



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

TERA

February 25, 1980

Dockets Nos. 50-317
50-318

Mr. A. E. Lundvall, Jr.
Vice President - Supply
Baltimore Gas & Electric Company
P. O. Box 1475
Baltimore, Maryland 21203

Dear Mr. Lundvall:

By letters dated November 15 and December 14, 1979, you responded to our October 23, 1979 letter on Containment Purging at Calvert Cliffs Nuclear Power Plant, Units Nos. 1 and 2. Your commitment to operate in conformance with the interim position enclosed with our October 23, 1979 letter is found acceptable on an interim basis. However, our long term concern regarding the design of all safety actuation signal circuits, as expressed in our November 29, 1978 letter, remains unresolved.

As a result of this generic review, we have established criteria regarding electrical override/bypass for use in the review of all operating reactors. These criteria are presented in Enclosure 1. You will note that some of these criteria overlap with our Lessons Learned requirements that resulted in your recent modifications to the containment isolation circuitry for both units.

We find that our review cannot continue without a more complete description of the Lessons Learned Item 2.1.4 modification discussed in your January 4, 1980 letter. You are requested to provide the additional information enumerated in Enclosure 2 within 30 days of the receipt of this letter.

Sincerely,

A handwritten signature in cursive script that reads "Robert W. Reid".

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures:

1. Containment Isolation
Electrical Override/Bypass
Design Criteria
2. Request for Additional Information

cc w/enclosures:
See next page

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CONTAINMENT ISOLATION

ELECTRICAL OVERRIDE/BYPASS DESIGN CRITERIA

1. The overriding* of one type of safety actuation signal (e.g., radiation) should not cause the blocking of any other type of safety actuation signal (e.g., pressure) to the isolation valves.
2. Sufficient physical features (e.g., key lock switches) should be provided to facilitate adequate administrative controls.
3. The system-level annunciation of the overridden status should be provided for every safety system impacted when an override is active.
4. At least two diverse signals should be provided to initiate isolation of the containment ventilation system. Specifically, containment high radiation, safety injection actuation, and/or containment high pressure should automatically initiate containment isolation.
5. The instrumentation and control systems provided to initiate containment isolation should be designed and qualified as safety-grade equipment.
6. The overriding or resetting* of the isolation actuation signal should not cause the automatic reopening of any isolation/purge valve.

* The following definitions are given for clarity of use in this issue:
Override - the signal is still present, and it is blocked in order to perform a function contrary to the signal; Reset - the signal has come and gone, and the circuit is being cleared to return to the normal condition.

REQUEST FOR ADDITIONAL INFORMATION
CONTAINMENT PURGE SYSTEM
CLAVERT CLIFFS NUCLEAR POWER PLANT
DOCKETS NOS. 50-317 AND 50-318

1. Provide the details, including schematic drawings, of the modifications made to meet the Lessons Learned requirement 2.1.4.
2. Describe how the modified containment isolation system prevents any valves from changing position automatically when the CIAS signal is reset.
3. Discuss how your present safety system design conforms with each of the Enclosure 1 criteria.
4. Describe any differences between the control of containment ventilation isolation valves and dampers and the valves and dampers of all other engineered safety features (ESF).
5. If the system design of any ESF system contains an override, will the overriding of one type of safety actuation signal cause the blocking of any other type of safety actuation signal?
6. Describe the features that are provided for bypassed and inoperable status indication.