Mr. Robert E. Denton Vice President - Nuclear Energy Baltimore Gas and Electric Company Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Lusby, MD 20657-4702

SUBJECT:

ISSUANCE OF AMENDMENTS FOR CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 1 (TAC NO. M94228) AND UNIT NO. 2 (TAC NO. M94229)

Dear Mr. Denton:

The Commission has issued the enclosed Amendment No.  $210\,\mathrm{to}$  Facility Operating License No. DPR-53 and Amendment No. 188 to Facility Operating License No. DPR-69 for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated December 7. 1995.

The amendments add the convolution analytical technique for the analysis of the pre-trip main steam line break event to the list of approved core operating limits analytical methods listed in TS 6.9.1.9, "Core Operating Limits Report." The convolution analytical technique was previously reviewed and approved by the NRC staff and the supporting safety evaluation (SE) was provided to Baltimore Gas and Electric Company by letter dated May 11, 1995.

A copy of the related SE is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely.

Original signed by:

Daniel G. McDonald, Jr., Senior Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosures: 1. Amendment No. 210 to DPR-53

2. Amendment No. 188 to DPR-69

3. Safety Evaluation

cc w/encls: See next page

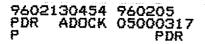
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DATED: February 5, 1996

AMENDMENT NO. 210TO FACILITY OPERATING LICENSE NO. DPR-53-CALVERT CLIFFS UNIT 1
AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-69-CALVERT CLIFFS UNIT 2

Docket File
PUBLIC
PDI-1 Reading
S. Varga, 14/E/4
L. Marsh
S. Little
D. McDonald
OGC
G. Hill (2), T-5 C3
C. Grimes, 11/E/22
ACRS
PD plant-specific file
C. Cowgill, Region I

cc: Plant Service list



WASHINGTON, D.C. 20555-0001

February 5, 1996

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Project Directorate I-1

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

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3. Safety Evaluation

cc w/encls: See next page

Mr. Robert E. Denton
Calvert Cliffs Nuclear Power Plant

cc:

Ms. Mary Krug, President Calvert County Board of Commissioners 175 Main Street Prince Frederick, MD 20678

D. A. Brune, Esquire
General Counsel
Baltimore Gas and Electric Company
P.O. Box 1475
Baltimore, MD 21203

Jay E. Silberg, Esquire Shaw, Pittman, Potts and Trowbridge 2300 N Street, NW Washington, DC 20037

Mr. Terrence J. Camilleri, Director, NRM Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Lusby, MD 20657-47027

Resident Inspector c/o U.S. Nuclear Regulatory Commission P.O. Box 287 St. Leonard, MD 20685

Mr. Richard I. McLean Administrator - Radioecology Department of Natural Resources 580 Taylor Avenue Tawes State Office Building B3 Annapolis, MD 21401

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406 Calvert Cliffs Nuclear Power Plant Unit Nos. 1 and 2

Mr. Joseph H. Walter, Chief Engineer Public Service Commission of Maryland Engineering Division 6 St. Paul Centre Baltimore, MD 21202-6806

Kristen A. Burger, Esquire Maryland People's Counsel 6 St. Paul Centre Suite 2102 Baltimore, MD 21202-1631

Patricia T. Birnie, Esquire Co-Director Maryland Safe Energy Coalition P.O. Box 33111 Baltimore, MD 21218

Mr. Larry Bell NRC Technical Training Center 5700 Brainerd Road Chattanooga, TN 37411-4017



WASHINGTON, D.C. 20555-0001

#### BALTIMORE GAS AND ELECTRIC COMPANY

#### DOCKET NO. 50-317

#### CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 210 License No. DPR-53

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated December 7, 1995, 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2. of Facility Operating License No. DPR-53 is hereby amended to read as follows:

#### 2. <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 210, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Ledyard B. Marsh, Director Project Directorate I-1

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: February 5, 1996



WASHINGTON, D.C. 20555-0001

#### BALTIMORE GAS AND ELECTRIC COMPANY

**DOCKET NO. 50-318** 

#### CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 188 License No. DPR-69

- The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated December 7, 1995, 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2. of Facility Operating License No. DPR-69 is hereby amended to read as follows:

#### 2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 188, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Ledyard B. Marsh, Director Project Directorate I-1

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: February 5, 1996

#### ATTACHMENT TO LICENSE AMENDMENTS

# AMENDMENT NO. 210 FACILITY OPERATING LICENSE NO. DPR-53 AMENDMENT NO. 188 FACILITY OPERATING LICENSE NO. DPR-69 DOCKET NOS. 50-317 AND 50-318

