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GEORGE C. CREEL
VICE PRESIDENT
NUCLEAR ENERGY
(301) 260-4455

March 19, 1990

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Response to Generic Letter 89-19, Unresolved Safety Issue A-47

- REFERENCES:
- (a) Generic Letter 89-19, Request for Action Related to Unresolved Safety Issue A-47, "Safety Implication of Control Systems in LWR Nuclear Power Plants" Pursuant to 10 CFR 50.54(f)
 - (b) NUREG-1217, Evaluation of Safety Implications of Control Systems in LWR Nuclear Power Plants - Technical Findings Related to USI A-47
 - (c) NUREG-1218, Regulatory Analysis for Resolution of USI A-47

Gentlemen:

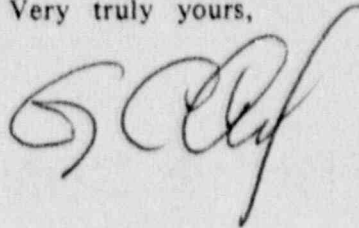
In accordance with your request (Reference (a)), we have enclosed our response to your recommended actions regarding (1) steam generator overfill protection, (2) periodic verification and testing of the overfill protection, and (3) emergency operating procedures and operator training to ensure safe shutdown during any postulated small break loss of coolant accident. We have reviewed the Generic Letter and its related NUREGs (References (b) and (c)) and have concluded that appropriate action is warranted in response to your concerns. Our plans for implementing the recommendations of Reference (a) are discussed in Enclosure 1.

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Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,



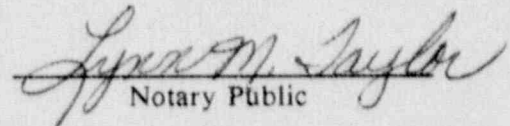
STATE OF MARYLAND

County of Calvert

TO WIT :

I hereby certify that on the 19th day of March, 1990, before me, the subscriber, a Notary Public of the State of Maryland in and for Calvert County, personally appeared George C. Creel, being duly sworn, and states that he is Vice President of the Baltimore Gas and Electric Company, a corporation of the State of Maryland; that he provides the foregoing response for the purposes therein set forth; that the statements made are true and correct to the best of his knowledge, information, and belief; and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal:


Notary Public

My Commission Expires:

Feb. 2, 1994
Date

GCC/GLB/bjd

Enclosure

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
R. A. Capra, NRC
D. G. McDonald, Jr., NRC
W. T. Russell, NRC
L. E. Nicholson, NRC
T. Magette, DNR

ENCLOSURE (1)

RESPONSE TO GENERIC LETTER 89-19 UNRESOLVED SAFETY ISSUE A-47

I. STEAM GENERATOR OVERFILL PROTECTION

A steam generator (SG) feed pump trip will be installed in each Unit to provide a separate and independent SG overfill-protection system that will serve to mitigate main feedwater (MFW) overfeed events. The overfill protection system will be separated from the feedwater control system so that it is not powered from the same power source, is not located in the same cabinet, and is routed to reduce the potential of fire affecting both pumps.

The overfill protection system will be implemented prior to startup after the next refueling outage for Unit 1 (Fuel Cycle #11) and for Unit 2 (Fuel Cycle #9).

II. PERIODIC VERIFICATION AND TESTING OF OVERFILL PROTECTION

Plant procedures, as appropriate, will be revised to provide periodic verification and testing of the SG overfill protection system. The instrumentation will be demonstrated to be operable by the performance of a channel check, channel functional testing, and channel calibration. These controls will be developed consistent with other secondary system controls.

The Combustion Engineering Owners Group (CEOG) is currently developing the Restructured Standard Technical Specifications (RSTS) in response to the Commission's interim policy issued in 1987 on Technical Specification improvement. As part of any future upgrades to our Technical Specifications, we will consider including appropriate limiting conditions of operations and surveillance requirements for SG overfill protection if it is recommended by CEOG.

The appropriate plant procedures will be implemented by the Unit's respective schedule as discussed above.

III. SAFE SHUTDOWN DURING SMALL BREAK LOSS OF COOLANT ACCIDENT (SBLOCA)

Emergency Operating Procedures (EOPs) will be reassessed to ensure that the operators can handle the spectrum of possible SBLOCA scenarios. This work will be performed by the CEOG. The workscope includes: (1) reviewing available analyses which are applicable to depressurization of the Reactor Coolant System (RCS) during SBLOCA events; and (2) reviewing C-E Emergency Procedure Guidelines (CEN-152) and EOPs for equipment procedural actions and contingency actions used by plant operators to accomplish any needed RCS depressurization via secondary heat removal. CEOG will issue a report which will include: (1) recommended suggestions and solutions for any deficiencies noted and (2) recommendations and suggestions for responding to the RCS depressurization part of the Generic Letter, including a brief discussion of the design adequacy of the low head (less than 1275 psi) High Pressure Safety Injection pumps. Upon receipt of the final CEOG Report, we will reassess our SBLOCA EOPs and determine if changes are required to either the EOPs or the operator training programs.

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RESPONSE TO GENERIC LETTER 89-19
UNRESOLVED SAFETY ISSUE A-47

The CEOG Report is scheduled to be completed by June 4, 1990. Following our evaluation of the report's recommendations, we will submit a summary report to the NRC. This report will describe our plan and schedule for completing any required changes to SBLOCA EOPs and/or operator training programs. This report will be submitted within 45 days of receiving the final CEOG Report.