

December 21, 1988

Docket Nos. 50-317  
and 50-318

Mr. J. A. Tiernan  
Vice President - Nuclear Energy  
Calvert Cliffs Nuclear Power Plant  
MD Rts. 2 & 4  
P. O. Box 1535  
Lusby, Maryland 20657

DISTRIBUTION

Docket file

NRC PDR

SVarga

RCapra

SMcNeil

DHagan

BGrimes

WJones

ACRS (10)

ARM/LFMB

Local PDR

PDI-1 Rdg

BBoger

CVogan

OGC

EJordan

TBarnhart (4)

EButcher

GPA/PA

LTripp, RI

Dear Mr. Tiernan:

SUBJECT: AMENDMENT TO ADD THE REFUELING INTERVAL FREQUENCY NOTATION  
DEFINITION (TACS 69240 AND 69241)

The Commission has issued the enclosed Amendment No. 133 to Facility Operating License No. DPR-53 and Amendment No. 114 to Facility Operating License No. DPR-69 for the Calvert Cliffs Power Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in partial response to your application transmitted by letter dated June 16, 1988, as supplemented on November 29, 1988.

These amendments add the definition "Refueling Interval - At least once per 24 months," to Table 1.2 of TS Definition 1.22, "Frequency Notation."

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

Scott Alexander McNeil, Project Manager  
Project Directorate I-1  
Division of Reactor Projects, I/II

Enclosures:

1. Amendment No. 133 to DPR-53
2. Amendment No. 114 to DPR-69
3. Safety Evaluation

cc: w/enclosures  
See next page

OFC	:PDI-1	:PDI-1	:PDI-1	:OGC			
NAME	:CVogan	:SMcNeil	:RCapra	:S H Lewis			
DATE	:12/14/88	:12/14/88	:12/21/88	:12/19/88			

OFFICIAL RECORD COPY

8812280232 881221  
PDR ADOCK 05000317  
P PDC

Mr. J. A. Tiernan  
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant

cc:

Mr. John M. Gott, President  
Calvert County Board of  
Commissioners  
Prince Frederick, Maryland 20768

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  
1800 M Street, NW  
Washington, DC 20036

Mr. W. J. Lippold, General Supervisor  
Technical Services Engineering  
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

Department of Natural Resources  
Energy Administration, Power Plant  
Siting Program  
ATTN: Mr. T. Magette  
Tawes State Office Building  
Annapolis, Maryland 21204

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



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

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NOS. 50-317

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 133  
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 June 16, 1988, as supplemented on November 29, 1988, 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:

8812280236 881221  
PDR ADOCK 05000317  
P PDC

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 133, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective twenty days after the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Robert A. Capra*

Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects, I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 21, 1988



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. 114  
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 June 16, 1988, as supplemented on November 29, 1988, 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. 114, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective twenty days after the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Robert A. Capra*

Robert A. Capra, Director  
Project Directorate I-1  
Division of Reactor Projects, I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 21, 1988

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 133 FACILITY OPERATING LICENSE NO. DPR-53

AMENDMENT NO. 114 FACILITY OPERATING LICENSE NO. DPR-69

DOCKET NOS. 50-317 AND 50-318

Revise Appendix A as follows:

Remove Pages

1-9\*  
1-10

Insert Pages

1-9\*  
1-10

\*Overleaf provided for continuity purposes.

TABLE 1.1  
OPERATIONAL MODES

<u>MODE</u>	<u>REACTIVITY CONDITION, <math>K_{eff}</math></u>	<u>%RATED THERMAL POWER*</u>	<u>AVERAGE COOLANT TEMPERATURE</u>
1. POWER OPERATION	$\geq 0.99$	$> 5\%$	$\geq 300^{\circ}\text{F}$
2. STARTUP	$\geq 0.99$	$\leq 5\%$	$\geq 300^{\circ}\text{F}$
3. HOT STANDBY	$< 0.99$	0	$\geq 300^{\circ}\text{F}$
4. HOT SHUTDOWN	$< 0.99$	0	$300^{\circ}\text{F} > T_{avg}$ $> 200^{\circ}\text{F}$
5. COLD SHUTDOWN	$< 0.99$	0	$\leq 200^{\circ}\text{F}$
6. REFUELING**	$\leq 0.95$	0	$\leq 140^{\circ}\text{F}$

---

\*Excluding decay heat.

\*\*Reactor vessel head unbolted or removed and fuel in the vessel.



TABLE 1.2  
FREQUENCY NOTATION

<u>NOTATION</u>	<u>FREQUENCY</u>
S	At least once per 12 hours.
D	At least once per 24 hours.
W	At least once per 7 days.
M	At least once per 31 days.
Q	At least once per 92 days.
SA	At least once per 6 months.
R	At least once per 18 months.
S/U	Prior to each reactor startup.
P	Completed prior to each release.
N.A.	Not applicable.
Refueling Interval	At least once per 24 months.

