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

June 19, 1990

Docket Nos. 50-317
and 50-318

Mr. G. C. Creel
Vice President - Nuclear Energy
Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
MD Rtes. 2 & 4
P. O. Box 1535
Lusby, Maryland 20657

Dear Mr. Creel:

SUBJECT: ISSUANCE OF AMENDMENTS, CALVERT CLIFFS, UNITS 1 AND 2

REFERENCE: TAC Numbers 76709 (Unit 1) and 76710 (Unit 2)

The Commission has issued the enclosed Amendment No. 143 to Facility Operating License No. DPR-53 and Amendment No.126 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 in response to your application transmitted by letter dated May 2, 1990.

These amendments would modify the Surveillance Requirement 4.4.10.1.1 by revising the existing footnotes on pages 3/4 4-28 and 3/4 4-29 to replace the June 1990 and June 1991 dates with a reference to the applicable Unit 1 and Unit 2 refueling outages.

The Nuclear Regulatory Commission (NRC) issued license amendments (Nos. 123 and 106) modifying the Unit 1 and 2 Technical Specification Surveillance Requirement 4.4.10.1.1 to link the completion of the reactor coolant pump (RCP) flywheel inspections to the RCP motor overhaul program. The original schedules called for completion of the RCP motor overhaul program and flywheel inspections to coincide with the completion of Unit 1 Refueling Outage (RFO) #10 (June 1990) and Unit 2 RFO #9 (June 1991). The dates for these refueling outages have been revised as a result of an extended shutdown of both units since the first half of 1989 to accomplish certain unrelated hardware evaluations, repairs and various administrative actions. The new schedules for Unit 1 RFO #10 and Unit 2 RFO #9 are fall 1991 and spring 1992, respectively, based on a Unit 1 startup in July 1990 and a Unit 2 startup late fall of 1990.

DFO 1
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A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY:

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

Enclosures:
1. Amendment No. 143 to DPR-53
2. Amendment No. 126 to DPR-69
3. Safety Evaluation

cc: w/enclosures
See next page

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cc:

Mr. William T. Bowen, President
Calvert County Board of
Commissioners
Prince Frederick, Maryland 20678

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

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

Ms. G. L. Adams, Licensing
Calvert Cliffs Nuclear Power Plant
MD Rts 2 & 4, P. O. Box 1535
Lusby, Maryland 20657

Resident Inspector
c/o U.S.Nuclear Regulatory Commission
P. O. Box 437
Lusby, Maryland 20657

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

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

Mr. Joseph H. Walter
Engineering Division
Public Service Commission of Maryland
American Building
231 E. Baltimore Street
Baltimore, Maryland 21202-3486

Ms. Kirsten A. Burger, Esq.
Maryland People's Counsel
American Building, 9th Floor
231 E. Baltimore Street
Baltimore, Maryland 21202

Ms. Patricia Birnie
Co-Director
Maryland Safe Energy Coalition
P. O. Box 902
Columbia, Maryland 21044

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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 143
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 May 2, 1990, 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) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 143, 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

Robert A. Capra

Robert A. Capra, 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: June 19, 1990

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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NO. 50-318

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 126
License No. DPR-69

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Baltimore Gas and Electric Company (the licensee) dated May 2, 1990, 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-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. 126, 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

Robert A. Capra, 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: June 19, 1990

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 143 FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 126 FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 4-27 (DPR-53)	3/4 4-27*
3/4 4-28 (DPR-53)	3/4 4-28
3/4 4-29 (DPR-69)	3/4 4-29
3/4 4-30 (DPR-69	3/4 4-30*

* No changes repositioned.

3/4.4.10 STRUCTURAL INTEGRITY

ASME CODE CLASS 1, 2 AND 3 COMPONENTS

LIMITING CONDITION FOR OPERATION

3.4.10.1 The structural integrity of ASME Code Class 1, 2 and 3 components shall be maintained in accordance with Specification 4.4.10.1.

APPLICABILITY: ALL **MODES**.

