



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406

July 12, 1989

Docket Nos. 50-317 and 50-318
License Nos. DPR-53 and DPR-69
EA 89-107

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 -
\$75,000
(NRC Inspection Report No. 50-317/89-11; 50-318/89-11)

This refers to the special NRC safety inspection conducted during April 17 - 27, 1989 at the Calvert Cliffs Nuclear Power Plant, Units 1 and 2. The inspection report was sent to you on May 18, 1989. The inspection was conducted to review the circumstances associated with two examples of a violation of a technical specification limiting condition for operation which occurred at your facility in April 1989. Both examples were identified by members of your staff and reported to the NRC. During the inspection, the NRC also reviewed the circumstances associated with six examples of a violation of 10 CFR 50.59 which were identified by your staff's review of certain temporary modifications made at the facility. The review was performed in response to a commitment made to the NRC during an onsite meeting on March 10, 1989. On May 30, 1989, an enforcement conference was conducted with you and members of your staff to discuss the violations, their causes and your corrective action. The violations are described in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty.

The first violation involved two examples of failure to maintain containment refueling integrity while core alterations (namely, uncoupling of control element assemblies) were being performed. The violation occurred for approximately 1½ hours on April 17, 1988 and for approximately 2 hours on April 19, 1989. In each case, containment refueling integrity was not maintained in that a direct path existed from containment (via three small vent valves on a drained service water supply header) through the service water piping to the outside of containment (via either open vent valves or an open flange).

The NRC recognizes that the safety significance of these individual degradations was low since the size of the vent valves inside containment was less than 1/8-th of an inch, the differential pressure to provide the motive force for a radiological release following a postulated fuel handling accident was almost

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negligible, and the actual core alterations in progress were comparatively low risk evolutions. Nonetheless, the NRC is concerned about the lack of control and coordination between operations and maintenance personnel that contributed to these degradations.

In the first instance, although containment refueling integrity had initially been established via control valves in the service water lines, an unrelated maintenance activity was performed after the containment integrity verification procedure had been completed. This maintenance activity was not properly coordinated between operations and maintenance personnel, and resulted in this valve being opened and containment refueling integrity not being maintained. At the time this violation occurred, the responsible operations personnel were unaware of the maintenance activity. Furthermore, the maintenance personnel were neither aware of the need to maintain containment refueling integrity nor the significance of clearing the safety tags which allowed deenergizing of the control valve's solenoid causing the valve to fail open.

In the second instance, which occurred approximately two days later, although containment refueling integrity had again been established using, in this case, two butterfly valves in the service water supply piping, subsequent miscommunication between operations personnel and a lack of understanding of system status resulted in both valves being inadvertently opened and containment integrity again not being maintained while core alterations were performed. In addition to these two events, there were two other instances in April 1989 where containment integrity was inadvertently not maintained because of poorly coordinated maintenance activities. However, there were no core alterations during those instances and therefore a violation did not occur.

This violation demonstrates several weaknesses in the control of operations at Calvert Cliffs. Scheduling and coordination of outage activities were weak, thereby permitting equipment to be manipulated for maintenance purposes without the knowledge of responsible operations staff. Furthermore, the lessons learned from the first event were not promptly or effectively assessed and communicated to the staff, which, if done, may have precluded the occurrence of the second event.

The second violation involved the implementation of six temporary plant modifications between 1987 and 1989 without the required review by the Plant Onsite Safety Review Committee (POSRC) and without the required safety evaluations to confirm that the modifications did not involve unreviewed safety questions. When the evaluations were eventually performed, they confirmed that one of these modifications did in fact involve an unreviewed safety question, as described in the enclosed Notice. The NRC recognizes that the safety significance of this violation was also low because five of the six modifications did not involve unreviewed safety questions, and the other modification though increasing the possibility of a fuel handling event would not have increased its consequences. However, the NRC is concerned that a flaw existed in your procedure for controlling temporary modifications at Calvert Cliffs, thus providing inadequate controls over the modification process. The procedure permitted modification to equipment classified as "not

affecting nuclear safety" without prior 50.59 and POSRC reviews, even if the equipment was described in the FSAR.

The NRC has, in previous correspondence, expressed concerns regarding the (1) lack of sufficient control of operations at Calvert Cliffs, and (2) the lack of adequate coordination and communication among and between departments. These prior concerns were expressed during previous SALP evaluations, i. a \$150,000 civil penalty issued to you on August 19, 1988 for two other violations of NRC requirements, and in several other Severity Level IV and V violations issued since that time concerning inadequate control of procedure changes, lack of POSRC reviews, and failure to adhere to procedural requirements. The enclosed violations demonstrate that these concerns continue to exist at Calvert Cliffs and aggressive management involvement is needed to prevent further problems in these areas.

Accordingly, a need exists for better control of operations at Calvert Cliffs, and better coordination both within and among the departments to assure (1) the reactors are operated in accordance with the technical specifications and regulatory requirements, and (2) changes to the facility are only made after the changes receive adequate safety reviews. To emphasize this need, 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 Seventy-Five Thousand Dollars (\$75,000) for the violations described in the enclosed Notice. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, 53 Fed. Reg. 40019 (October 13, 1988) (Enforcement Policy), the violations described in the enclosed Notice have been categorized as a Severity Level III problem.

The base civil penalty amount for a Severity Level III problem is \$50,000. The escalation and mitigation factors of the Enforcement Policy were considered and overall a 50 percent escalation of the base civil penalty was found appropriate. With respect to identification and reporting, no adjustment of the base civil penalty was deemed appropriate despite the fact that the violations were identified by your staff. In the case of violation A, mitigation under that factor was viewed as unwarranted because adequate corrective actions were not taken subsequent to identification of the first event to prevent the second event. For violation B, mitigation for identification was unwarranted because the violation was not identified until after a review was done in response to a commitment to the NRC. In considering corrective actions, it was also found that no adjustment to the base civil penalty should be made. With respect to violation A, four separate instances where containment integrity was not maintained are not indicative of prompt or extensive actions. While the short-term actions for violation B were reasonable, the long-term actions were not yet finalized and overall the actions were not considered prompt and extensive. In the area of past performance, a 50 percent escalation of the civil penalty was deemed appropriate. Previous NRC correspondence including SALP evaluations, have expressed concerns about inadequate control of operations and inadequate engineering reviews. Full 100 percent escalation based on past

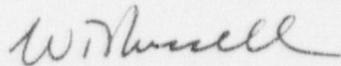
performance was not applied because previous concerns with control of operations did not specifically focus on the operations/maintenance interface and there is not recent enforcement history concerning violations of 10 CFR 50.59 requirements. The other factors set forth in the enforcement policy were considered and found not to be applicable in this case.

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 further 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,



William T. Russell
Regional Administrator

Enclosure: Notice of Violation and Proposed Imposition of Civil Penalty

cc w/encl:

W. J. Lippold, General Supervisor, Technical Services Engineering
T. Magette, Administrator, Nuclear Evaluations
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
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