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VICE PRESIDENT
SUPPLY

February 1, 1981

Mr. D. G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Calvert Cliffs Nuclear Power Plant
Units 1 & 2, Docket Nos. 50-317 & 50-318
Response to NUREG-0737

References:
(a) Letter from A. E. Lundvall, Jr. to D. G. Eisenhut dated December 15, 1980
(b) Report CEN-117, "Inadequate Core Cooling-A response to NRC IE Bulletin 79-06C, Item 6 for Combustion Engineering Nuclear Steam Supply Systems.
(c) Report CEN-128, "Response of Combustion Engineering Nuclear Steam Supply System to Transients and Accidents."
(d) Letter from D. G. Eisenhut to All Licensees dated October 31, 1980; NUREG-0737

Dear Mr. Eisenhut:

In reference (a), Baltimore Gas and Electric Company (BG&E) presented a schedule for submitting reanalyses of transient, accident and inadequate core cooling conditions. We must now revise that schedule. Activity related to this Action Plan item is summarized below.

BG&E has participated in Combustion Engineering Owners Group (CEOG) activities conducted since the accident at Three Mile Island to develop improved emergency procedure guidelines and associated supporting analysis. The CEOG has submitted numerous documents to the NRC for review, and is sponsoring activities which will be completed and documented in the first half of 1981.

The initial CEOG analysis of Inadequate Core Cooling (ICC) is documented in reference (b). This report was submitted to the NRC staff by the owners group on October 31, 1979. "Operational Guidance for Inadequate Core Cooling" was prepared by the CEOG based on the analysis described in CEN-117, and a copy was submitted to the NRC on December 10, 1980.

The CEOG has also sponsored an extensive study of instrumentation response characteristics under ICC conditions. This study was begun in early 1980 and described to the NRC staff at a meeting on May 28, 1980. BG&E is currently evaluating a draft report of this study for use in possible revisions to plant emergency procedures.

The initial CEOG analysis of transient and accident (non-LOCA) conditions is documented in reference (c). This report was submitted to the NRC staff by the CEOG on April 1, 1980. This report shows how a typical C-E designed plant would respond to various event initiators, and which systems would be actuated in the course of an incident.

This analysis considered only a single active failure for each system called upon to function for a particular event. Passive failures and multiple system failures were not considered. The CEOG is now conducting a program to develop analyses of transients and accidents involving multiple failures. This program was outlined to the NRC staff at a meeting on January 31, 1980, and is scheduled to be completed in the first half of 1981.

The CEOG has developed guidelines for emergency procedures based upon review of existing procedures, previous safety redesign analysis, plant simulation, sequence of events analysis, and interviews with operations personnel at plants with C-E reactors. These procedure guidelines were documented in reference (c). The NRC sent questions to the CEOG concerning these guidelines in a letter dated July 17, 1980. These questions were discussed at a meeting between the CEOG and the NRC staff on September 11, 1980, and a preliminary response was submitted to the staff on December 10, 1980.

The CEOG has initiated an effort to define the process by which plant emergency procedures should be developed or modified using guidelines and supporting analyses. BG&E is participating in this effort and feels that it must be completed before plant emergency procedures are further revised. A meeting was held with the NRC staff on January 30, to discuss this process. This activity is now scheduled to be completed by May 1, 1981, and revised emergency procedure guidelines are to be submitted by June 1, 1981.

Following completion of the NRC review of the revised emergency procedure guidelines and completion of the C-E Owners Group activities to define the process for development or revision of plant emergency procedures, BG&E will evaluate the need for revision of its plant emergency procedures. Reference (d) indicates that six months will be required for NRC staff review and approval and that another six months or more are to be allowed for revision and implementation of emergency procedures. Therefore, the Calvert Cliffs Nuclear Power Plant emergency procedures will be revised, if necessary, after December 1, 1981, and the revisions implemented at the first refueling outage after June 1, 1982. Any additional training for mitigating core damage required per item II.B.4 will be conducted prior to implementation of these changes to emergency procedures.

If any additional information is required, we would be pleased to provide it to you.

Very truly yours,

Arthur E. Lundvall, Jr.

cc: J. A. Biddison, Esquire
G. F. Trowbridge, Esquire
Mr. E. L. Conner, Jr. - NRC