

# BALTIMORE GAS AND ELECTRIC COMPANY

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October 28, 1980

ARTHUR E. LUNDVALL, JR.  
VICE PRESIDENT  
SUPPLY

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

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

Subject: Calvert Cliffs Nuclear Power Plant  
Units Nos. 1 & 2, Dockets Nos. 50-317 & 50-318  
Fire Protection Modifications

Reference: (a) BG&E letter dated 8/20/80 from A. E. Lundvall, Jr.  
to R. A. Clark, same subject.

Gentlemen:

Reference (a) contained revisions to our Fire Hazards Analysis which described a change to our previously-submitted approach to protection of safe shutdown equipment inside containment. In addition to the use of existing fire protection features, characteristics and equipment, our approach included the following modifications:

- 1) Addition of a reactor coolant pump motor lube oil collection system.
- 2) Fire detection in cable trays in the electrical penetration areas and in reactor coolant pump bay areas.
- 3) Covering all exposed cable and trays with two applications of Flamemastic fire resistant material.
- 4) Where redundant safe shutdown raceways are located within 10 feet of each other and are not separated by physical barriers, we are rerouting the raceway(s) or providing a physical barrier of Marinite board. This approach was based upon (a) our own design and testing programs, (b) the latest, though not final, NRC criteria (Draft 10CFR50 Appendix R and the Calvert Cliffs Safety Evaluation Report); and (c) communications, both formal and informal, with NRC staff. Although we did not receive a response to reference (a), we continued with design and procurement in preparation for the Unit 1 refueling outage (which began October 17).

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From the most recent draft of Appendix E and from several recent conversations with your staff, we conclude that we will receive little or no credit for installation of Flamemastic or Marinite barriers. In addition, the separation requirement that was previously 10 feet is now 20 feet. We detect no consensus among NRC staff on what will be an acceptable approach after resolution of the Appendix E proceeding, and are therefore modifying our plans for inside containment as follows:

- 1) Reactor coolant pump motor lube oil - same as before.
- 2) Detection - same as before.
- 3) Flamemastic - deleted.
- 4) Barriers/Separation Modifications - deleted.

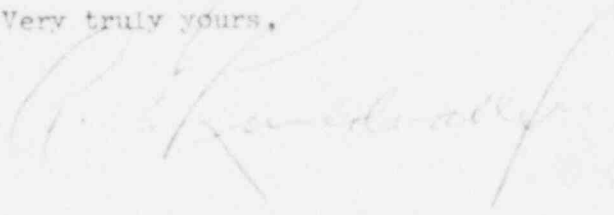
We consider this approach to be acceptable, both short and long-term, for reasons itemized below. All of these considerations have been previously discussed in detail in our Fire Hazards Analysis and other correspondence.

- 1) Existing silicone rubber-insulated, glass braid, asbestos-jacketed cable for all instrumentation, control and low power applications. The superior fire resistance properties of this cable have been the subject of much previous correspondence.
- 2) Existing compliance with Regulatory Guide 1.75 as to separation of cable.
- 3) Minimization of Combustibles:
  - a) essentially no transient fire hazards during operation due to strict controls and limited access.
  - b) Isolation of the major fire hazard and approximately half the total containment fire load through new installation of the reactor coolant pump motor lube oil collection system.
  - c) New in-tray detection in all cable trays in the penetration area, the other major source of combustible material.
- 4) Addition of detection in all areas containing significant combustible load - RCP bay areas and cable trays.
- 5) Existing fire hose stations inside containment, and adequate procedures for use.
- 6) The Containment Spray System could be used to control a fire even though not originally designed for fire protection.

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We are proceeding with the Unit 1 outage based on the approach described above. We would be happy to discuss any questions with you at your convenience.

Very truly yours,

A handwritten signature in cursive script, appearing to read "R. A. Clark", is written over the typed phrase "Very truly yours,".

cc: J. A. Biddison, Esquire  
C. F. Trowbridge, Esquire  
Mr. E. L. Conner, Jr. - NRC