

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

Region I

Report No. 50-317/80-25
50-318/80-21
Docket No. 50-317
50-318
License No. DPR-53
DPR-69 Priority -- Category C

Licensee: Baltimore Gas and Electric Company
P. O. Box 1475
Baltimore, Maryland

Facility Name: Calvert Cliffs, Units 1 and 2

Inspection at: Lusby, Maryland

Inspection conducted: December 15-19, 1980

Inspectors: Wm. Trostkoski for
L. Bettenhausen, Ph.D., Reactor Inspector

1-16-81
date signed

Wm. Trostkoski
W. Trostkoski, Reactor Inspector

1-16-81
date signed

Approved by: D. L. Capton
D. L. Capton, Chief, Nuclear
Support Section No. 1, RO&NS Branch

date signed
1/19/81
date signed

Inspection Summary:

Inspection on December 15-19, 1980 (Combined Inspection Report Nos. 50-317/80-25 and 50-318/80-21)

Areas Inspected: Routine, unannounced inspection of licensee actions on previous items; General Training, Technician Training, Reactor Operator Requalification Training, and Startup Test Program for Unit 1, Cycle 5. The inspection involved 60 inspector-hours on site by two NRC region-based inspectors.

Results: No items of noncompliance in the four areas inspected.

DETAILS

1. Persons Contacted

- *M. E. Bowman, Senior Engineer, Nuclear Fuel Management
- *W. S. Gibson, General Supervisor-Electrical Controls
 - L. Hinkle, Unit I&C Foreman
- *S. E. Jones, Jr., Supervisor-Training
- *N. L. Millis, General Supervisor-Radiation Safety
- *E. T. Reimer, Plant Health Physicist
 - L. Russell, Chief Engineer
 - J. Yoe, Training Specialist

The inspectors also interviewed licensed Senior Reactor Operators, Technicians, temporary employees, and other licensee personnel during the course of the inspection.

USNRC Representative Present

- *R. Architzel, Senior Resident Inspector

*denotes those present attending the exit interview on December 19, 1980.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (79-17-02): Review Licensee Corrections on QA Training Audit 20:23:79. The specified QA audit had determined that maintenance of training records in the mechanical department and the documentation of retraining in the I&C maintenance department were deficient. The inspectors discussed the training practices with the shop foreman. From these discussions, it was determined that technicians are given the General Orientation Training per CCI-602D. They were further trained and qualified by a combination of on-the-job training and vendor schools. After a specified period of time, approximately two years, they are requalified on specific test procedures. The inspectors randomly selected and reviewed the records of three individuals to confirm proper documentation. I&C Shop Training Program Memo I-8, Revision 2, February 20, 1980, now includes this retraining. The inspectors had no further questions at this time.

(Closed) Deficiency (79-17-04): Failure of All Licensed Operators to Attend One Required Lecture. The Calvert Cliffs Requalification program requires all licensed operators to attend specified lectures regardless of the score achieved on the annual requalification examination. In addition, licensed operators are required to attend lectures in areas where they scored below 80% on these exams. The inspectors reviewed the training records and verified that all of the required lectures were attended by all licensed personnel. The annual requalification examinations were selectively reviewed. For those with indicated scores of less than 80%, the records

were further reviewed to verify that the individual undertook the additional training required. The deficient item, training on Facility Change Requests, was conducted in 2-hour sessions for all operators in the period 12/5-12/28/79. The inspectors have no further questions at this time.

3. General Training

References:

- CCI-600B, Onsite Training of Calvert Cliffs, dated June 8, 1979.
- CCI-601B, Calvert Cliffs Training Memoranda, dated October 21, 1980, specifies documentation of training not covered under a formal program.
- CCI-602D, Calvert Cliffs Nuclear Power Plant General Orientation Training, dated June 23, 1977.
- CCI-610B, Personnel Training Records, dated January 9, 1979.
- CCI-611C, Site Emergency Plan Training, Change 2, dated April 21, 1977.
- CCI-133B, Calvert Cliffs Fire Protection Plan, dated May 21, 1979.

a. Program Definition

The inspector reviewed the referenced procedures with respect to the program definition requirements of: 10 CFR 50 Appendix B, Criterion II; 10 CFR 19.12; 10 CFR 73.50; and ANSI N18.1. The referenced procedures set forth formal training programs for: new employees; temporary maintenance or service personnel; operations personnel; technicians; and craft personnel.

These programs establish training which covers; administrative controls and procedures; radiological health and safety; controlled access and security; industrial safety training; respirator protection; quality assurance training; fire training; and emergency plan training. Formal training is also provided for all employees on the contents of Appendix A to Regulatory Guide 8.13.

b. Program Participation

The inspector reviewed the licensee's records to assure that the required training had been given. In addition, the inspector conducted interviews with certain of those individuals whose records were reviewed. The interviews were to verify that: the scope of the training was similar to that contained in the licensee's records; the training as conducted was meaningful to those attending; and, that the areas

presented were covered accurately and sufficiently from the participants' point of view. Interviews were conducted for personnel listed below:

- two employees with six years service
- two contractor employees
- two employees with less than one year of experience
- one female employee.

c. Training Attendance

The inspector attended a training session required of all personnel for access to the site.

