



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
475 ALLENDALE RD, SUITE 102  
KING OF PRUSSIA, PA 19406-1415

October 26, 2023

EA-23-097

David P. Rhoades  
Senior Vice President  
Constellation Energy Generation, LLC  
President and Chief Nuclear Officer (CNO)  
Constellation Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

**SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1 – FINAL  
SIGNIFICANCE DETERMINATION OF A WHITE FINDING WITH  
ASSESSMENT FOLLOW-UP AND NOTICE OF VIOLATION; INSPECTION  
REPORT 05000317/2023090**

Dear David Rhoades:

This letter provides you the final significance determination of the preliminary White finding and associated apparent violation discussed in U. S. Nuclear Regulatory Commission (NRC) Inspection Report 05000317/2023050 issued on September 29, 2023 (ML23272A027)<sup>1</sup>. The finding involved a failure by staff at the Calvert Cliffs Nuclear Power Plant (Calvert Cliffs) to adequately establish and implement maintenance instructions and practices that reasonably ensured the reliability, availability, and operability of the 1A emergency diesel generator (1A EDG) since the engine was originally commissioned. Adequate instructions, guidance, and part replacement frequencies relevant to the 1A EDG and the associated lube oil and fuel oil systems, in part, would have ensured appropriate preventive maintenance actions. The failure to perform these maintenance tasks consistent with station and vendor guidance caused or contributed to an imbalanced fuel condition in the engine, ultimately resulting in its failure on April 24, 2023.

In a letter dated October 6, 2023 (ML23279A120), Peter Moodie, Plant Manager, Calvert Cliffs Nuclear Power Plant, confirmed that Constellation Energy Generation, LLC did not contest the characterization of the risk significance of this finding and that you declined your opportunity to discuss this issue at a Regulatory Conference or to provide a written response. Therefore, after considering the information developed during the inspection, the NRC has concluded that the finding is appropriately characterized as White, a finding of low to moderate safety significance. Note: 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

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<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.

response to the preliminary determination letter.

The NRC has also determined that the failure to establish and implement appropriate procedures and instructions that could affect the performance of the safety-related 1A EDG is a violation of Calvert Cliffs Technical Specifications as cited in the enclosed Notice of Violation (Notice). The circumstances surrounding the violation were described in detail in the subject inspection report. In accordance with the NRC Enforcement Policy, the Notice is considered an escalated enforcement action because it is associated with a White finding.

The NRC has concluded that the information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved is already adequately addressed on the docket in NRC Inspection Report 05000317/2023050. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position.

As a result of this White finding in the Mitigating Systems Cornerstone, the NRC has assessed Calvert Cliffs Unit 1 to remain in the Regulatory Response column of the NRC's Reactor Oversight Process Action Matrix described in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program." This White finding input is retroactive to the third calendar quarter of 2023. The NRC plans to conduct a supplemental inspection for this finding in accordance with Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response) Inputs," following Constellation'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, if you choose to provide one, 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,

Raymond K. Lorson  
Regional Administrator

Docket No. 05000317  
License No. DPR-15

Enclosure:  
Notice of Violation

cc w/encl: Distribution via LISTSERV

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1 – FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING WITH ASSESSMENT FOLLOW-UP AND NOTICE OF VIOLATION; INSPECTION REPORT 05000317/2023090: DATED

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## NOTICE OF VIOLATION

Constellation Energy Generation, LLC  
Calvert Cliffs Nuclear Power Plant, Unit 1

Docket No. 05000317  
License No. DPR-15  
EA-23-097

During an NRC inspection conducted from May 1, 2023, through August 31, 2023, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Calvert Cliffs Nuclear Power Plant, Unit 1 TS 5.4.1, "Procedures," requires, in part, that written procedures shall be established, implemented, and maintained covering the activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Regulatory Guide 1.33, section 9, recommends procedures for performing maintenance that can affect the performance of safety-related equipment and states it should be properly pre-planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances.

Contrary to this requirement, prior to April 24, 2023, and as early as 1996 (since 1A EDG installation), Constellation failed to establish and implement appropriate procedures and instructions for performing maintenance that can affect the performance of the safety-related 1A EDG. Specifically, the licensee did not incorporate into its maintenance procedures and work orders recommendations from the vendor technical manual and requirements from the station maintenance template to inspect and/or replace specified components to ensure reliable operation of the EDG. This ultimately led to an imbalanced fueling condition and loss of compression on the 1A EDG.

This violation is associated with a White SDP finding.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence and the date when full compliance will be achieved is already adequately addressed on the docket in Inspection Report 05000317/2023050. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," include the EA number, and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region I, 475 Allendale Rd. Suite 102, King of Prussia, PA 19406-1415, and a copy to the NRC Resident Inspector at Calvert Cliffs Nuclear Power Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

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.

If you choose to respond, 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>. Therefore, to the extent possible, the response 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 26th day of October, 2023.