TABLE 1.1  
OPERATIONAL MODES

<u>MODE</u>	<u>REACTIVITY CONDITION, <math>K_{eff}</math></u>	<u>%RATED THERMAL POWER*</u>	<u>AVERAGE COOLANT TEMPERATURE</u>
1. POWER OPERATION	$\geq 0.99$	$> 5\%$	$\geq 300^{\circ}\text{F}$
2. STARTUP	$\geq 0.99$	$\leq 5\%$	$\geq 300^{\circ}\text{F}$
3. HOT STANDBY	$< 0.99$	0	$\geq 300^{\circ}\text{F}$
4. HOT SHUTDOWN	$< 0.99$	0	$300^{\circ}\text{F} > T_{avg}$ $> 200^{\circ}\text{F}$
5. COLD SHUTDOWN	$< 0.99$	0	$\leq 200^{\circ}\text{F}$
6. REFUELING**	$\leq 0.95$	0	$\leq 140^{\circ}\text{F}$

---

\* Excluding decay heat.

\*\* Reactor vessel head unbolted or removed and fuel in the vessel.

TABLE 1.2  
FREQUENCY NOTATION

<u>NOTATION</u>	<u>FREQUENCY</u>
S	At least once per 12 hours.
D	At least once per 24 hours.
W	At least once per 7 days.
M	At least once per 31 days.
Q	At least once per 92 days.
SA	At least once per 6 months.
R	At least once per 18 months.
S/U	Prior to each reactor startup.
P	Completed prior to each release.
N.A.	Not applicable.
Refueling Interval	At least once per 24 months.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 133 TO FACILITY OPERATING LICENSE NO. DPR-53  
AND AMENDMENT NO. 114 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

INTRODUCTION

By letter dated June 16, 1988, as supplemented on November 29, 1988, the Baltimore Gas and Electric Company (BG&E, the licensee) proposed changes to the Units 1 and 2 Technical Specifications (TS). The proposed changes would add the definition, "Refueling Interval - At least once per 24 months," to TS Definition 1.22, "Frequency Notation," Table 1.2.

The November 29, 1988 submittal provided camera-ready copies of the proposed TS changes as were requested on June 16, 1988. This November 29, 1988 supplement did not affect the proposed TS changes noticed in the Federal Register on October 19, 1988 and did not affect the staff's proposed no significant hazards determination.

DISCUSSION AND EVALUATION

The licensee has requested the addition of the definition, refueling interval, to Table 1.2 of TS Definition 1.22, "Frequency Notation," in order to support the licensee's 24-month operating cycle. Recently, on November 3, 1987 and May 3, 1988, the Commission issued TS amendments, with associated Safety Evaluations, in which the intervals for several surveillance requirements were extended from at least once per 18 months (or R) to the new frequency of Refueling Interval which was defined as at least once per 24 months.

This change is administrative in nature. As the Refueling Interval frequency notation is not used anywhere else in the Units 1 or 2 TS other than in the November 3, 1987 and May 3, 1988 amendments, the addition of this new frequency notation definition will affect only those TS surveillance requirements that were modified to support implementation of the licensee's 24-month operating cycle. Of the TS surveillance requirements affected, all were previously analyzed and approved for a 24-month surveillance interval. Thus, the addition of this frequency notation definition was proposed for the sole purpose of placing these previously approved TS surveillance interval changes in effect. Consequently, the NRC staff has determined that the addition of the refueling definition to Table 1.2 of TS Definition 1.22, "Frequency Notation," is acceptable.

### INTENT

The intent of the proposed change is to add the definition, Refueling Interval, to TS Definition 1.22 "Frequency Notation," Table 1.2. Refueling Interval shall be defined as a frequency of "at least once per 24-months" which shall be equivalent to at least once per 732 days.

TS Surveillance Requirement 4.0.2 shall be applicable to all TS Surveillance Requirements specifying the Refueling Interval test frequency unless the associated TS Limiting Condition for Operation specifically states that Specification 4.0.2 is not applicable. Consequently, the maximum allowable surveillance interval extension under TS 4.0.2.a shall not exceed 183 days (resulting in a maximum extended interval of 915 days). Similarly, the maximum time interval for any 3 consecutive Refueling Interval Surveillances shall not exceed 2379 days.

### ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of the facilities' components located within the restricted areas as defined in 10 CFR 20. 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.

### CONCLUSION

The Commission made proposed determinations that the amendments involve no significant hazards consideration, which were published in the Federal Register (53 FR 40982) on October 19, 1988. The Commission consulted with the State of Maryland. No public comments were received, and the State of Maryland did not have any comments.

Based on the considerations discussed above, the staff concludes 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: December 21, 1988

### PRINCIPAL CONTRIBUTOR:

S. A. McNeil