



## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

February 3, 1981

ocket Nos. 50-317 and 50-318



Mr. A. E. Lundvall, Jr. Vice President - Supply Baltimore Gas & Electric Company P. O. Box 1475 Baltimore, Maryland 21203

Dear Mr. Lundvall:

In the process of reviewing your letter dated October 8, 1979 on Adequac; of Station Electric Distribution System Voltages, we find that additional information as detailed in the enclosure is needed to complete our review. Please provide the additional information within 45 days of receipt of this letter.

Sincerely,

6

Robert A. Clark, Cnief Operating Reactors Branch #3 Division of Licensing

Enclosure: As stated

cc: See next page

## Baltimore Gas and Electric Company

cc: James A. Biddison, Jr. General Counsel G and E Building Charles Center Baltimore, Maryland 21203

George F. Trowbridge, Esquire Shaw, Pittman, Potts and Trowbridge 1800 M Street, N.W. Washington, D. C. 20036

Mr. R. C. L. Olson Baltimore Gas and Electric Company Room 922 - G and E Building Post Office Box 1475 Baltimore, Maryland 21203

Mr. Leon B. Russell Plant Superintendent Calvert Cliffs Nuclear Power Plant Baltimore Gas & Electric Company Lusby, Maryland 20657

Bechtel Power Corporation ATTN: Mr. J. C. Judd Chief Nuclear Engineer 15740 Shady Grove Road Gaithersburg, Maryland 20760

Conduction Engineering, Inc. ATTN: Mr. P. W. Kruse, Manager Engineering Services Post Office Box 500 Windsor, Connecticut 06095

Calvert County Library Prince Frederick, Maryland 20678

Director, Department of State Planning 301 West Preston Street Baltingre, Maryland 21201

Mr. R. M. Douglass, Manager Quality Assurance Department Room 923 Gas & Electric Building P. O. Box 1475 Baltimore, Maryland 21203 Mr. Bernard Fowler President, Board of County Commissioners Prince Frederick, Maryland 20768

Director, Criteria and Standards Division Office of Radiation Programs (ANR-460) U.S. Environmental Protection Agency Washington, D.C. 20460

U. S. Environmental Protection Agency Region III Office ATTN: EIS COORDINATOR Curtis Building (Sixth Floor) Sixth and Walnut Streets Philadelphia, Pennsylvania 19106

Ralph E. Architzel Resident Reactor Inspector NRC Inspection and Enforcement P. O. Box 437 Lusby, Maryland 20657

Mr. Charles B. Brinkman Manager - Washington Nuclear Operations C-E Power Systems Combustion Engineering, Inc. 4853 Cordell Ave., Suite A-1 Bethesda, Maryland 20014

Administrator, Power Plant Siting Program Energy and Coastal Zone Administration Department of Natural Resources Tawes State Office Building Annapolis, Maryland 21204 REQUEST FOR ADDITIONAL INFORMATION CALVERT CLIFFS NUCLEAR POWER PLANT Units 1 and 2 DOCKET NO. 50-317 and 50-318

Reference 1: NRC letter (W. Gammill) to all Power Reactor Licensees, dated August 8, 1979.

Reference 2: Baltimore Gas and Electric Company letter (A. E. Lundvall) to the NRC (D.G. Eisenhut), dated October 8, 1979.

. Reference 3: Baltimore Gas and Electric Company letter (A. E. Lundvall) to the NRC (D. L. Zieman), dated September 15, 1976

- 1. The voltage analysis submitted in Ref. 2 was performed using both service transformers (P-13000-1 and P-13000-2) supplying the Class 1E buses. Ref. 1 requests that an analysis be completed for the worst case. Submit an analysis assuming only one service transformer is in service prior to an accident (Guideline 2, Ref. 1). After the transients of the emergency loading, calculations showing the effect of starting a large non-safety load should be made (Guideline 3, Ref. 1). Also, confirm that the second-level of undervoltage protection relays will not give a spurious trip for this condition.
- 2. Ref. 2 provided calculations and tests for 4160 volt buses and 480 volt buses. Submit calculated voltages for all low-voltage AC (less than 480 volts) Class 1E buses or distribution terminals or document that all low-voltage AC Class 1E equipment will be operating within their required voltage ratings for each case analyzed. Do these buses supply any instruments or control circuits required by GDC-13? If so, is all equipment capable of sustaining the analyzed voltages without blowing fuses, overheating, etc., and without affecting the equipment's ability to perform the required function.
- 3. Ref. 3, Enclosure 1, page 1 refers to "safety related" buses 4160-14, 480-14A, and 480-14B. Are these buses Class 1E supplying Class 1E equipment? If so, submit an analysis for these buses and equipment as submitted for buses 11, 11A, and 11B.