

May 31, 1996

Mr. Charles H. Cruse  
Vice President - Nuclear Energy  
Baltimore Gas and Electric Company  
Calvert Cliffs Nuclear Power Plant  
1650 Calvert Cliffs Parkway  
Lusby, MD 20657-4702

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING, CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 (TAC NOS. M95436 AND M95437)

Dear Mr. Cruse:

The Commission has requested the Office of the Federal Register to publish the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazard Consideration Determination, and Opportunity for a Hearing." This notice relates to your application for amendment dated May 28, 1996, which would allow installation of a proposed modification of the Unit 1 and Unit 2 Service Water (SRW) Systems. The amendment proposed replacing the mechanical stops in the inlet control valves of the containment air coolers (CACs) with a variable flow controller for the inlet control valve.

Sincerely,

Original signed by:

Alexander W. Dromerick, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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Docket Nos. 50-317  
and 50-318

Enclosure: Notice of Consideration

cc w/encls: See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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Vice President - Nuclear Energy  
Baltimore Gas and Electric Company  
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Sincerely,

A handwritten signature in cursive script that reads "Alexander W. Dromerick".

Alexander W. Dromerick, 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

Enclosure: Notice of Consideration

cc w/encls: See next page

Mr. Charles H. Cruse  
Calvert Cliffs Nuclear Power Plant

Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 and 2

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UNITED STATES NUCLEAR REGULATORY COMMISSION

BALTIMORE GAS AND ELECTRIC COMPANY

DOCKET NOS. 50-317 AND 50-318

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE. PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION. AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License Nos. DPR-53 and DPR-69, issued to Baltimore Gas and Electric (BGE) Company for operation of the Calvert Cliffs Nuclear Plant Unit Nos. 1 and 2 located in Calvert County, Maryland.

The proposed amendment would replace the mechanical stops in the inlet control valves of the containment air coolers (CACs) with a variable flow controller for the inlet control valve.

The licensee requests that this proposed amendment be considered as exigent under the criteria of 10 CFR 50.91(a)(6). The licensee states that they could not have foreseen the need for this request prior to this time. This modification is the result of a substantial proactive effort in dealing with the concerns that BGE have with their Service Water (SRW) System. The history of BGE's activities concerning the SRW System is given in Attachment (1) of the proposed amendment. This particular modification was determined to be necessary after BGE obtained data from a site stream monitor that BGE had installed to measure the rate of microfouling in the SRW heat exchangers. The data from the side stream monitor was not analyzed and available to BGE until

January 17, 1996. By mid-February, BGE had determined that the installation of flow controllers on the CAC inlet valves was necessary to offset the effects of the larger than expected microfouling. BGE has committed the necessary money and resources to install this modification before the summer. Design and procurement activities were done in parallel. About mid-April, the engineering was to the stage that work could begin on the safety evaluation (SE) required by 10 CFR 50.59. Refinements to the engineering continued even as the SE was being developed. On May 24, 1996, the Plant General Manager determined that an unreviewed safety question existed for this modification. This request has been submitted as soon as practical after the determination was made.

It is important for BGE to perform this modification on the schedule set out a number of months ago. To prevent operational and safety impacts, this modification must be installed before the hot summer weather causes the Chesapeake Bay water temperature to exceed the SRW temperature limit. Historically, the Chesapeake Bay water temperature has approached or exceeded the current limit by the last week in June. As noted above, whenever the SRW heat exchangers are removed from service for cleaning, some safety-related equipment is rendered inoperable. It is important to minimize the amount of time BGE is in these more vulnerable conditions (with some safety-related equipment out-of-service). Additionally, BGE believes that reducing the power output from both units significantly during a time of high demand (high summer temperatures) is not in the best interest of the public.

Therefore, given the need to act quickly, and the determination that this change does not represent a significant hazard, BGE requests that this

amendment be considered under exigent circumstances as described in 10 CFR 50.91(a)(6).

