



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PA 19406-1415

August 3, 2010

EA-10-080

George H. Gellrich, Vice President  
Calvert Cliffs Nuclear Power Plant, LLC  
1650 Calvert Cliffs Parkway  
Lusby, Maryland 20657-4702

**SUBJECT: FINAL SIGNIFICANCE DETERMINATION OF WHITE FINDING, WITH ASSESSMENT FOLLOW-UP, AND NOTICE OF VIOLATION – CALVERT CLIFFS NUCLEAR POWER PLANT [NRC Special Inspection Report No. 05000317/2010006 AND 05000318/2010006]**

Dear Mr. Gellrich:

This letter provides you the final significance determination of the preliminary White finding sent to you with the NRC letter dated June 14, 2010, as well as the result of our assessment of the current performance of Calvert Cliffs Nuclear Power Plant (CCNPP) Units 1 and 2. This updated assessment of CCNPP supplements, but does not supersede, our annual assessment letter issued on March 3, 2010. The finding, described in detail in the subject inspection report, involved the failure to develop and implement scheduled preventative maintenance for safety-related Agastat E7000 series time delay relays that are used in the protective logic for the 2B Emergency Diesel Generator (EDG). This resulted in a failure of the time delay relay which caused the 2B EDG to trip when called upon to energize the 24.4 kV safety bus during an event on February 18, 2010. The finding was reviewed during an inspection, for which an exit meeting was held on April 30, 2010.

In a letter dated June 24, 2010, CCNPP responded to the NRC preliminary determination and stated that it acknowledged the characterization of the risk significance of this finding and did not plan to discuss this issue in a Regulatory Conference or to provide a written response. Therefore, after considering the information developed during the inspection, and having assessed the finding using the reactor safety significance determination process, the NRC has concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance. The NRC has also determined that the finding is a violation of Technical Specification (TS) 5.4.1, as described in the attached Notice of Violation (Notice). The NRC considered citing a violation for the EDG being inoperable for a time in excess of the allowed outage time specified in the TS. However, the NRC decided to cite the violation related to deficiencies in your performance monitoring and maintenance activities, because this violation most appropriately captures the deficiencies that directly contributed to the EDG inoperability.

In accordance with the NRC Enforcement Policy, the Notice is considered 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.

As a result of our review of CCNPP performance, including this White finding in the Mitigating Systems Cornerstone, we have assessed CCNPP Unit 1 to remain in the Licensee Response

Mr. Gellrich

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column of the NRC's Action Matrix (Matrix), and for Unit 2 to be in the Regulatory Response column of the Matrix. Therefore, for Unit 2, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," when your staff has notified us of your readiness for this inspection. This inspection is conducted to provide assurance that the root cause and contributing causes of risk significant 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.

Sincerely,



Marc L. Dapas  
Acting Regional Administrator

Docket No. 50-317, 50-318  
License No. DPR-53, DPR-69

Enclosure:  
Notice of Violation

cc w/encl: Distribution via ListServ

## NOTICE OF VIOLATION

Calvert Cliffs Nuclear Power Plant, LLC  
Calvert Cliffs Nuclear Power Plant

Docket No. 50-317, 50-318  
License No. DPR-53, DPR-69  
EA-10-080

During an NRC inspection, for which an exit was conducted on April 30, 2010, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Technical Specification 5.4.1 states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978.

Section 9.b. of Appendix A to Regulatory Guide 1.33 states, in part, that preventive maintenance schedules should be developed to specify inspection or replacement of parts that have a specific lifetime.

Engineering Change Package No. ES200100067, issued in March 2001, specified that a performance monitoring program would be used to meet the requirement for inspection or replacement of safety-related Agastat E7000 series time delay relays to ensure the continued reliability and operability beyond the vendor recommended 10-year lifetime.

Contrary to the above, the licensee failed to develop and implement scheduled preventive maintenance for Agastat E7000 series time delay relays. Specifically, subsequent to the approval of Engineering Change Package No. ES200100067, issued in March 2001, the licensee did not replace the relays within the vendor recommended 10-year lifetime, nor establish a performance monitoring program. Consequently, on February 18, 2010, an Agastat E7000 series time delay relay that had a lifetime in excess of 10 years, used in the 2B emergency diesel generator (EDG) protective logic, timed out early and failed to support a demand fast start and run of the 2B EDG. This resulted in the EDG becoming inoperable with the resultant loss of alternating current to the 24 safeguards bus during the dual unit trip that occurred on February 18, 2010.

This violation is associated with a White SDP finding.

Pursuant to the provisions of 10 CFR 2.201, Calvert Cliffs Nuclear Power Plant, LLC 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 Inspectors, 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-10-080" and should include for the violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, 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, you may be required to post this Notice within two working days of receipt.

Dated this 3rd day of August 2010

column of the NRC's Action Matrix (Matrix), and for Unit 2 to be in the Regulatory Response column of the Matrix. Therefore, for Unit 2, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," when your staff has notified us of your readiness for this inspection. This inspection is conducted to provide assurance that the root cause and contributing causes of risk significant 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.

Sincerely,

*/RA/*

Marc L. Dapas  
Acting Regional Administrator

Docket No. 50-317, 50-318  
License No. DPR-53, DPR-69

Enclosure:  
Notice of Violation

cc w/encl: Distribution via ListServ

SUNSI Review Complete: aed (Reviewer's Initials)

Non-Public Designation Category: MD 3.4 Non-Public N/A (A.3 – A.7 or B.1)

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\*Concurrence on previous sheet

\*\* via email dated 7/23/10

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