Docket Nos. 50-317
50-318

Mr. Rober E. Denton
Vice President - Nuclear Energy
Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657 - 4702

Dear Mr. Denton:

SUBJECT: COMBINED INSPECTION REPORT NOS. 50-317/93-7 AND 50-318/93-21 ON OCTOBER 21, 1993

This refers to your October 21, 1993, correspondence, in response to our letter, dated September 23, 1993, regarding Calvert Cliffs Nuclear Power Plant, Unit 1, concerning your design review process for the emergency diesel generator load sequencer timer setting for auxiliary feedwater pump 13. We have reviewed this matter in accordance with NRC Inspection Manual Procedure 92702.

Thank you for informing us of the corrective and preventive actions documented in your letter. We have reviewed your corrective actions, and have determined that the changes to your design control processes to provide additional controls for relay setting sheets are adequate.

We consider these actions acceptable pending further review in a future inspection of your design change programs.

We appreciate your cooperation.

Sincerely, Original Signed By:

James M. Trapp, Acting Chief

Electrical Section, EB Division of Reactor Safety

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cc:

G. Detter, Director, Nuclear Regulatory Matters (CCNPP)

R. McLean, Administrator, Nuclear Evaluations

J. Walter, Engineering Division, Public Service Commission of Maryland

K. Burger, Esquire, Maryland People's Counsel

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V. McCree, OEDO (VMM)

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#### 1650 CALVERT CLIFFS PARKWAY - LUSBY, MARYLAND 20657-4702

ROBERT E JENTON VICE PRESIDENT NUCLEAR ENERGY

October 21, 1993

U. S. Nuclear Regulatory Commission Washington, DC 20555

ATTENTION:

Document Control Desk

SUBJECT:

Calvert Cliffs Nuclear Power Plant

Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318

Notice of Violation NRC Region I Combined Inspection Report

Nos. 50-317/93-21 and 50-318/93-21

REFERENCES:

(a) Letter from Mr. J. P. Durr (NRC) to Mr. R. E. Denton (BG&E), dated September 23, 1993, Notice of Violation NRC Region I Combined Inspection Nos. 50-317/93-21 and 50-318/93-21

In response to Reference (a), please find Attachment (1) detailing our response to the cited violation concerning our design review process. As discussed in the attachment, we note that this deficiency was self-identified and that it did not result in equipment inoperability. We believe that upgrades in our design control processes implemented as part of our continuing improvement efforts will preclude similar violations from recurring.

Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

RED/WDM/wdm/bjd

Attachment

cc

D. A. Brune, Esquire

J. E. Silberg, Esquire

R. A. Capra, NRC

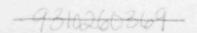
D. G. McDonald, Jr., NRC

T. T. Martin, NRC

P. R. Wilson, NRC

R. I. McLean, DNR

J. H. Walter, PSC



## ATTACHMENT (1)

# REPLY TO NOTICE OF VIOLATION INSPECTION REPORT NOS. 50-317(318)/93-21

## IMPROPER SETTING OF SAFETY-RELATED TIMED RELAY

### I. DESCRIPTION OF VIOLATION.

Reference (a) states that on November 30, 1992, measures were not established to assure design control for verifying or checking the adequacy of design, in that Facility Change Request (FCR) 90-29 was implemented without adequate design review, resulting in a safety-related Agastat timer for Auxiliary Feed Pump 13 being replaced and improperly set to 5 seconds instead of the previously established setting of 14.5 seconds. Reference (a) characterizes this as a violation of 10 CFR Part 50, Appendix B, Criterion III.

### II. REASON FOR VIOLATION.

Two FCRs were involved in this incident. The first, FCR 90-0029, was initiated in 1990 to replace obsolete Agastat relays with a newer model. This FCR was not urgent; the affected relays were planned to be replaced over a long period as the equipment became available due to other maintenance. The second was FCR 92-0210, initiated in March 1992 to address an Emergency Diesel Generator operability concern. This FCR changed the setting for the 13 Auxiliary Feedwater (AFW) pump LOCI sequencer time delay relay from 5 to 14.5 seconds. This FCR was urgent and was implemented on June 6, 1992. It was not until November 1992 that the earlier relay replacement FCR was implemented on 13 AFW pump, incorrectly resetting the time delay back to its original 5 second setting.

The violation occurred because unapproved, and therefore uncontrolled, relay setting sheets were issued with the earlier relay replacement FCR. The engineer preparing the package thought this was acceptable, when in fact it was not allowed by the controlling procedure. Subsequent review of the package did not identify the discrepancy, because review requirements in force at the time did not require thorough review of all parts of a package and because the relay setting sheets had no markings such as "preliminary." Had the relay setting sheets been properly approved, they would have been placed in the Relay Setting Book, the controlled location of all approved relay setpoints. The engineer preparing the second FCR would then have noted the need to update these earlier sheets when he reviewed this book.

# III. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED.

Upon discovery of the problem by a Baltimore Gas and Electric Company maintenance planner, 13 AFW pump was conservatively declared inoperable, the relay was returned to its correct setting of 14.5 seconds, and the pump was returned to operable status. An engineering analysis determined that the Emergency Diesel Generator and 13 AFW pump would have remained operable even with the 5 second time delay relay setting. Facility Change Request 90-0029 was reviewed in its entirety to determine if any other affected relays were improperly set. No other discrepancies were found.

# IV. CORRECTIVE ACTIONS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS.

Subsequent to the preparation of the original FCR, requirements for design review, qualification of responsible engineers, and control of design documentation have become much more stringent. Procedural requirements for the control of relay setting sheets have been moved to their own

## ATTACHMENT (1)

## REPLY TO NOTICE OF VIOLATION INSPECTION REPORT NOS, 50-317(318)/93-21

## IMPROPER SETTING OF SAFETY-RELATED TIMED RELAY

procedure, which clearly identifies originator, review, and approval requirements for issuing relay setting sheets to the field. Additionally, new relay setting sheets now have separate signature blocks which make it obvious when a sheet is not yet fully reviewed and approved. This procedure is currently being revised to include specific requirements for the control and issue of relay setting sheets when they relate to plant design changes (FCRs). This revision is expected to be completed early in 1994.

# V. DATE WHEN FULL COMPLIANCE WAS ACHIEVED.

Full compliance was achieved on July 27, 1993, upon completion of the engineering analysis and review of other affected relays described above.