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Docket Nos. 50-317 50-318 EA No. 92-095

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

Dear Mr. Creel:

Subject:

Electrical Distribution System Functional Inspection (EDSFI) of Calvert Cliffs Units 1 and 2, Combined Inspection Report Nos. 50-317/92-80 and 50-318/92-80

This letter transmits the report of the EDSFI team inspection conducted by Mr. Roy K. Mathew and other NRC personnel, from March 2 to April 3, 1992 at Calvert Cliffs Units 1 and 2 in Lusby, Maryland. Mr. Mathew discussed the team's findings with Mr. C. Cruse and other members of your staff on April 3, 1992, at the conclusion of the inspection. Subsequent to the inspection, on April 5 - 10, 1992, the team reviewed additional information provided by Mr. E. Wilson of your staff, regarding some of the team's concerns. The conclusions of this review were discussed by Mr. Mathew with Mr. E. Wilson on April 28, 1992. The primary purpose of this inspection was to determine whether the electrical distribution system (EDS) as designed, installed, and configured at Calvert Cliffs Units 1 and 2 would be capable of performing its intended safety functions. In addition, an assessment of engineering and technical support relative to the electrical distribution system was performed.

This inspection was discreted toward areas important to publishealth and safety. Areas examined during this respection are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of the electrical distribution system design calculations, relevant procedures and representative records, installed equipment, interviews with personnel and observations by the inspectors. The inspection team concluded that the electrical distribution systems at Calvert Cliffs Units 1 and 2 were capable of performing their intended function based upon the information provided to us, taking into consideration the latest modifications to the sequencer design. However, we note small margins in some of the electrical distribution systems, particularly the emergency diesel generators and the voltage profiles for the electrical systems. Additional work is warranted to establish adequate margin. The team determined that four of the issues require expedited

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review and resolution. They are: establishing adequate Emergency Diesel Generator (EDG) loading and its capabilities; establishing adequate load flow analysis and degraded relay settings; determining adequacy of the swing diesel operation without cooling water; and establishing analysis and mitigating actions necessary for potential single failure of switchgear room heating, ventilation and air conditioning systems (HVAC), particularly with respect to Appendix R requirements.

Based non the results of this inspection, four apparent violations were identified. Three of the violations are as set forth in the Notice of Violation, enclosed herewith as Appendix A. The violations have been categorized by severity level in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (Enforcement Policy)(1992). You are required to respond to this Notice of Violation (NOV) and, in preparing your response, you should follow the instructions in Appendix A.

The fourth apparent violation involved a problem with the Emergency Diesel Generator load sequencer design. The NRC is concerned that the safety and regulatory significance of this issue was not recognized by your safety review committees when it was initially identified and no appropriate corrective actions were taken until this issue was identified by the NRC EDSFI team. This apparent violation is being considered for escalated enforcement action, in accordance with the Enforcement Policy. Accordingly, no Notice of Violation is being issued at this time for this apparent violation.

An enforcement conference has been scheduled for June 17, 1992, at the Region I office to discuss the apparent violation involving the emergency diesel generator load sequencer design, its causes and safety significance; to provide you with the opportunity to point out any errors in our inspection report; to provide an opportunity for you to present aur proposed corrective actions and actions taken; and to discuss any other information that will help us determine the appropriate enforcement action in accordance with Enforcement Policy. Pertaining to this apparent violation, you should be prepared at the enforcement conference to discuss the following: load sequencer design condition and any modifications performed since the plan was licensed; corrective actions taken based on the 1986 industry information regarding potential unsequenced loading on the EDG due to process-controlled signal design feature; actions taken by the safety review committee on March 18, 1987 for the inadequate sequencer loading design including discussions of Probabilistic Risk Assessment (PRA) and why the PRA approach was used instead of considering a plant modification and, your understanding of the safety and regulatory significance of this issue; whether emergency diesel generators and emergency core cooling system (ECCS) loads were inoperable prior to the corrective actions taken during the EDSFI on March 1992 and compliance with Technical Specifications Section 3.4.8.1.1.e; and the reportability and operability assessment performed

to meet the regulatory requirements and procedures and process used. You will be advised by separate correspondence of the results of our deliberations on this matter. Please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. No response regarding this apparent violation is required at this time.

We request that you provide us, in writing, within thirty days of the receipt of this letter, with a schedule for the resolution of the unresolved issues identified in this report and any actions taken or planned in order to enhance the functionality of the electrical distribution system.

Your cooperation with us in this matter is appreciated.

Sincerely,

Original Signed By: Marvin W. Hodges

Marvin W. Hodges, Director Division of Reactor Safety

Enclosure: NRC Combined Inspection Report Nos. 50-317/92-80 and 50-318/92-80

cc w/encl:

G. Detter, Director, Nuclear Regulatory Matters (CCNPP)

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

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Public Document Room (PDR)

Local Public Document Room (LPDR)

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bcc w/encl:

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R. Lobel, OEDO

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