

September 19, 2001

EA-01-206

Mr. Charles H. Cruse
Vice President
Constellation Nuclear
Calvert Cliffs Nuclear Power Plant, Inc.
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A YELLOW FINDING AND
NOTICE OF VIOLATION AT CALVERT CLIFFS UNIT 1
(NRC Inspection Report 50-317/01-009)

Dear Mr. Cruse:

The purpose of this letter is to provide you with the final results of our significance determination of the preliminary Yellow finding identified during an NRC inspection conducted between June 27 - 28 and July 9 - 13, 2001, at the Calvert Cliffs Nuclear Power Plant, Unit 1. The results of the inspection were discussed with you and members of your staff at an exit meeting on July 23, 2001. The inspection finding was assessed using the significance determination process and was preliminarily characterized as Yellow, an issue with substantial importance to safety that will result in additional NRC inspection and potentially other NRC action. This Yellow finding involved a failure of the No. 11 auxiliary feedwater (AFW) pump turbine bearing that occurred on May 16, 2001. Due to inadequate adherence to maintenance instructions during reassembly of the turbine bearing, excessive sealant was applied to the bearing housing. This, in turn, contaminated the bearing oil, resulting in a loss of lubrication and subsequent bearing failure. The finding has substantial importance to safety due to the equipment's intended function of removing decay heat if called upon, as well as the length of time this condition existed.

In a telephone conversation with Mr. David Lew of NRC, Region I, on August 31, 2001, Mr. Peter Katz of your staff indicated that Calvert Cliffs Nuclear Power Plant, Inc. did not contest the characterization of the risk significance of this finding and that you declined your opportunity to provide a written response or discuss this issue in a regulatory conference. During a subsequent telephone discussion between Mr. Lew and Mr. Mark Geckle of your staff, although you did not dispute the Yellow characterization, you clarified that your risk assessment, which calculated an increase in core damage frequency of 2E-5/yr for this condition, did not credit operator action to restore the No. 11 AFW pump turbine bearing. This clarification modified the risk assessment previously submitted in your LER which indicated that operator action was credited.

After consideration of the information developed during the inspection and the additional information you provided, the NRC has concluded that the inspection finding is appropriately characterized as Yellow. You have 10 business days from the date of this letter to appeal the staff's determination of significance for the identified Yellow finding. Such appeals will be

considered to have merit only if they meet the criteria given in NRC Inspection Manual Chapter (IMC) 0609, Attachment 2.

The NRC has also determined that the failure to follow maintenance order instructions, which resulted in excessive sealant being applied to the No. 11 AFW pump turbine outboard bearing housing, is a violation of the requirements of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," as cited in the attached Notice of Violation (Notice). The circumstances surrounding the violation are described in the subject inspection report. In accordance with the NRC Enforcement Policy, NUREG-1600, the Notice is considered escalated enforcement action because it is associated with a Yellow finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. We recognize that the pump turbine bearing was replaced and the pump was tested satisfactorily. However, your response should address all immediate and long term actions to correct the violation, including action to ensure that maintenance order instructions are followed. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Because plant performance for this issue has been determined to be in the degraded cornerstone band, we will use the Action Matrix, Exhibit 5 in IMC 0305, to determine the most appropriate NRC response for this event. We will notify you by separate correspondence of that determination.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

IRA

Hubert J. Miller
Regional Administrator

Docket No. 50-317
License Nos. DPR-53

Enclosure: Notice of Violation

cc w/encl: M. Geckle, Director, Nuclear Regulatory Matters (CCNPPI)
R. McLean, Administrator, Nuclear Evaluations
J. Walter, Engineering Division, Public Service Commission of Maryland
K. Burger, Esquire, Maryland People's Counsel
R. Ochs, Maryland Safe Energy Coalition
State of Maryland (2)

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NOTICE OF VIOLATION

Calvert Cliffs Nuclear Power Plant, Inc.
Calvert Cliffs, Unit 1

Docket No. 50-317
License No. DPR-53
EA-01-206

During an NRC inspection conducted on June 27 - 28, 2001, and July 9 - 13, 2001, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

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

Maintenance Order No. 1199804675, "Inspect AFW Pump Turbine Bearings," provided instructions to reassemble the No. 11 auxiliary feedwater pump (AFW) turbine bearings, an activity affecting quality. Step 80, for outboard bearing reassembly, references Vendor Technical Manual 12083-010, "Steam Generator, Auxiliary Feedwater Pump," pages 5-8 and 5-8A, which state, in part, that sealant application should be limited to a thin film to prevent anything blocking bearing oil flow.

Contrary to the above, on March 25, 2000, the reassembly of the No. 11 AFW pump outboard bearing housing was not accomplished in accordance with Maintenance Order No. 1199804675, Step 80, in that sealant was not limited to a thin film. As a result, excessive sealant was applied that contaminated the bearing oil and resulted in a loss of lubricating oil flow to, and the subsequent failure of, the outboard bearing on the No. 11 AFW pump turbine on May 16, 2001.

This violation is associated with a YELLOW significance determination process finding.

Pursuant to the provisions of 10 CFR 2.201, Calvert Cliffs Nuclear Power Plant, Inc is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice, 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" and should include for the violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or its significance, (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 Publicly Available Records (PARS) component of NRC's document system (ADAMS), 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. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room). 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 2.790(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.

Dated this 19th day of September 2001