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed modification is the result of our need to reduce the peak post-accident heat load on the service water (SRW) heat exchangers. It will replace the mechanical stops currently on the control valves which admit SRW into the containment air coolers (CACs) with a flow controller loop. By throttling the SRW to the CACs, the heat load on the SRW heat exchangers is reduced during the early phases of an accident. The increased accuracy of throttling would allow the SRW system to perform its safety function during periods of high ultimate heat sink temperatures. During the summer months, the Chesapeake Bay water (the ultimate heat sink for the units) heats up substantially during some parts of the day. At times, these high temperatures could exceed the current expected limits for the heat exchanger operation. With the more accurately throttled valves, the effect of high ultimate heat sink temperatures is reduced. The modification will ensure that the SRW heat exchangers are capable of meeting their intended safety function up to the maximum expected bay water temperature.

The safety function of the SRW System is to provide cooling to the CACs and the Emergency Diesel Generators (EDGs) following a design basis accident. With this proposed modification in place, the SRW System will continue to meet this safety function. All of the failure mechanisms for this modification have previously been evaluated and were found acceptable. However, because the proposed modification may have a higher probability of malfunction for which compensatory actions may not adequately control the consequence of failure, the probability of a malfunction of systems important to safety may be slightly increased, and this modification has been determined to be an unreviewed safety question.

The single failure of the flow controllers would not be an initiator to an accident. The system provides cooling to safety-related equipment following an accident. It supports accident mitigation functions. Therefore, this proposed modification does not significantly increase the probability of an accident previously evaluated.

The proposed modification will enhance the ability of the SRW system to respond to accident conditions under a wider range of environmental conditions (i.e., higher ultimate heat sink temperatures). Malfunctions of the flow controller have been evaluated and determined to result in consequences that are no more severe than those previously approved. A failure of the flow controller could allow the valve to fail in a position that does not allow the SRW System to perform its safety function. Since the SRW System is redundant on each unit, a single failure of one of the flow controllers would not prevent the other redundant portion of the system from performing its safety function. The consequences of a single failure of the SRW System have been previously analyzed and these consequences do not change due to this modification.

Therefore, this proposed modification does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Would not create the possibility of a new or different type of accident from any accident previously evaluated.

The SRW System provides cooling water to the CACs and EDGs. The purpose of the components which are affected by this modification is to mitigate accidents. The single failure of the flow controllers would not be an initiator to an accident. This modification does not change the equipment's function, or significantly alter the method of operating the equipment to be modified. The system will continue to operate in essentially the same manner as before the modification was done.

Therefore, the proposed change does not create the possibility of a new or different type of accident from any accident previously evaluated.

3. Would not involve a significant reduction in a margin of safety.

The margin of safety is reduced for this proposed modification, but not significantly. If the CAC inlet valve fails open, the CAC on that train would continue to perform its safety function. However, the EDG on that train would receive cooling water above the design temperature and may fail to perform its safety function. The redundant EDG would provide adequate electricity to continue to perform its safety function. If the CAC inlet valve fails in the closed position, the EDG would continue to function; however, the affected CAC would not receive adequate cooling water. The other three CACs would provide adequate cooling for the containment. Also, the Containment Spray System provides additional containment cooling as a backup to the CACs. If the CAC inlet valve fails to throttle properly, the consequences are bounded by the other two cases discussed above.

Adding a more complex component which could fail and result in a failure of the SRW System does reduce the margin of safety, but not significantly because: 1) the proposed flow controller is very reliable and not likely to fail; 2) the other redundant CAC and EDG are available to mitigate the consequence of an accident should there be a single failure of the flow controller.

Therefore, this modification does not significantly reduce the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the



amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D22, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By July 1, 1996, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington,

DC, and at the local public document room located at the Calvert County Library, Prince Frederick, Maryland 20678. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which

are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment

and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to Jocelyn A. Mitchell: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Jay E. Silbert, Esquire, Shaw, Pittman, Potts and Trowbridge, 2300 N Street, NW, Washington, DC 20037, attorney for the licensee.


Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer

or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated May 28, 1996, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room, located at the Calvert County Library, Prince Frederick, Maryland 20678.

Dated at Rockville, Maryland, this 29<sup>th</sup> day of May 1996.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Alexander W. Dromerick, Senior Project Manager  
Project Directorate I-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation