

DATE	1/15/77	1/16/77	1/16/77	1/16/77	1/14/77
SURNAME	RMDiggs	EAREVES	HROOD	KIEFER	DLZIEMANN
OFFICE	DOR:ORB #2	DOR:ORB #2	DOR:ORB #2	OELD	DOR:ORB #2

Enclosures: 1. Amendments No. 19 and 5 to Licenses No. DPR-53 and DPR-53
 2. Safety Evaluation and Environmental Impact Appraisal
 3. Notice and Negative Declaration

DOR:ORB #2
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 1/16/77

DPM:LWR #2
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 01/11/77

Original signed by
 Dennis L. Ziemann
 Chief, Operating Reactors Branch #2
 Division of Operating Reactors

Sincerely,

Copies of the Safety Evaluation and Environmental Impact Appraisal, and Notice of Issuance and Negative Declaration are enclosed.

These amendments modify the licenses to incorporate Amendment No. 2 to the Environmental Report for Calvert Cliffs Nuclear Plant Units No. 1 and No. 2 to authorize an additional offsite power source from Southern Maryland Electric Cooperative (SMECO). The SMECO line will provide a standby offsite power source to augment the two existing offsite power sources.

The Commission has issued the enclosed Amendment Nos. 19 and 5 to Facility Operating License Nos. DPR-53 and DPR-53 for the Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2, respectively. The amendments are in accordance with your application dated March 15, 1976, and supplement thereto dated July 13, 1976.

Baltimore Gas & Electric Company
 ATTN: Mr. A. E. Lundvall, Jr.
 Vice President - Supply
 Gas and Electric Building
 Charles Center
 Baltimore, Maryland 21203

- Bones (8)
- OIE (9)
- OELD
- Bharless
- RDSilver
- KKniele
- HROOD
- EAREVES
- RMDiggs
- DLZIEMANN

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Docket Nos. 50-317

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 - JRBuchanan
 - ACRS (16)
- Jean Lee, DPM*

January 14, 1977

cc w/enclosures:

James A. Biddison, Jr.
General Counsel
Gas and Electric Building
Charles Center
Baltimore, Maryland 21203

James C. Cawood, Jr., Esquire
Vice President
Chesapeake Environmental
Protection Association
4700 Auth Place
Camp Springs, Maryland 20023

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

Bechtel Power Corporation
ATTN: Mr. R. L. Ashley
Chief Nuclear Engineer
P. O. Box 607
Gaithersburg, Maryland 20760

Combustion Engineering, Inc.
ATTN: Mr. J. A. Honey
Project Manager
P. O. Box 500
Windsor, Connecticut 06095

Mr. R. C. L. Olson
Baltimore Gas and Electric Company
Room 922 Gas and Electric Building
Charles Center
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Mr. R. M. Douglass, Chief Engineer
Calvert Cliffs Nuclear Power Plant
Baltimore Gas and Electric Company
Lusby, Maryland 20657

Calvert County Library
Prince Frederick, Maryland 20678

Dr. Steven Long
Power Plant Siting Program
Department of Natural Resources
B-3, Pawes
State Office Building
Annapolis, Maryland 21401

Mr. Bernard Fowler
President, Board of County
Commissioners
Prince Frederick, Maryland 20678

Chief, Energy Systems
Analyses Branch (AW-459)
Office of Radiation Programs
U. S. Environmental Protection
Agency
Room 645, East Tower
401 M Street, S. W.
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

cc w/enclosures and copy of BG&E
filings 3/18/76 and 7/13/76:
Director, Department of State
Planning
301 West Preston Street
Baltimore, Maryland 21201
(w/4 copies)



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

BALTIMORE GAS & ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 19
License No. DPR-53

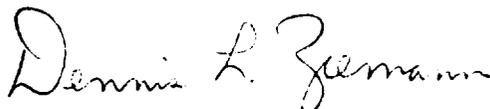
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas & Electric Company (the licensee) dated March 18, 1976, as supplemented by letter dated July 13, 1976, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License Nos. DPR-53 is amended by modifying Paragraph 2.A to read as follows:

"2.A This license applies to the Calvert Cliffs Nuclear Plant Unit 1, a pressurized water reactor and associated equipment (the facility), owned by the Baltimore Gas & Electric Company. The facility is located in Calvert County, Maryland and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 11 through 47), and the Environmental Report as supplemented and amended (Amendments No. 1 and No. 2)."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

Date of Issuance: January 14, 1977



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

BALTIMORE GAS & ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 5
License No. DPR-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Baltimore Gas & Electric Company (the licensee) dated March 18, 1976, as supplemented by letter dated July 13, 1976, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Facility Operating License Nos. DPR-69 is amended by modifying Paragraph 2.A to read as follows:

"2.A This license applies to the Calvert Cliffs Nuclear Plant Unit 2, a pressurized water nuclear reactor and associated equipment (the facility), owned by the Baltimore Gas & Electric Company. The facility is located in Calvert County, Maryland, on the western shore of the Chesapeake Bay, about 10 and 1/2 miles southeast of Prince Frederick, Maryland, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 11 through 53), and the Environmental Report as supplemented and amended (Amendments No. 1 and No. 2)."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Karl Kniel, Chief
Light Water Reactors Branch #2
Division of Project Management

Date of Issuance: January 14, 1977



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

SAFETY EVALUATION AND ENVIRONMENTAL IMPACT APPRAISAL
BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENTS NO. 19 AND NO. 5 TO
FACILITY OPERATING LICENSES NO. DPR-53 AND DPR-69

BALTIMORE GAS & ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANTS UNIT NO. 1 AND NO. 2

DOCKET NOS. 50-317 AND 50-318

INTRODUCTION

By application dated March 18, 1976, and supplement thereto dated July 13, 1976, the Baltimore Gas & Electric Company (BG&E) requested an amendment to Facility Operating License No. DPR-53 for the Calvert Cliffs Nuclear Power Plant Unit No. 1. The request is considered by the staff to be a revision to the Environmental Report for the facility and is in accordance with the Environmental Technical Specifications, Appendix B, Section 5.4.2, Subsection 6.a. The request is also considered to be applicable to Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant Unit No. 2.

