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VICE PRESIDENT  
SUPPLY

September 7, 1982

Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

50-318

Attn: Mr. Robert A. Clark, Chief  
Operating Reactors Branch #3  
Division of Licensing

Subject: Reactor Safety Study Methodology Applications Program

Reference: Letter from J. A. Tiernan to G. R. Burdick dated 3/5/82

Gentlemen:

Baltimore Gas & Electric Company (BG&E) welcomes the opportunity to comment on the draft final report of the Reactor Safety Study Methodology Applications Program (RSSMAP): Calvert Cliffs #2 PWR Power Plant. As you are aware, we had previously submitted comments on an earlier draft of the report (see Reference).

BG&E recognizes that the RSSMAP was not intended to accurately predict core melt probabilities at Calvert Cliffs Unit 2 but, rather, to provide a comparison of the likelihood of core melt at Calvert Cliffs relative to (e.g., greater than or less than) that at another PWR plant (Surry) which had been analyzed in detail by the Reactor Safety Study. Inasmuch as the RSSMAP was conducted using FSAR vintage information without the benefit of updated design information and without continual feedback between SANDIA and BG&E, we do not feel that the RSSMAP Report represents any more than a guide to those areas of plant design where the greatest gains might be made in reducing core melt frequency. The RSSMAP Report does not represent conclusive evidence that any design changes are needed or that core melt frequency is above an acceptable level.

BG&E also recognizes that the usefulness of the RSSMAP Report from the licensee's and regulator's viewpoints has been greatly diminished by the fact that a more rigorous study, the Interim Reliability Evaluation Program (IREP), was performed on Calvert Cliffs Unit 1, which has an essentially identical nuclear steam supply system to that of Unit 2.

Finally, BG&E recognizes that the RSSMAP Report exists and that, taken alone, it could be construed as a definitive document identifying design weakness which may need timely attention. For this reason, principally, we acknowledge the need for the NRC Staff to produce a Safety Evaluation of the RSSMAP Report including a resolution of any identified design issues.

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In support of the NRC Staff's efforts to conduct their evaluation of the RSSMAP Report, and in the interest of making the information therein as accurate as possible (within the limits of the study), we offer the following comments:

- 1) The transient initiation frequency for total loss of feedwater should be 0.5/yr as opposed to the 3.0/yr used in RSSMP. Data for transient initiation should be consistent with EPRI Document NP-2230. This will reduce the transient incidence by a factor of 6.
- 2) Requantification of the auxiliary feedwater (AFW) system unavailability using current, more realistic estimates for components in use reduces unavailability by a factor of 5.
- 3) Requantification of diesel generator (DG) unavailabilities, which appear to be in error in table B.13.11, results in a reduction in DG unavailability by a factor of 2.

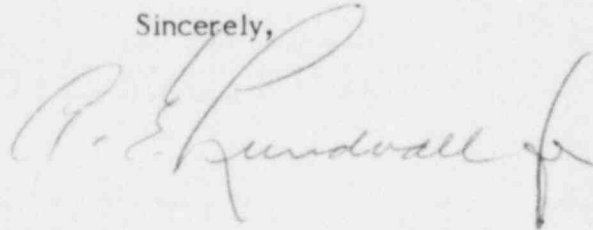
The net effect of these requantifications reduces the incidence of core melt from  $2E-3$  to about  $1E-4$  per year.

Note that this requantification takes no credit for the proposed AFW system modification.

As mentioned above, we believe that the IREP study provides a more comprehensive view of the core melt probabilities at Calvert Cliffs and, in essence, supersedes the RSSMAP Report.

We would be happy to discuss our comments with you in greater detail at your convenience.

Sincerely,



MCK:gvg

cc: J. A. Biddison, Jr., Esquire  
G. F. Trowbridge, Esquire  
Mr. D. H. Jaffe - NRC  
Mr. R. E. Architzel - NRC