



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
2100 RENAISSANCE BLVD.  
KING OF PRUSSIA, PA 19406-2713

July 6, 2016

EA-16-057

Mr. Bryan Hanson  
Senior Vice President, Exelon Generation  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION – FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING WITH ASSESSMENT FOLLOW-UP AND NOTICE OF VIOLATION - INSPECTION REPORT 05000219/2016010

Dear Mr. Hanson:

This letter provides you the final significance determination for the preliminary White finding discussed in the U.S. Nuclear Regulatory Commission (NRC) letter dated May 12, 2016, which included NRC Inspection Report Numbers 05000219/2016001 and 05000219/2016009 (ML16132A436).<sup>1</sup> The finding involved the failure by Exelon to maintain a flexible coupling hose, which provides cooling water to the emergency diesel generator (EDG) No. 1, in support of its safety function. Specifically, the flexible coupling hose was in service for approximately 22 years and subjected to thermal degradation and aging that eventually led to failure of EDG No. 1 on January 4, 2016. The NRC determined that this finding involved a violation of Title 10 of the *Code of Federal Regulations* (CFR), Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," as cited in the attached Notice of Violation (Notice). Additionally, Exelon violated Technical Specification 3.7.C, since EDG No. 1 was determined to be inoperable for greater than the technical specification allowed outage time of seven days. The circumstances surrounding this issue were described in detail in the subject inspection report.

In a telephone conversation with Mr. Silas Kennedy of NRC, Region I, on May 18, 2016, Mr. Mike McKenna, of your staff, indicated that Exelon did not contest the characterization of the risk significance of this finding and that you declined your opportunity to discuss this issue in a Regulatory Conference or to provide a written response. According to NRC Inspection Manual Chapter (IMC) 0609, appeal rights only apply to those licensees that have either attended a regulatory conference or submitted a written response to the preliminary determination letter.

In accordance with the NRC Enforcement Policy, the Notice is considered an escalated enforcement action because it is associated with a White finding. You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. If you have additional information that you believe the NRC should consider, you may provide it in your response to the Notice. The NRC review of your response to the

---

<sup>1</sup> Designation in parentheses refers to an Agency-wide Documents Access and Management System (ADAMS) accession number. Documents referenced in this letter are publicly-available using the accession number in ADAMS.

B. Hanson

-2-

Notice will also determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

As a result of this White finding in the Mitigating Systems Cornerstone, the NRC has assessed Oyster Creek to be in the Regulatory Response column of the NRC Action Matrix, retroactive to the first calendar quarter of 2016. The NRC plans to conduct a separate supplemental inspection for this finding in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," following Exelon's notification of readiness for this inspection. This inspection is conducted to provide assurance that the root causes and contributing causes of any performance issues are understood, the extent of condition is identified, and the corrective actions are sufficient to prevent recurrence.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Should you have any questions regarding this matter, please contact Mr. Silas Kennedy, Chief, Projects Branch 6, Division of Reactor Projects in Region I, at (610) 337-5046.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Dorman" with a stylized flourish at the end.

Daniel H. Dorman  
Regional Administrator

Docket No. 50-219  
License No. DPR-16

Enclosure:  
Notice of Violation

cc w/encl: Distribution via ListServ

Enclosure  
NOTICE OF VIOLATION

Exelon Nuclear  
Oyster Creek Nuclear Generating Station

Docket No. 50-219  
License No. DPR-16  
EA-16-057

During an NRC inspection conducted from January 1, 2016 through March 31, 2016, and for which an inspection exit meeting was conducted on April 29, 2016, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Oyster Creek Technical Specification 3.7.C.2.b requires that if one diesel generator becomes inoperable during power operation, the reactor may remain in operation for a period not to exceed 7 days.

Contrary to the above, since 2002, Exelon did not appropriately prescribe an activity affecting quality, in documented instructions, associated with maintenance of Oyster Creek's EDGs to ensure the cooling water system flexible coupling hose was maintained to support the EDG safety function. Specifically, Exelon did not have appropriate work instructions to replace the EDG cooling flexible coupling hoses every 12 years as specified by Exelon's procedure and vendor information. As a result, the flexible coupling hose remained in service for approximately 22 years and was subjected to thermal degradation and aging that eventually led to a failure of EDG No. 1 during a surveillance test on January 4, 2016. In addition, based on analysis of the hose failure and review of past operability, the NRC determined that EDG No. 1 was inoperable for a period greater than its technical specification allowed outage time of seven days.

This violation is associated with a White Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, Exelon Nuclear is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at Oyster Creek Nuclear Generating Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation; EA-16-057" and should include for the violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, Exelon may be required to post this Notice within two working days of receipt.

Dated this 6<sup>th</sup> day of July 2016.