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Docket No. 50-317  
50-318

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

Dear Mr. Lundvall:

The Commission has issued the enclosed Amendment Nos. 74 and 55 to Facility Operating License Nos. DPR-53 and DPR-69 for Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated July 20, 1982.

These amendments revise the Technical Specifications to extend the date for operability of the Hydrogen Analyzers from August 1, 1992 to September 30, 1982.

A copy of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by

David H. Jaffe, Project Manager  
Operating Reactors Branch #3  
Division of Licensing

Enclosures:

1. Amendment No. 74 to DPR-53
2. Amendment No. 55 to DPR-69
3. Safety Evaluation
4. Notice of Issuance

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PDR ADOCK 05000317  
PDR

F-R NOTICE  
+ AMENDMENT

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|---------|------------|----------|----------|-----------|---------|--|
| OFFICE  | ORB#3:DL   | ORB#3:DL | ORB#3:DL | AD:ORC:DL | OELD    |  |
| SURNAME | PMKreutzer | DJaffe   | RAClark  | GLaffias  |         |  |
| DATE    | 7/23/82    | 7/23/82  | 7/23/82  | 7/23/82   | 7/23/82 |  |



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

DISTRIBUTION:  
Docket File  
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Docket No. 50-317/  
50-318/

Docketing and Service Section  
Office of the Secretary of the Commission

SUBJECT: BALTIMORE GAS AND ELECTRIC COMPANY, Calvert Cliffs Nuclear  
Power Plant, Unit Nos. 1 and 2.

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies ( 12 ) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- Notice of Availability of Applicant's Environmental Report.
- Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).
- Other: Amendment Nos. 74 and 55.

Referenced documents have been provided PDR.

Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosure:  
As Stated

|           |               |  |  |  |  |  |
|-----------|---------------|--|--|--|--|--|
| OFFICE →  | ORB#3:DL      |  |  |  |  |  |
| SURNAME → | PMKreutzer/pr |  |  |  |  |  |
| DATE →    | 7/30/82       |  |  |  |  |  |

Baltimore Gas and Electric Company

cc:

James A. Biddison, Jr.  
General Counsel  
Baltimore Gas and Electric Company  
P. O. Box 1475  
Baltimore, MD 21203

George F. Trowbridge, Esquire  
Shaw, Pittman, Potts and Trowbridge  
1800 M Street, N. W.  
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Mr. R. C. L. Olson, Principal Engineer  
Nuclear Licensing Analysis Unit  
Baltimore Gas and Electric Company  
Room 922 - G&E Building  
P. O. Box 1475  
Baltimore, MD 21203

Mr. Leon B. Russell  
Plant Superintendent  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Bechtel Power Corporation  
Attn: Mr. J. H. Bell  
Chief Nuclear Engineer  
15740 Shady Grove Road  
Gaithersburg, MD 20760

Combustion Engineering, Inc.  
Attn: Mr. P. W. Kruse, Manager  
Engineering Services  
P. O. Box 500  
Windsor, CT 06095

Public Document Room  
Calvert County Library  
Prince Frederick, MD 20678

Director, Department of State Planning  
301 West Preston Street  
Baltimore, MD 21201

Mr. R. M. Douglass, Manager  
Quality Assurance Department  
Fort Smallwood Road Complex  
P. O. Box 1475  
Baltimore, MD 21203

Mr. T. L. Syndor, General Supervisor  
Operations Quality Assurance  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Ms. Mary Harrison, President  
Calvert County Board of County Commissioners  
Prince Frederick, MD 20768

U. S. Environmental Protection Agency  
Region III Office  
Attn: Regional Radiation Representative  
Curtis Building (Sixth Floor)  
Sixth and Walnut Streets  
Philadelphia, PA 19106

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

Mr. Charles B. Brinkman  
Manager - Washington Nuclear Operations  
Combustion Engineering, Inc.  
4853 Cordell Avenue, Suite A-1  
Bethesda, MD 20014

Mr. J. A. Tierman, Manager  
Nuclear Power Department  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

Mr. W. J. Lippold, Supervisor  
Nuclear Fuel Management  
Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
P. O. Box 1475  
Baltimore, Maryland 21203

Mr. R. E. Denton, General Supervisor  
Training & Technical Services  
Calvert Cliffs Nuclear Power Plant  
Maryland Routes 2 & 4  
Lusby, MD 20657

cc w/enclosure(s) and incoming  
dated: 7/20/82

Administrator, Power Plant Siting Program  
Energy and Coastal Zone Administration  
Department of Natural Resources  
Tawes State Office Building  
Annapolis, MD 21204

Regional Administrator  
Nuclear Regulatory Commission, Region I  
Office of Executive Director for Operations  
631 Park Avenue  
King of Prussia, Pennsylvania 19406



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 74  
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 July 20, 1982, 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.

