

March 11, 1988

Docket No. 50-317

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Mr. J. A. Tiernan  
Vice President-Nuclear Energy  
Baltimore Gas and Electric Company  
P.O. Box 1475  
Baltimore, Maryland 21203

Dear Mr. Tiernan:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - UNIT 1 CYCLE 10 RELOAD  
(TAC 67143)

Your letter dated February 12, 1988 requested amendment to Operating License No. DPR-69 for Calvert Cliffs Unit 1 to operate for a tenth cycle. The NRC staff has performed an initial review of your supporting safety analysis information and has determined that additional information is required to complete the review. The request for additional information is enclosed.

As you are intending to complete this refueling outage with heat up to mode 4 on May 17, 1988, time is very short for completing our review. In order to expedite the completion of this review, please provide the information as requested within 20 days of this letter's issuance date.

This request for information affects fewer than 10 respondents; therefore, OMB clearance is not required under Public Law 95-511.

Sincerely,

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

Enclosure:  
As stated

cc: See next page

PDI-1  
CVogan *W*  
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*Rae*  
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Mr. J. A. Tiernan  
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant

cc:

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Calvert County Board of  
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Prince Frederick, Maryland 20768

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

REQUEST FOR ADDITIONAL INFORMATION

BALTIMORE GAS AND ELECTRIC COMPANY

CALVERT CLIFFS UNIT 1

CYCLE 10 RELOAD

1. Your staff stated on March 10, 1988 that they intend to withdraw the changes proposed to make the requirements of Technical Specification (TS) 3/4.1.1, "Boration Control, Shutdown Margin -  $T_{avg} > 200^{\circ}F$ ," inapplicable to critical operating modes (Modes 1 and 2 when  $K_{eff} > 1.0$ ). Therefore, please provide the appropriate data on CEA worths to verify that the shutdown margin requirements at EOC, hot zero power can be achieved.
2. Table 9-1 of your February 12, 1988 submittal states that your proposed change to Limiting Condition For Operation 3.1.1.4, "Moderator Temperature Coefficient," (MTC) is identical to the change proposed in your letter of February 6, 1987 (Unit 2 Cycle 8 Reload request) as was approved in our Safety Evaluation dated May 4, 1987. In this Safety Evaluation, the acceptability of this MTC change was contingent upon your commitment to a negative MTC at hot full-power, equilibrium xenon conditions. This commitment was made in lieu of your submission of an evaluation of the impact of increasingly positive MTCs on the safety margin provided for ATWS. Please commit to a negative MTC at hot full-power, equilibrium xenon conditions or provide your analysis of the impact of this MTC change upon the ATWS safety margin.
3. The maximum pin burnup for some C-E fuel may reach 54,100 MWD/T during cycle 10 which is higher than the 52,000 MWD/T value accepted by the staff for high burnup C-E fuel. Therefore, please confirm that the maximum pressure within these pins will remain below the nominal system pressure of 2250 psia.
4. Since the C-E fuel DNBR calculations are based on the CE-1 correlation, whereas the ANF fuel DNBR calculations are based on the XNB correlation, how is the extended SCU methodology affected by the mixed C-E/ANF core?