No items of noncompliance were identified.

4. Technician Training

References:

- CCI-603B, Operator Training, dated January 12, 1975.
- CCI-606B, Maintenance Personnel Training, dated June 29, 1979.

a. Program Definition

The inspector reviewed the referenced procedures with respect to the program definition requirements of: 10 CFR 50 Appendix B, Criterion II, ANSI N18.1; and ANSI N45.2.6. The referenced procedures set forth formal training programs for the I&C, maintenance, non-licensed operators and quality assurance/quality control personnel. These programs establish training which covers: initial and annual training requirements for on-the-job training, formal technical training commensurate with the job classifications; and, certification procedures to meet ANSI N45.2.6.

b. Program Participation

The inspector reviewed the licensee's records and conducted interviews with selected individuals. The interviews were conducted to ascertain that the documented training had been given and was not directed at determining that the individuals were qualified to perform their assigned tasks.

The following personnel were interviewed:

- one mechanic
- one I&C technician
- one Health Physics technician

No items of noncompliance were identified.

5. Requalification Training

Reference:

- CCI-604C, Licensed Operator Training, dated November 20, 1980.
- NUREG-0737, Clarification of TMI Action Plan Requirements.

a. Program Review

The inspector reviewed the referenced procedure and verified that it complies with the requirements of 10 CFR 55 Appendix A, NUREG-0737 and the Calvert Cliffs accepted Requalification Program and includes the following items:

- an established, planned, continuing lecture schedule; with lectures described by lesson plan covering scope of lecture;
- documentation of personnel attendance;
- required reactivity control manipulations; including a simulator training program;
- discussions/reviews of changes in facility design, procedures, and facility license;
- systematic observation and evaluation of performance;
- review of abnormal/emergency procedures; and,
- annual written examinations.

b. Record Review

The inspector reviewed the records of licensed operator training to verify that the following documentation was present:

- Completed course and yearly examinations with answers;
- Documentation of lecture attendance and additional training;
- Manipulations of controls for reactivity changes required by the program;
- Discussion of emergency/abnormal procedures and responses;
- Results of supervisory evaluations.

c. Personnel Interviews

The inspector selected and interviewed three licensed personnel who participated in the requalification program. The interviews were directed at obtaining subjective appraisal of the content and effectiveness of the requalification training as presented.

The inspector identified no discrepancies or inconsistencies between the interview results and the licensee's records.

Discussions with personnel and training staff brought out the fact that a new site emergency plan had been put into effect on December 15, 1980. Some training had been conducted, but it was evident from these discussions that more training, including mini-exercises, is needed to make the plant staff familiar with their various roles in the new emergency plan. Licensee representatives were developing this training and negotiating contractor training assistance for a portion of this. Another weakness was noted as a result of initial training to have the Shift Supervisor personally make all notification calls in an emergency situation. This was the apparent requirement of the plan. While NUREG-0654 requires the emergency classification and notification decision to be made by the senior management person on site, the communication of this decision can be accomplished by others. Licensee representatives acknowledged that the plan tasks a plant operator as communicator and stated that they would review the plan and the implementing training, as well as conduct the additional plant staff training by April 30, 1981. This is an unresolved item (317/80-25-01; 318/80-21-01).

No items of noncompliance were identified.

6. Startup Test Program for Unit 1, Cycle 5

References

- Post-Startup Test Procedure (PSTP)-2), Unit 1, Cycle 5, Initial Approach to Criticality and Low Power Physics Testing, Revision 1, approved 12/11/80.

- Post-Startup Test Procedure (PSTP)-3, Unit 1, Cycle 5, Escalation to Power Test Procedure, Revision 1, approved 12/16/80.

Procedure Review

The inspector reviewed the test procedures to insure that the following checks and tests are included in the test program:

- Control rod drive and rod position checks, including rod drop times;
- control rod worth measurements;
- isothermal temperature coefficient;
- control element symmetry checks;
- critical boron concentration;
- power coefficient;
- power distribution measurements.

The inspector pointed out an inconsistency between step 4-7 of PSTP-2 and Technical Specifications; licensee representatives stated that their review also noted the inconsistency and a procedure change would be made.

Licensee representatives also stated that they would have the process computer set up to trend in-core thermocouples and primary system Resistance Temperature Devices during plant heatup to establish relative relations between the temperature measuring devices up to about 520F.

At the time of this inspection, the plant was prepared for heatup and heated to 300F.

The inspector had no further questions.

7. Unresolved Items

Items about which more information is required to determine acceptability are considered unresolved. Paragraph 5 of this report contains an unresolved item.

8. Exit Interview

At the conclusion of this inspection on December 19, 1980, the inspector held a meeting (see Detail 1 for attendees) to discuss the inspection scope and findings. The unresolved item was identified at this time.