U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-317/79-09

Docket No. 50-317

License No. DPR-53 Priority: -- Category: C

Licensee: Baltimore Gas and Electric Company
Gas and Electric Building
Charles Center
Baltimore, Maryland 21203

Facility Name: Calvert Cliffs Unit No. 1

Inspection at: Lusby, Maryland

Inspection conducted: June 18-21, 1979

Inspector: for J. E. Tripp 9/21/79
for J. P. Durr, Reactor Inspector date signed

Approved by: J. E. Tripp 9/21/79
L. E. Tripp, Chief, Engineering Support, Section No. 1, RC&ES Branch date signed

Inspection Summary:

Inspection on June 18-21, 1979 (Report No. 50-317/79-09)
Areas Inspected: Routine, unannounced inspection of Bulletin 79-02 activities. The inspection involved 35 inspector hours onsite by one NRC Regional Inspector and one supervisor.
Results: No items of noncompliance were identified in the one area inspected.

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DETAILS

1. Persons Contacted

Baltimore Gas and Electric Company

D. Latham, Supervisor, Technical Support
J. Lemons, Maintenance Engineer
M. Roberson, Assistant General Foreman Mechanical Maintenance
*R. Russell, Chief Engineer
K. Strupp, Quality Control Inspector
T. Syndor, Engineer

Bechtel

D. Marinari, Field Engineer
S. Daulat, Field Resident Engineer

*Present at the exit interview.

2. Review and Observation of Bulletin 79-02 Activities

Reference: Bulletin 79-02, Revision 1, Pipe Support Base Plate Designs Using Concrete Expansion Anchors.

The Technical Support Procedure No. 24 and the Civil Standard, 6750-CS-5, Revision 0, were reviewed for technical adequacy. It was noted that the civil standard, 6750-CS-5 provided two methods for tension testing anchor bolts, the torque and proof load (pure tension) methods. The proof load method requires the "jacking pressure" to be distributed outside the area having its center at the expansion anchor and its diameter equal to the minimum spacing of the expansion bolts. The requirement of the proof load method to restrict the "jacking pressure" beyond the immediate area around the bolt is not reflected in the torque methods of paragraph 2.3.1 of the same standard, Civil Standard 6750-CS-5, or the test method of Technical Support Procedure No. 24, Appendix A. This item is unresolved pending resolution of this inconsistency and review by the NRC (317/79-09-01).

Deficiencies noted by the licensee during the anchor bolt inspection program are recorded by disposition on Field Engineering Changes

(FEC). A review of 13 FEC's was performed to determine the nature of the deficiencies and the adequacy of the dispositions. FEC 79-47-6 addressed a base plate that was welded in lieu of concrete anchor bolts as specified by the drawing. The disposition accepted the welding as adequate without apparently considering the size and length of the welds. The individual responsible for the disposition or the supporting calculations was not available at the time of this inspection. This item is unresolved pending review of the calculations by the NRC (317/79-09-02).

The inspector observed the placement and testing of the various types of anchor bolts used to establish torque versus tension data. He discussed the technical aspects of the procedure and test with the technicians and craftsmen. The testing was not complete at the time of this inspection. This data will be used to qualify the values used to test and preload the anchor bolts in the facility. This item is unresolved pending completion of the test program and review by the NRC (317/79-09-03).

The inspector toured the facility observing testing and repair of pipe supports and anchor bolts. He verified that the observed activities were performed in accordance with the approved procedures and that there was adequate quality control.

No items of noncompliance were identified.

3. Control of Welding Material

The inspector examined the licensee's welding program as it relates to the use of AWS classification E6010 welding material. The material is acceptable for use in ASME quality work, if properly qualified. The licensee has a qualified welding procedure, P1-C, which qualified the use of E6010 weld rod in up to 60,000 psi material. The possibility exists that some materials in safety-related systems may exceed 60,000 psi. The licensee performed a preliminary records search of safety related system welds to assure that a material mismatch did not occur, none were identified. He stated that an indepth review would be made to provide absolute assurance a mismatch had not occurred.

The inspector had no further questions at this time.

4. The inspector met with the licensee representative listed in paragraph one at the conclusion of the inspection on June 21, 1979. The inspector summarized the scope and findings of this inspection.