriers and signs were not hung to for the protected #12 SDC train and vital 125 VDC battery bus to ensure workers did not assess protected equipment

Inspection Report# : [2013010](#) (*pdf*)

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## **Mitigating Systems**

**Significance:**  Mar 31, 2014

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Design Control Measures Employed During Control Room HVAC Modification**

The inspectors identified a Green non-cited violation of Title 10 of the Code of Federal Regulations (10 CFR) 50, Appendix B, Criterion III, "Design Control," because Constellation Energy Nuclear Group, LLC (CENG) did not implement adequate design controls to ensure piping in the reactor building closed loop cooling (RBCLC) system remained operable while implementing a modification to the Unit 1 control room heating and ventilation system. Specifically, while implementing the modification, CENG personnel removed permanent plant supports and piping for the safety-related RBCLC system and did not fully assess how this change could impact the operability of the system with respect to a hydraulic shock or seismic acceleration event. In response to this observation, CENG initiated condition report CR-2014-001676 and evaluated the condition for operability. Existing temporary supports were enhanced to provide additional margin by bracing the structure for horizontal loads. An extent-of-condition walkdown was performed and no additional issues of concern were identified. Subsequently, CENG's operability review determined the RBCLC system had remained operable.

This finding was more than minor because it was associated with the design control attribute of the Mitigating Systems cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, while implementing the modification, CENG removed permanent plant supports and piping for the safety-related RBCLC system and did not fully assess how this change could impact the operability of the system if a hydraulic shock or seismic acceleration occurred. This finding is also similar to Examples 3.j and 4.k in Inspection Manual Chapter (IMC) 0612, Appendix E, "Examples of Minor Issues," where a temporary modification was installed without adequate design information and adequate design controls were not implemented leading to a reasonable doubt of operability of plant components. In

accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 2 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," the inspectors determined this finding is of very low safety significance (Green) because the performance deficiency was a design or qualification deficiency that did not result in the inoperability of the RBCLC system. The finding has a cross-cutting aspect in the area of Human Performance, Work Management, because CENG failed to implement a process of planning, controlling, and executing work activities such that nuclear safety is the overriding priority. Specifically, CENG failed to ensure that the installed temporary supports were adequate to ensure the RBCLC piping would not be stressed above code allowable values in the event of a seismic acceleration or hydraulic shock event prior to removing the permanently installed seismic supports

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

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## Barrier Integrity

**Significance:**  Dec 31, 2013

Identified By: NRC

Item Type: NCV NonCited Violation

### Failure to Perform Surveillance Test for Unit 1 Smoke Removal Dampers

The inspectors identified a Green NCV of Unit 1 license condition DPR-63, Section 2.D(7), "Fire Protection," because CENG staff did not perform visual inspections of fire dampers associated with Unit 1 between 2002 and 2013 in accordance with the Fire Protection Program and Updated Final Safety Analysis Report (UFSAR) Section 10A.2.4.1.10.1.A. As a result, CENG staff determined 25 dampers were non-functional due to the surveillance test not being performed. CENG staff's planned corrective actions include revising the UFSAR to state that performance-based testing requirements apply only to non-smoke removal dampers. Further, the 25 smoke removal dampers will remain non-functional until visual inspections can be performed as planned in work order (WO) C92482273. This issue was entered into CENG's CAP as CR-2013-009208.

This finding is more than minor because it is associated with the structure, system, and component (SSC) and barrier performance attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers protect the operators in the control room from radionuclide releases caused by accidents or events. The finding was evaluated in accordance with IMC 0609.04, "Initial Characterization of Findings," and Exhibit 3 of IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power," issued June 19, 2012, and the inspectors determined that this finding is of very low safety significance (Green) because the performance deficiency only represented a degradation of the smoke removal and radiological barrier function provided for the control room. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because CENG staff failed to identify smoke removal damper visual inspections were not being performed. Specifically, UFSAR section 10A.2.4.1.10.1.A, as part of license condition DPR-63 2.D(7) and the Fire Protection Program, requires CENG staff to perform visual inspections of smoke removal dampers, which was not being performed between 2002 and 2013, resulting in the control room envelope not being operable and 25 smoke removal dampers being declared non-functional. CENG performed an evaluation to determine if the control room habitability requirements contained in TS 3.4.5.f for the control envelope were met. CENG staff subsequently determined that Unit 1 control room habitability requirements of TS 3.4.5.f were met based on previous successful surveillance testing for control room operability testing under N1-ST-C9, "Control Room Emergency Ventilation System Testing," Revision 01502

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

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## Emergency Preparedness

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## Occupational Radiation Safety

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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

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