DISCUSSION

The licensee has proposed modifications to the offsite power system to add a third power system thus allowing the plant to continue operation during a major outage of one of the existing two 500 kV/13.8kV station transformers. Presently, an outage of one of these transformers for more than seven days requires shutdown of both Units 1 and 2.

The proposed modifications include installing: (1) A new 69kV line owned by Southern Maryland Electric Cooperative (SMECO) southeast of the intersection of Maryland Routes 2 and 4 and Sollers Road, (2) A new 69kV/13.8kV substation on BG&E property near the existing on-site plant switchyard where the new 69kV line will terminate. This new substation would connect to the onsite electric distribution system independently of the existing station service transformers.

I. SAFETY EVALUATION

The proposed new backup offsite power system design as described in BG&E letters of March 18, and July 13, 1976, have been compared with those portions of General Design Criterion 17 (GDC 17) of 10 CFR 50 pertaining to offsite power. We have determined that the capacity of the new backup offsite power system is sufficient to operate a full complement of essential auxiliaries for one reactor under LOCA conditions and the equipment necessary to attain and maintain a safe shutdown in the remaining unit. Because of the limited capacity (5000kW) of the new line, the loads will be sequenced on the line in a manner similar to the sequencing of loads to the emergency diesel generators to ensure orderly loading and to minimize transients caused by motor starting. The proposed new system which serves as a third standby source of offsite power when both unit transformers are available, provides an increased margin of safety over that described in the FSAR and previously accepted by the staff. For a major outage of one of the unit transformers of more than seven days, the addition of the standby power source enables the offsite power system to continue to meet the minimum requirements of GDC 17.

CONCLUSION ON SAFETY

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

II. ENVIRONMENTAL IMPACT APPRAISAL

Attachment 3 to BG&E's application dated March 18, 1976, as supplemented by BG&E letter dated July 13, 1976, is considered by the staff as Amendment No. 2 to the Environmental Report for the Calvert Cliffs Nuclear Power Plant.

The proposed 69kV transmission line would pass through heavily wooded areas and would not cross any presently cultivated land. Vegetative screening will help maintain low visibility of the line from the scattered residential homes in the area, and the main visual impact will be the road crossing (Routes 2 and 4 and Sollers Road). The licensee has indicated that tower structures will be set back from the edge of the road and typically only the overhead conductors may be seen.

The proposed 69kV/13.8kV substation site is presently lightly wooded but will be cleared and graded before construction. Because there is no public access to this area due to its location on BG&E property and because the surrounding area is rolling and wooded, visual impact to the public will be minimal. There are no known historical sites, archeological sites, park areas or game reserves along the proposed right-of-way (ROW). Three Maryland Historical Trust sites are near the proposed line; Parran's Park and Middleban Chapel are within 5000 feet and 1.2 miles, respectively, and Preston's Cliffs is within 4600 feet. The extensive vegetation together with the distance of these sites from the ROW will most likely prevent any visual impact from the proposed ROW. The licensee will halt construction activities and notify appropriate agencies in the event any finds of an archeological nature are encountered so that a full investigation may be initiated.

Since clearing the proposed ROW will be done in a selective manner, and since the line will extend a relatively short distance (1.2 miles) through the highly rural area, the 69kV line will not impact unacceptably on the wildlife habitat or the wilderness resources. It is possible that the browse habitat may increase due to the proposed ROW, thereby increasing the food supply and cover for certain species of wildlife.

Two alternative routes to the proposed ROW were analyzed by the licensee and reviewed by our staff. The staff concludes that these routes would not reduce land use requirements over the proposed ROW and would impact the more cultivated acreage and places of residence.

CONCLUSION AND BASIS FOR NEGATIVE DECLARATION

Based upon the probable impacts as described above, the staff concludes that this action will not significantly affect the quality of the human environment and that a negative declaration to this effect is warranted for these amendments that will allow use of a new 69kV transmission line as a backup offsite power source for the Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2.

Date: January 14, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-317 AND 50-318

BALTIMORE GAS AND ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

AND NEGATIVE DECLARATION

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 19 and 5 to Facility Operating License Nos. DPR-53 and DPR-69 (respectively), issued to Baltimore Gas & Electric Company (the licensee), which revised the licenses for operation of the Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2 (the facilities) located in Calvert County, Maryland. The amendments are effective as of their date of issuance.

The amendments authorized an additional offsite power source from Southern Maryland Electric Cooperative (SMECO) which provides a standby offsite power source to augment the two existing offsite power sources and increases the reliability of the offsite power sources, thus minimizing the possibility of an extended shutdown of the facilities.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has prepared an environmental impact appraisal relating to the action authorized by these license amendments and has concluded that an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the action.

For further details with respect to this action, see (1) the application for amendment dated March 18, 1976, and supplement thereto dated July 13, 1976, (2) Amendment No. 19 to License No. DPR-53 and Amendment No. 5 to License No. DPR-69, and (3) the Commission's jointly issued Safety Evaluation and Environmental Impact Appraisal. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Calvert County Library, Prince Frederick, Maryland 20678. A single copy copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 14th day of January, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors