

DCS

March 6, 1990

Docket Nos. 50-317 and 50-318
License Nos. DPR-53 and DPR-69
EA 90-002

Baltimore Gas and Electric Company
ATTN: Mr. George C. Creel
Vice President, Nuclear Energy
Calvert Cliffs Nuclear Power Plant
MD Rts 2 & 4, Post Office Box 1535
Lusby, Maryland 20657

Gentlemen:

Subject: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY - \$100,000
(NRC Inspection Report No. 50-317/89-31; 50-318/89-32)

This letter refers to the special unannounced NRC safety inspection conducted between October 1 - November 30, 1989 at the Calvert Cliffs Nuclear Power Plant, Lusby, Maryland. The inspection report was sent to you on January 3, 1990. The inspection was conducted to review the adequacy of the Low Temperature Overpressure Protection (LTOP) plan at Calvert Cliffs. During the inspection, a violation of NRC requirements was identified. The violation involved the failure to adequately identify, track and correct conditions adverse to quality concerning the LTOP system, notwithstanding several opportunities to do so. On January 18, 1990, an enforcement conference was held with you and members of your staff to discuss the violation, its causes, and your corrective actions.

On November 30, 1976, the NRC issued an Operating License to Calvert Cliffs, Unit 2. A condition of the license was the required development of a permanent NRC-approved LTOP plan prior to start-up of the plant from the first refueling outage. The purpose of the plan was to assure that the LTOP system would function, as designed, to prohibit the reactor pressure from exceeding certain design limits during low Reactor Coolant System (RCS) temperature conditions so as to protect the reactor vessel from brittle fracture.

In July 1977, you submitted your proposed LTOP plan to the NRC for approval. This plan included 38 commitments to the NRC involving a combination of administrative controls, hardware improvements, technical specification changes and operator training. This plan was approved by the NRC, and provided the basis for issuance of a Safety Evaluation Report (SER) in August 1978, authorizing deletion of the LTOP license condition from the Operating License.

Subsequent to issuance of the SER, information was provided to, or developed by, your staff on three separate occasions between 1987 and 1989, which, if properly evaluated, should have resulted in recognition that some of the original commitments had not been implemented. For example, during an inspection in March 1988 (IR No. 50-317/88-05; 50-318/88-06), the NRC determined that two of

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the original LTOP commitments had never been implemented. Specifically, procedures had not been developed to prohibit either the testing of the emergency core cooling system with the plant solid, or the startup of the shutdown cooling system when steam generator temperatures were above 220° F. Notwithstanding those NRC findings in 1988, corrective actions had not been initiated at the time of the most recent inspection completed in November 1989, to prohibit startup of the shutdown cooling system under the described conditions. Furthermore, an evaluation was not performed to verify that the remaining LTOP commitments had been implemented. As a result, you did not determine until after the recent inspection was completed and an enforcement conference was scheduled, that four other LTOP commitments had not been implemented.

Furthermore, in March 1987, and again in September 1989 (in response to NRC Generic Letter 88-11 "NRC Position on Radiation Embrittlement of Reactor Vessel Material and its Impact on Plant Operations"), you performed thermo-hydraulic reanalysis of the LTOP system. The analysis performed in both instances indicated that your LTOP system was potentially inadequate due to significantly higher reactor coolant system pressures occurring as a result of various mass addition transients, then previously assumed. However, no further evaluations were made, nor corrective actions undertaken, in response to these reanalyses, to address the potential deficiencies in the LTOP system. If adequate evaluations had been performed, the failure to meet all of your original LTOP commitments would have been identified. These failures to identify and correct a significant condition adverse to quality constitute a violation of NRC requirements. The violation is set forth in the enclosed Notice.

At the enforcement conference, you indicated that there were limited times when the reactor was susceptible to an LTOP event, and that plant procedures generally provided adequate assurance of protection, although not as comprehensive as the original commitments. Furthermore, the NRC recognizes that you have addressed our immediate concerns regarding the completion of commitments made to the NRC via the implementation of your "Commitment Implementation Assessment Project" which outlines your plan to assess the effectiveness of your ability to identify, implement, monitor, and complete commitments made to the NRC. In addition, on February 1, 1990, Region I issued Confirmatory Action Letter (CAL) 89-08, Supplement 1, which confirms your commitment to complete this assessment prior to restart of either unit. The original CAL was issued on May 25, 1989 to confirm your earlier commitments to determine and correct, prior to restart of the plant, the root causes of problems related to the lack of control and oversight of plant activities.

Notwithstanding the above, the NRC is concerned that the original LTOP commitments were not fully implemented in 1978, nor were these conditions identified or corrected by you during the subsequent opportunities that existed in 1987, 1988 and 1989. This failure demonstrates the importance of prompt implementation of commitments, and prompt identification and correction of adverse conditions when they exist. To emphasize the importance of these concerns, I have been authorized, after consultation with the Director, Office of Enforcement and the Deputy Executive Director for Nuclear Materials Safety,

Safeguards and Operations Support to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$100,000 for the violation set forth in the Notice.

The violation has been classified at Severity Level III in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions", 10 CFR Part 2, Appendix C, (1989) (Enforcement Policy) because the violation represents a breakdown in the management control and oversight of work activities at the facility. Specifically, the missed commitments existed for an extended period without being identified, and once identified, were not promptly corrected.

The base civil penalty amount for a Severity Level III violation or problem is \$50,000. The escalation and mitigation factors set forth in the enforcement policy were considered and the base civil penalty has been escalated 100%. A 50% escalation of the base civil penalty is warranted because the violation was identified by the NRC and should reasonably have been identified sooner if adequate management control of work activities had been in place. Your corrective actions regarding the problems identified in the May 11, 1988 NRC inspection report were neither prompt nor comprehensive, and therefore, 50% escalation of the base civil penalty on this factor is warranted.

We also considered escalating this penalty, based on your prior poor performance which included issuance of two civil penalties (EA 88-202 and 89-107) and a separate Severity Level III violation since 1988. However, we concluded that further escalation on this factor was not necessary to emphasize our concern because that performance has contributed to the extended shutdown of your facility. Finally, the NRC also considered escalating the civil penalty amount because the violation existed for an extended duration and because you had prior notice from the NRC in March 1988, that certain commitments had not been met. However, since these factors were considered in establishing the violation and classifying it at Severity Level III, further escalation on these factors was considered inappropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether future NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The responses directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L. No. 96-511.

Sincerely,

Original Signed By
WILLIAM T. RUSSELL

William T. Russell
Regional Administrator

Enclosure:
Notice of Violation and Proposed
Imposition of Civil Penalty

cc w/encl:
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T. Magette, Administrator, Nuclear Evaluations
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State of Maryland (2)

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