Revise Appendix A as follows:

Remove Pages 6-26 Insert Pages 6-26

- (c) Letter from Mr. G. C. Creel (BG&E) to NRC Document Control Desk, dated February 7, 1989, "Calvert Cliffs Nuclear Power Plant Unit No. 2; Docket 50-318, Request for Amendment, Unit 2 Ninth Cycle License Application"
- (d) Letter from Mr. S. A. McNeil, Jr. (NRC) to Mr. G. C. Creel (BG&E), dated January 10, 1990, "Safety Evaluation Report Approving Unit 2 Cycle 9 License Application"
- (42) Letter from Mr. D. G. McDonald, Jr. (NRC) to Mr. R. E. Denton (BGE), dated May 11, 1995, "Approval to Use Convolution Technique in Main Steam Line Break Analysis Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 (TAC Nos. M90897 and M90898)
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any mid-cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

#### SPECIAL REPORTS

- 6.9.2 Special reports shall be submitted to the Regional Administrator of the NRC Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:
  - a. ECCS Actuation, Specifications 3.5.2 and 3.5.3.
  - c. Inoperable Meteorological Instrumentation, Specification 3.3.3.4.
  - e. Core Barrel Movement, Specification 3.4.11.
  - f. Fire Detection Instrumentation, Specification 3.3.3.7.
  - g. Fire Suppression Systems, Specifications 3.7.11.1, 3.7.11.2, 3.7.11.3, 3.7.11.4, and 3.7.11.5.
  - h. Penetration Fire Barriers, Specification 3.7.12.
  - i. Steam Generator Tube Inspection Results, Specification 4.4.5.5.a and c.
  - j. Specific Activity of Primary Coolant, Specification 3.4.8.

- (c) Letter from Mr. G. C. Creel (BG&E) to NRC Document Control Desk, dated February 7, 1989, "Calvert Cliffs Nuclear Power Plant Unit No. 2; Docket 50-318, Request for Amendment, Unit 2 Ninth Cycle License Application"
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  - c. Inoperable Meteorological Instrumentation, Specification 3.3.3.4.
  - e. Core Barrel Movement, Specification 3.4.11.
  - f. Fire Detection Instrumentation, Specification 3.3.3.7.
  - g. Fire Suppression Systems, Specifications 3.7.11.1, 3.7.11.2, 3.7.11.3, 3.7.11.4, and 3.7.11.5.
  - h. Penetration Fire Barriers, Specification 3.7.12.
  - i. Steam Generator Tube Inspection Results, Specification 4.4.5.5.a and c.
  - j. Specific Activity of Primary Coolant, Specification 3.4.8.
  - k. Containment Structural Integrity, Specification 4.6.1.6.



WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 210 TO FACILITY OPERATING LICENSE NO. DPR-53 AND AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-69 BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

#### 1.0 INTRODUCTION

By letter dated December 7, 1995, the Baltimore Gas and Electric Company (BGE/the licensee) submitted a request for changes to the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, Technical Specifications (TSs). The requested changes would add the convolution analytical technique for the analysis of the pre-trip main steam line break event to the list of approved core operating limits analytical methods listed in TSs 6.9.1.9, "Core Operating Limits Report." The convolution analytical technique was previously reviewed and approved by the NRC staff and the supporting safety evaluation (SE) was provided to BGE by letter dated May 11, 1995.

#### 2.0 EVALUATION

By letter dated November 1, 1994, BGE requested that the NRC staff review and approve the use of the convolution analytical technique for the analysis of the pre-trip main steam line break event for the Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. The staff approved the use of the convolution analytical technique and provided its supporting SE as noted above. The May 11, 1995, SE is incorporated herein by reference.

TSs 6.9.1.9.b provides the list of analytical methods which are used to determine the core operating limits and have been previously reviewed and approved by the NRC staff. Since the convolution analytical technique has been previously reviewed and approved by the NRC staff, it is acceptable to include it in TSs 6.9.1.9.b as an approved analytical method.

#### 3.0 **STATE CONSULTATION**

In accordance with the Commission's regulations, the Maryland State official was notified of the proposed issuance of the amendments. The State official had no comments.

#### 4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation and use of a facility component located within the restricted area as defined by Part 20. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (61 FR 177). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: D. McDonald

Date: February 5, 1996