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*A Member of the  
Constellation Energy Group*



March 7, 2000

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant  
Unit No. 1; Docket No. 50-317  
Wide Range Containment Sump Level Indication Special Report

The attached special report is submitted pursuant to 10 CFR 50.4 and in accordance with Calvert Cliffs Unit 1 Technical Specification 3.3.10 Condition B. This Special Report is required due to the inoperability of the Unit 1 wide range containment sump level indication for a period in excess of the 30-day restoration time.

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

Very truly yours,

A handwritten signature in cursive script that reads 'Peter Katz'.

PEK/ALS/dlm

Attachment:

cc: R. S. Fleishman, Esquire  
J. E. Silberg, Esquire  
Director, Project Directorate I-1, NRC  
A. W. Dromerick, NRC

H. J. Miller, NRC  
Resident Inspector, NRC  
R. I. McLean, DNR  
J. H. Walter, PSC

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**ATTACHMENT (1)**

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**UNIT 1 WIDE RANGE CONTAINMENT SUMP LEVEL INDICATION**

**SPECIAL REPORT**

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**Baltimore Gas and Electric Company**  
**Calvert Cliffs Nuclear Power Plant**  
**March 7, 2000**

## ATTACHMENT (1)

### UNIT 1 WIDE RANGE CONTAINMENT SUMP LEVEL INDICATION SPECIAL REPORT

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Baltimore Gas and Electric Company (BGE) submits this Special Report as required by Calvert Cliffs Unit 1 Technical Specification 3.3.10 Condition B and Reporting requirement 5.6.7 "Post-Accident Monitoring Report." Specifically, the Unit 1 wide range containment sump level indication remained inoperable for greater than the 30-day restoration time specified in Technical Specification 3.3.10 Condition A.

#### ACTION TAKEN

The Unit 1 wide range containment sump level indication was removed from operable status on January 25, 2000, at 0700, due to control room indication failing low. Troubleshooting efforts were conducted and the transmitter was determined to be at fault by measuring the loop current. Once it was determined that the transmitter output was low, repair efforts were discontinued because the transmitter is located at Elevation 10' of the Unit 1 containment, an area of high dose during power operations.

#### EFFECT ON OPERATION

Per the Technical Specification Basis, the wide range containment sump level indications are provided for verification and long-term surveillance of reactor coolant system integrity. Post-accident monitoring instrumentation displays plant variables that provide information required by the control room operators during accident situations. Operability of the post-accident monitoring instrumentation ensures that there is sufficient information available on selected plant parameters to monitor and assess plant status and behavior following an accident. The specific functions of the sump level indication is for monitoring the flow of emergency core cooling system water into the containment sump in preparation for initiating recirculation actuation signal.

Per the station emergency operating procedures action value basis document, the verification of containment sump level is not necessary to provide net positive suction head (NPSH) for the safety injection pumps, as NPSH is ensured by plant design. Containment sump level indication is only used as gross trending to verify that the emergency core cooling system water is entering the sump. When the refueling water tank level decreases sufficiently, the recirculation actuation signal initiates automatically, regardless of the actual containment sump level. The operator can monitor the safety injection pumps for cavitation by observing safety injection system flow indicators, pump ammeters, and pressure gauges for decreased or erratic readings.

Two redundant wide range level indicators are used to monitor sump level, 1-LI-4146 and 1-LI-4147. Indicator 1-LI-4146 remains fully operable and will provide the preferred method of monitoring the sump level. In addition, two narrow range sump level indications, 1-LI-4144 and 1-LI-4145, provide information that can be used for alternate methods of monitoring and for trending in the unlikely event 1-LI-4146 were to become inoperable.

#### CAUSE OF INOPERABILITY

The cause of the inoperability is due to the failure of the differential pressure transmitter inside the containment. Further repair activities will determine the specific fault with the transmitter.

#### PLANS AND SCHEDULES FOR RESTORING THE SYSTEM TO OPERABLE STATUS

Because the transmitter is located in the 10' level of the containment, repair of the equipment is scheduled to occur during the Unit 1 refueling outage scheduled to begin in March 2000. The transmitter will either be replaced or repaired.