

# Calvert Cliffs 1

## 4Q/2016 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

#### **Scaffolding Impairs Fire Sprinkler Systems in Safety Related Fire Areas**

• Green. The inspectors identified a Green, NCV of CCNPP Renewed Facility Operating License for Units One and Two, paragraph 2.E for Exelon's failure to maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report (UFSAR). Specifically, Exelon installed scaffolding in safety related areas not in accordance with approved procedures and, therefore, impaired fire sprinkler systems that were required by the approved fire protection program without establishing approved contingency measures. The inspectors determined that Exelon's impairment of fire sprinkler systems by installing scaffolding with dimensions exceeding those approved in Exelon procedure MA-AA-716-025 was a performance deficiency that was within Exelon's ability to foresee and prevent. The performance deficiency led to the violation of CCNPP Renewed Facility Operating License, paragraph 2.E, because Exelon failed to maintain in effect all provisions of the approved fire protection program. Exelon's immediate corrective actions included stationing continuous fire watches and removal of the scaffolding deck boards which were impairing the fire sprinkler systems. Exelon entered these issues in to their corrective action program (CAP) as issue reports (IR): 02642463, 02642549, 02642844, 02644495, 02647104, 02647454, and 02647455.

The inspectors reviewed IMC 0612, Appendix B, "Issue Screening," and determined the issue is more than minor because it adversely affected the protection against external factors attribute of the Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, Exelon installed scaffolding that exceeded the allowed dimensions in MA-AA-716-025 and impaired the function of fire sprinkler systems in areas containing safety related equipment. The inspectors evaluated the finding using IMC 0609, Attachment 4, "Initial Characterization of Findings," issued on June 19, 2012, and IMC 0609, Appendix F, "The Fire Protection SDP Worksheet" issued on September 20, 2013 and determined the finding to be of very low safety significance (Green) because, in all cases of impairment, the fire sprinkler systems were still capable of protecting their intended targets or were still capable to suppress fires such that no additional equipment important to safety would have been affected. The inspectors determined that the finding had a cross-cutting aspect in the area of Human Performance, Procedure Adherence, because Exelon failed to properly implement procedure MA-AA-716-025, "Scaffold Installation, Modification, and Removal Request Process," Revision 11, which limits scaffolding dimensions and locations when installing scaffolding in safety related areas. [H.8] (Section 1R05)

Inspection Report# : [2016002](#) (pdf)

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## Barrier Integrity

**Significance:**  Sep 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

### **Deficient Design Control of Air Pressure Available for Unit 1 Component Cooling Water Air Operated Valves**

•Green. The inspectors identified a Green non-cited violation (NCV) of Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix B, Criterion III, “Design Control,” for Exelon’s failure to establish measures to assure that the design basis was correctly translated into specifications affecting safety related functions of air operated valves (AOV). Specifically, when implementing a design change, Exelon failed to verify the air pressure supplied to AOVs in the component cooling (CC) water system was adequate to ensure that the valves would have performed their safety function to close during certain specific accident conditions. The inspectors determined that Exelon’s failure to verify ECP-15-000213 ensured that air pressure supplied to safety related Unit 1 CC heat exchanger (HX) outlet AOVs was sufficient to support their safety function of closing during a design basis accident (DBA) was a performance deficiency that was reasonably within its ability to foresee and correct and should have been prevented. Exelon’s immediate corrective actions included conducting an engineering evaluation that demonstrated the operability of the CC system in the degraded condition and increasing the air pressure supplied to the CC HX outlet valves to ensure the valves are capable of fully closing during a DBA. Exelon entered this issue into its corrective action program (CAP) as action request (AR) 02680281.

The inspectors reviewed IMC 0612, Appendix B, “Issue Screening,” and determined the issue is more than minor because it adversely affected the design control attribute of the Barrier Integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors also reviewed IMC 0612, Appendix E, “Examples of Minor Issues,” and found it was sufficiently similar to Example 3.j, in that the design analysis deficiency resulted in a condition where reasonable doubt existed regarding the operability of the Unit 1 CC HX outlet valves. In accordance with IMC 0609, Attachment 4, “Initial Characterization of Findings,” issued on June 19, 2012, and IMC 0609, Appendix A, “The Significance Determination Process for Findings at Power,” issued on June 19, 2012, the inspectors determined that this finding is of very low safety significance (Green) since, the finding did not involve an actual open pathway in the physical integrity of reactor containment. The inspectors determined that the cause of the finding has a cross-cutting aspect in the area of Human Performance, Documentation, because Exelon’s AOV program, as implemented by ER AA 410, “Air Operated Valve Implementing Program,” Revision 2, did not require that complete, accurate, and up-to-date documentation on the CC HX outlet valves’ design be maintained. [H.7] (Section 1R15)

Inspection Report# : [2016003](#) (*pdf*)

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## Emergency Preparedness

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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

**Significance:** N/A Jun 30, 2016

Identified By: NRC

Item Type: NCV Non-Cited Violation

**Failure to report conditions as required per 10 CFR 50.73**

•Severity Level IV. The inspectors identified a Severity Level IV, NCV of 10 CFR 50.73(a)(2) for Exelon's failure to report within 60 days of discovery, a condition that could have prevented the fulfillment of the safety function of the service water (SRW) system needed to mitigate the consequences of an accident. Additionally, Exelon failed to report within 60 days of discovery, a single condition that caused two trains of the SRW system, a system designed to mitigate the consequences of an accident, to become inoperable. Exelon entered the issue into their CAP as IR 02688409 and on July 20, 2016, submitted LER 05000317/2016-004-00, High Energy Line Break Barrier Breached Due to Human Performance Error Causing Both Service Water Trains to be Inoperable.

The inspectors determined that Exelon's failure to report a single condition that caused the inoperability of two trains of SRW and may have prevented SRW from fulfilling its design functions to mitigate the consequences of an accident within 60 days of discovering the condition was a violation of 10 CFR 50.73(a)(2), and could have impacted the regulatory process. The inspectors reviewed IMC 0612, Appendix B, "Issue Screening," and the NRC Enforcement Policy, revised February 4, 2015, and determined the violation is of SL-IV because it is most similar to example 6.9.d.9 of the NRC Enforcement Policy, "A licensee fails to make a report required by 10 CFR 50.72 or 10 CFR 50.73," which is a SL-IV violation. The inspectors determined that the violation did not have a cross-cutting aspect because it involved the traditional enforcement process only. (Section 40A1)

Inspection Report# : [2016002](#) (*pdf*)

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