DESIGNATED ORIGINAL

Certified By \_\_\_\_\_

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P PDR

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) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 74, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the  
Technical Specifications

Date of Issuance: July 30, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 74

FACILITY OPERATING LICENSE NO. DPR-53

DOCKET NO. 50-317

Replace the following page of the Appendix A Technical Specifications with the enclosed page as indicated. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Page

3/4 6-26

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

| <u>PENETRATION NO.</u> | <u>ISOLATION CHANNEL</u> | <u>ISOLATION VALVE IDENTIFICATION NO.</u> | <u>FUNCTION</u>            | <u>ISOLATION TIME (SECONDS)</u> |
|------------------------|--------------------------|---|----------------------------|---------------------------------|
| 61                     | NA                       | 76Y-1                                     | Refueling Pool Outlet      | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
| 62                     | SIAS A                   | MOV-6579                                  | Containment Heating Outlet | ≤13                             |
| 64                     | NA                       | 238-1                                     | Containment Heating Inlet  | NA                              |

(1) Manual or remote manual valve which is closed during plant operation.

(2) May be opened below 300°F to establish shutdown cooling flow.

(3) Containment purge isolation valves will be shut in MODES 1, 2, 3 and 4 per TS 3/4 6.1.7.

\* May be open on an intermittent basis under administrative control.

\*\* Containment purge isolation valves isolation times will only apply for MODES 5 and 6 during which time these valves may be opened. Isolation time is NA for MODES 1, 2, 3 and 4 per TS 3/4 6.1.7 during which time these valves must remain closed.

## CONTAINMENT SYSTEMS

### 3/4.6.5 COMBUSTIBLE GAS CONTROL

#### HYDROGEN ANALYZERS

#### LIMITING CONDITION FOR OPERATION

---

3.6.5.1 Two independent containment hydrogen analyzers shall be OPERABLE\*.

APPLICABILITY: MODES 1 and 2.

#### ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

## SURVEILLANCE REQUIREMENTS

---

4.6.5.1 Each hydrogen analyzer shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases containing:

- a. Zero volume percent hydrogen, balance nitrogen, and
- b. Three volume percent hydrogen, balance nitrogen.

---

\*Until September 30, 1982, one hydrogen analyzer may be made inoperable, at any given time, for the purpose of performing modifications relating to TMI Action Plan Item II.F.1.6. During this time, Specification 3.0.4 is not applicable to this requirement.



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55  
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 July 20, 1982, 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.

DESIGNATED ORIGINAL

Certified By \_\_\_\_\_

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-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. 55, 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.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the  
Technical Specifications

Date of Issuance: July 30, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 55

FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NO. 50-318

Replace the following page of the Appendix A Technical Specifications with the enclosed page as indicated. The revised page is identified by Amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Page

3/4 6-26

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

| <u>PENETRATION NO.</u> | <u>ISOLATION CHANNEL</u> | <u>ISOLATION VALVE IDENTIFICATION NO.</u> | <u>FUNCTION</u>            | <u>ISOLATION TIME (SECONDS)</u> |
|------------------------|--------------------------|---|----------------------------|---------------------------------|
| 61                     | NA                       | 76Y-1                                     | Refueling Pool Outlet      | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
|                        | NA                       | 293M-1                                    |                            | NA                              |
| 62                     | SIAS A                   | MOV-6579                                  | Containment Heating Outlet | ≤13                             |
| 64                     | NA                       | 238-1                                     | Containment Heating Inlet  | NA                              |

(1) Manual or remote manual valve which is closed during plant operation.

(2) May be opened below 300°F to establish shutdown cooling flow.

(3) Containment purge isolation valves will be shut in MODES 1, 2, 3 and 4 per TS 3/4 6.1.7.

\* May be open on an intermittent basis under administrative control.

\*\* Containment purge isolation valves isolation times will only apply for MODES 5 and 6 during which time these valves may be opened. Isolation time is NA for MODES 1, 2, 3 and 4 per TS 3/4 6.1.7 during which time these valves must remain closed.

CALVERT CLIFFS - UNIT 2

3/4 6-25

Amendment No. 47

## CONTAINMENT SYSTEMS

### 3/4.6.5 COMBUSTIBLE GAS CONTROL

#### HYDROGEN ANALYZERS

#### LIMITING CONDITION FOR OPERATION

---

3.6.5.1 Two independent containment hydrogen analyzers shall be OPERABLE\*.

APPLICABILITY: MODES 1 and 2.

#### ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

4.6.5.1 Each hydrogen analyzer shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by performing a CHANNEL CALIBRATION using sample gases containing:

- a. Zero volume percent hydrogen, balance nitrogen, and
- b. Three volume percent hydrogen, balance nitrogen.

---

\*Until September 30, 1982, one hydrogen analyzer may be made inoperable, at any given time, for the purpose of performing modifications relating to TMI Action Plan Item II.F.1.6. During this time, Specification 3.0.4 is not applicable to this requirement.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 74 AND 55 TO

FACILITY OPERATING LICENSES NOS. DPR-53 AND DPR-69

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NOS. 1 & 2

DOCKET NOS. 50-317 AND 50-318

Introduction

By application for License Amendment dated July 20, 1982, Baltimore Gas and Electric (BG&E) requested changes to the Technical Specifications (TS) for Calvert Cliffs Units 1 and 2. The proposed change to TS 3.6.5.1 would extend the date for operability of the Calvert Cliffs Hydrogen Analyzers from August 1, 1982 to September 30, 1982. This extension is required so that BG&E can complete modifications required by the NRC under TMI Action Item II.F.1.6, "Hydrogen Level Monitoring".

Discussion

On November 6, 1981, the NRC issued Amendments 60 and 42 to the Operating Licenses for Calvert Cliffs Units 1 and 2, respectively. These license amendments provided changes to TS 3.6.5.1 which permitted one of two containment Hydrogen Analyzers to be inoperable, at one given time, until August 1, 1982, for the purpose of performing modifications required by the NRC under TMI Action Item II.F.1.6, "Hydrogen Level Monitoring".

The TS changes also permitted the reactors to be started up with a single Hydrogen Analyzer inoperable.

By application dated July 20, 1982, BG&E informed the NRC that they were experiencing difficulty during the start-up testing of one modified Hydrogen Analyzer. Since BG&E does not expect to have completed start-up testing of this Hydrogen Analyzer by August 1, 1982, they have requested an extension to September 30, 1982 to allow this analyzer to be inoperable for the purpose of start-up testing.

Evaluation

BG&E has informed us that one of the two modified Hydrogen Analyzers has been installed and successfully undergone start-up testing and is now operable. The second unit, while installed, is undergoing start-up delays due to an unforeseen delay in receipt of parts required to complete start-up testing.

DESIGNATED ORIGINAL

Certified By \_\_\_\_\_

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P PDR

As indicated in our Safety Evaluation Report (SER) issued on November 6, 1981, a single Hydrogen Analyzer is sufficient to perform post-LOCA hydrogen sampling for Calvert Cliffs Units 1 and 2. The use of hydrogen "grab samples" provides a back-up capability for the hydrogen analyzer system. These and other safety issues associated with reactor operation for an extended period with a single Hydrogen Analyzer were previously addressed in our November 6, 1981 SER.

Accordingly, since the issues associated with reactor operation with a single Hydrogen Analyzer have been previously addressed, and since there is reasonable assurance that the testing of a single Hydrogen Analyzer can be completed by September 30, 1982, the proposed change to TS 3.6.5.1 is appropriate and acceptable.

#### Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

#### Conclusion

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 an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, 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.

Date: July 30, 1982

Principal Contributor:  
D. H. Jaffe

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-317 AND 318BALTIMORE GAS AND ELECTRIC COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITYOPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment Nos. 74 and 55 to Facility Operating Licenses Nos. DPR-53 and DPR-69, issued to Baltimore Gas and Electric Company, which revised Technical Specifications for operation of the Calvert Cliffs Nuclear Power Plant, Units Nos. 1 and 2. The amendments are effective as of the date of issuance.

These amendments revise the Technical Specifications to extend the date for operability of the Hydrogen Analyzers from August 1, 1982 to September 30, 1982.

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 the amendments was not required since the amendments do not involve a significant hazards consideration.

DESIGNATED ORIGINAL

Certified By \_\_\_\_\_

- 2 -

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of the amendments.

For further details with respect to this action, see (1) the application for amendment dated July 20, 1982, (2) Amendment Nos. 74 and 55 to License Nos. DPR-53 and DPR-69, and (3) the Commission's related Safety Evaluation. 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. A 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 Licensing.

Dated at Bethesda, Maryland, this 30th day of July, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

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