

Mr. Charles H. Cruse, Vice President
Nuclear Energy Division
Baltimore Gas & Electric Company
1650 Calvert Cliffs Parkway
Lusby, MD 20657-47027

August 27, 1998

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 & 2, INTEGRATED PLANT ASSESSMENT REPORT FOR THE COMPONENT COOLING SYSTEM (TAC NOS. M99583, M99584 AND M99205)

Dear Mr. Cruse:

By letter dated July 30, 1997, Baltimore Gas and Electric Company (BGE) submitted for review the Component Cooling System (5.3) integrated plant assessment technical report as attached to the "Request for Review and Approval of System and Commodity Reports for License Renewal." BGE requested that the Nuclear Regulatory Commission (NRC) staff review the Component Cooling System (5.3) integrated plant assessment technical report to determine if the report meet the requirements of 10 CFR 54.21(a), "Contents of application-technical information," and the demonstration required by 10 CFR 54.29(a)(1), "Standards for issuance of a renewed license," to support an application for license renewal if BGE applied in the future. By letter dated April 8, 1998, BGE formally submitted its license renewal application.

The NRC staff has reviewed the Component Cooling System (5.3) integrated plant assessment technical report against the requirements of 10 CFR 54.21(a)(1) and 10 CFR 54.21(a)(3). By letter dated April 4, 1996, the staff approved BGE's methodology for meeting the requirements of 10 CFR 54.21(a)(2). By letter dated August 1, 1998, the NRC forwarded requests for additional information to BGE in order to give BGE additional time to prepare its responses while the staff was continuing its review of the subject report. Based on the continued review of Section 5.3 of BGE's license renewal application, the staff has identified in the enclosure additional areas beyond those outlined in the August 1, 1998 letter where information is needed to complete its review.

Please provide a schedule by letter or telephonically for the submittal of your responses within 30 days of the receipt of this letter. Additionally, the staff would be willing to meet with BGE prior to the submittal of the responses to provide clarifications of the staff's requests for additional information.

Sincerely,

9809170241 980827
PDR ADOCK 05000317
P PDR

David L. Solorio, Project Manager
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Docket Nos. 50-317, 50-318
Enclosure: As stated
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Mr. Charles H. Cruse
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant
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REQUEST FOR ADDITIONAL INFORMATION
CALVERT CLIFFS NUCLEAR POWER PLANT UNIT NOS. 1 & 2
COMPONENT COOLING SYSTEM
INTEGRATED PLANT ASSESSMENT, SECTION 5.3
DOCKET NOS. 50-317 AND 50-318

Section 5.3.2 Aging Management

1. The potential age related degradation mechanisms for the Component Cooling System (CCS) have been identified in Table 5.3-3 of Section 5.3 of the license renewal application. The components of the CCS were judged not to be susceptible to low cycle fatigue or corrosion fatigue. Describe the justification and any specific criteria used to make this determination for the piping, check valves, control valves and the pump/driver assemblies of the CCS.
2. Carbon steel piping bends, elbows and nozzles are vulnerable to erosion corrosion which has been identified as an age related degradation mechanism for the CCS piping. General wall thinning is anticipated as a result of erosion corrosion. Describe the specific evaluations which have been performed (or will be performed) to ensure structural integrity of the piping due to the effects of cyclic fatigue at locations where wall thinning may occur during the extended period of operation.
3. The rate of corrosion of components in the CCS can be mitigated by proper control of water chemistry. Please, provide specifications for water chemistry in the CCS. Your answer should include target values for individual parameters and their monitoring frequency.
4. In a 1996 summary report referenced in Section 5.3.2, several incidents which occurred at Calvert Cliffs that resulted in water chemistry parameters exceeding their action levels were mentioned. Baltimore Gas and Electric Company took actions to correct these conditions. Describe these actions, and the experience gained from implementation of these actions with respect to maintaining water chemistry parameters below action levels.

Enclosure