ACTION:

a. With the structural integrity of any ASME Code Class 1 components(s) not conforming to the above requirements, restore the structural integrity of the affected components(s) to within its limit or isolate the affected components(s) prior to increasing the Reactor Coolant System temperature more than $50^{o}F$ above the minimum temperature required by NDT considerations.

b. With the structural integrity of any ASME Code Class 2 components(s) not conforming to the above requirements, restore the structural integrity of the affected components(s) to within its limit or isolate the affected components(s) prior to increasing the Reactor Coolant System temperature above $200^{o}F$.

c. With the structural integrity of any ASME Code Class 3 components(s) not conforming to the above requirements, restore the structural integrity of the affected components(s) to within its limit or isolate the affected components(s) from service.

d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.4.10.1.1 The structural integrity of ASME Code Class 1, 2 and 3 components shall be demonstrated:

a. Per the requirements of Specification 4.0.5, and

b. Per the requirements of the augmented inservice inspection program specified in Specification 4.4.10.1.2.

SURVEILLANCE REQUIREMENTS (Continued)

In addition to the requirements of Specification 4.0.5, each Reactor Coolant Pump flywheel shall be inspected per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.*

4.4.10.1.2 Augmented Inservice Inspection Program for Main Steam and Main Feedwater Piping - The unencapsulated welds greater than 4 inches in nominal diameter in the main steam and main feedwater piping runs located outside the containment and traversing safety related areas or located in compartments adjoining safety related areas shall be inspected per the following augmented inservice inspection program using the applicable rules, acceptance criteria, and repair procedures of the ASME Boiler and Pressure Vessel Code, Section XI, 1983 Edition and Addenda through Summer 1983, for Class 2 components.

Each weld shall be examined in accordance with the above ASME Code requirements, except that 100% of the welds shall be examined, cumulatively, during each 10 year inspection interval. The welds to be examined during each inspection period shall be selected to provide a representative sample of the conditions of the welds. If these examinations reveal unacceptable structural defects in one or more welds, an additional 1/3 of the welds shall be examined and the inspection schedule for the repaired welds shall revert back as if a new interval had begun. If additional unacceptable defects are detected in the second sampling, the remainder of the welds shall also be inspected.

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* Reactor coolant pump flywheel inspections for the first inservice inspection interval may be completed during Unit 1 Refueling Outage No. 10 in conjunction with the reactor coolant pump motor overhaul program.

SURVEILLANCE REQUIREMENTS (Continued)

In addition to the requirements of Specification 4.0.5, each Reactor Coolant Pump flywheel shall be inspected per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.*

4.4.10.1.2 Augmented Inservice Inspection Program for Main Steam and Main Feedwater Piping - The unencapsulated welds greater than 4 inches in nominal diameter in the main steam and main feedwater piping runs located outside the containment and traversing safety related areas or located in compartments adjoining safety related areas shall be inspected per the following augmented inservice inspection program using the applicable rules, acceptance criteria, and repair procedures of the ASME Boiler and Pressure Vessel Code, Section XI, 1983 Edition and Addenda through Summer 1983, for Class 2 components.

Each weld shall be examined in accordance with the above ASME Code requirements, except that 100% of the welds shall be examined, cumulatively, during each 10-year inspection interval. The welds to be examined during each inspection period shall be selected to provide a representative sample of the conditions of the welds. If these examinations reveal unacceptable structural defects in one or more welds, an additional 1/3 of the welds shall be examined and the inspection schedule for the repaired welds shall revert back as if a new interval had begun. If additional unacceptable defects are detected in the second sampling, the remainder of the welds shall also be inspected.

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* Reactor coolant pump flywheel inspections for the first inservice inspection interval may be completed during Unit 2 Refueling Outage No. 9 in conjunction with the reactor coolant pump motor overhaul program.

REACTOR COOLANT SYSTEM

CORE BARREL MOVEMENT

LIMITING CONDITION FOR OPERATION

3.4.11 Core barrel movement shall be limited to less than the Amplitude Probability Distribution (APD) and Spectral Analysis (SA) Alert Levels for the applicable **THERMAL POWER** level.

APPLICABILITY: **MODE** 1.

ACTION:

a. With the APD and/or SA exceeding their applicable Alert Levels, **POWER OPERATION**, may proceed provided the following actions are taken:

   1. APD shall be measured and processed at least once per 24 hours,

   2. SA shall be measured at least once per 24 hours and shall be processed at least once per 7 days, and

   3. A Special Report, identifying the cause(s) for exceeding the applicable Alert Level, shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days of detection.

b. With the APD and/or SA exceeding their applicable Action Levels, measure and process APD and SA data within 24 hours to determine fit he core barrel motion is exceeding its limits. With the core barrel motion exceeding its limits, reduce the core barrel motion to within its Action Levels within the next 24 hours or be in **HOT STANDBY** within the following 6 hours.

c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 143 TO FACILITY OPERATING LICENSE NO. DPR-53

AND AMENDMENT NO. 126 TO FACILITY OPERATING LICENSE NO. DPR-69

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-317 AND 50-318

1.0 INTRODUCTION

By letter dated May 2, 1990, the Baltimore Gas and Electric Company (BG&E) requested amendments to the Technical Specifications for Calvert Cliffs Unit Nos. 1 and 2. The proposal would modify the technical specifications Surveillance Requirement 4.4.10.1.1 by revising the existing footnotes on pages 3/4 4-28 and 3/4 4-29 to replace the June 1990 and June 1991 dates with a reference to the applicable Unit 1 and Unit 2 refueling outages.

The Nuclear Regulatory Commission (NRC) issued license amendments modifying the Unit 1 and 2 Technical Specification Surveillance Requirement 4.4.10.1.1 to link the completion of the reactor coolant pump (RCP) flywheel inspections to RCP motor overhaul program. The original schedules called for completion of the RCP motor overhaul program and flywheel inspections to coincide with the completion of Unit 1 Refueling Outage (RFO) #10 (June 1990) and Unit 2 RFO #9 (June 1991). The dates for these refueling outages have been revised as a result of an extended shutdown of both units since the first half of 1989 to accomplish certain unrelated hardware evaluations, repairs and various administrative actions. The new schedules for Unit 1 RFO #10 and Unit 2 RFO #9 are fall 1991 and spring 1992, respectively, based on a Unit 1 startup in July 1990 and a Unit 2 startup in October 1990.

2.0 EVALUATION

Three years ago the licensee initiated a voluntary RCP motor overhaul program utilizing a spare motor to enable quick motor changeout. During each refueling outage one motor will be changed until all eight RCP motors are overhauled, at which time the voluntary program will be completed. The licensee intends to perform the required flywheel examinations coincident with the motor overhaul schedule. To date, six of the eight flywheels have been inspected with acceptable results.

The original schedules called for completion of the RCP motor overhaul program and flywheel inspections to coincide with the completion of Unit 1 RFO #10 (June 1990) and Unit 2 RFO #9 (June 1991). As noted above, the dates for these refueling outages have been revised as a result of an extended shutdown of both units since the first half of 1989.

The new schedules for Unit 1 RFO #10 and Unit 2 RFO #9 are fall 1991 and spring 1992, respectively, based on a Unit 1 startup in July 1990 and a Unit 2 startup in late fall of 1990.

The proposed change results in an additional extension of approximately 18 months in the actual completion of the RCP flywheel inspection program. Although the request lengthens the period of time necessary to complete the RCP flywheel inspections, the technical superiority of the visual flywheel inspection conducted in conjunction with the RCP motor changeout in comparison to the difficulty in adequately performing the conventional in-place ultrasonic examination of the two-piece bolted flywheel design more than compensates for the increase in inspection interval. In addition, the results of the previous inspection have no recordable flaw indications and the remaining two RCP pumps have been idle for extended intervals due to the outages of both units. As the result of being inoperable the flywheels have not been subjected to any increase in wear or stress caused by normal operation. Each unit has one of its four RCPs which require the flywheel inspection.

Therefore, based on the above, the staff has determined that the proposed change to Technical Specification 4.4.10.1.1 is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a surveillance requirement. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 these amendments.

4.0 CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

PRINCIPAL CONTRIBUTOR:

D. McDonald

Dated: June 19, 1990