

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-317/84-12
50-318/84-12

Docket No. 50-317
50-318

License No. DPR-53
DPR-69

Licensee: Baltimore Gas and Electric Company
P.O. Box 1475
Baltimore, Maryland 21203

Facility Name: Calvert Cliffs, Unit 1 and 2

Inspection At: Lusby, and Baltimore, Maryland

Inspection Conducted: May 14-18, 1984

Inspectors: J. Prall
P. H. Bissett, Reactor Engineer

5-31-84
date

J. Prall
E. J. Shayb, Reactor Engineer

5-31-84
date

Approved by: A. T. Gody
A. T. Gody, Chief, MPS

6/1/84
date

Inspection Summary:

Inspection on May 14-18, 1984 (Combined Inspection 50-317/84-12
and 50-318/84-12)

Areas Inspected: Routine, unannounced inspection by region-based inspectors of licensee actions on previous inspection findings; audit program; offsite support staff; and the surveillance program. The inspection involved 70 hours of inspection including 64 hours onsite and 6 hours offsite at corporate offices.

Results: No violations were observed in the areas inspected.

DETAILS

1. Persons Contacted

R. Androsik, Electrical & Controls (E&C) Surveillance Test Coordinator
A. Anuje, Supervisor Internal Audits and Program
L. Basso, E&C Preventive Maintenance Coordinator
E. Campo, QC Surveillance/RI Supervisor (Acting)
W. Chestnut, QA Engineer
J. Coveh, Incore Fuel Management Engineer
J. Dahlquist, Principal Engineer, I&C, Nuclear Generation Engineering
J. Davis, Operations Quality Assurance General Supervisor
G. Knierien, Technical Support (TS) Surveillance Test Coordinator
J. Lawson, TS Training Coordinator
J. Lohr, Operations Surveillance Test Coordinator
C. Mahon, Maintenance/Modifications Surveillance Test Coordinator
*L. Russell, Plant Superintendent
*R. Wenderlich, QA Auditing Supervisor

NRC

T. Foley, Senior Resident Inspector
*D. Trimble, Resident Inspector

*denotes those present at exit interview on May 18, 1984.

The inspectors also interviewed other licensee personnel including reactor operators, staff engineers and technicians, and clerical personnel.

2. Licensee Action on Previous Inspection Findings

(Closed) Inspector Follow Item (317/82-01-33; 318/82-01-33) Operations Quality Assurance Section Procedure (OQASP)-7 did not provide adequate instructions on how to disposition audit recommendations. OQASP-7 has been revised to provide adequate guidance for dispositioning audit recommendations.

(Closed) Inspector Follow Item (317/83-03-06; 318/83-03-06) Dates for revisions or changes to CCI's should reflect the date of issuance or effective date.

Calvert Cliffs Nuclear Power Plant Instructions and Notices, CCI-100F, has been revised, such that it now states that the effective date shall be placed on the first page of the instruction. Several procedures were reviewed to verify the effective date was incorporated onto the cover-sheet.

3. Audits

3.1 Reference

The requirements governing the performance of quality assurance audits of safety-related areas are specified in the following documents:

- 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants
- Technical Specifications, Section 6, Administrative Controls
- Regulatory Guide 1.33/ANSI 18.7-1976, Quality Assurance Program Requirements
- Regulatory Guide 1.144/ANSI N45.2.12-1977, Auditing of Quality Assurance Program.

3.2 Program Review

The above documents specify that audits achieve the following:

- The content of audit reports clearly defines the scope of the audit and the results
- Audits are conducted by trained personnel not having the direct responsibility in the area being audited
- Frequency of audits is in conformance with Technical Specifications and the QA program
- Appropriate followup actions (including reaudit, if necessary) are being taken, are in progress or are being initiated
- The audited organization's response to the audit findings is in writing, is timely, and adequately addresses the findings and recommendations

The inspectors reviewed the following procedures to verify that the licensee maintains an administration system to meet the above requirements:

- Quality Assurance Procedure (QAP)-21, Review and Audit of the Quality Assurance Program, Rev. 17
- QAP-11, Integrated Corrective Action System, Rev. 0.
- QAP-20, Training, Rev. 13

- Quality Assurance Department Procedure (QADP)-2, Training Quality Assurance and Quality Control Personnel, Rev. 9
- QADP-3, Audits of the Quality Assurance Department, Rev. 2
- QADP-5, Preparation and Control of QA Inspection Plans, Rev. 1
- QADP-6, Scheduling Internal Audits, Rev. 1
- Engineering Quality Assurance Unit Procedures (EQAUP)-5, Quality Assurance Audits, Rev. 13
- Operations Quality Assurance Section Procedure (OQASP)-7, Quality Assurance Audits, Rev. 15
- OQASP-9, Quality Assurance Surveillance, Rev. 5
- OQASP-10, Trending of Nonconformance Reports, Deficiencies and Operations Quality Assurance Audits, Rev. 5
- OQASP-18, Training Operations Quality Assurance Auditing Personnel, Rev. 2

3.3 Implementation

The inspectors reviewed the following areas to verify compliance with the audit program requirements.

3.3.1 Onsite

- 1984 Schedule of Audits (OQAS), Rev. 2
- Organization Chart for Operations QA Department, April 1, 1984
- Lead auditor certification for five QA personnel
- Joint Utility Management Audit (JUMA) of BG&E, July 1, 1983 and Responses to the Findings and Recommendations of JUMA
- Outstanding Finding Summary, April 1984
- Audit Status Log for 1983 and 1984.
- Audit Files, Including Operations Audit Status Checklist, Audit Checklist, OSSRC Review Sheet, and four Audit Reports (17-2-84, 2-41-83, 31/35-43-83 and 16-3-84)

- Semi annual Trending Reports of Audit Findings, NCR, Deficiencies and LER's dated September 6, 1983 and March 8, 1984
- Monthly Reports of OQAS activity including QC activities

3.3.2 Corporate Offices

- Offsite Internal Audit Schedule, 1983 and 1984
- Lead auditor certifications for four QA personnel
- Matrix for Internal Audit Schedule Preparation for 1984
- Outstanding Finding Summary, May 1, 1984
- Audit Logs for 1983 and 1984
- Seven Audit files, including Audit Report, Audit Plan, Audit Checklist, and OSSRC Review Sheet (Audits 83-12, 83-14, 84-01, 84-04, F84- ITS-1, F84-FMP-1, and F84-ITE-1)
- Monthly Report for IAPU for April 1984

3.3.3

To ensure adequate communications were established with the safety committees the inspector discussed the QA audit interfaces with the QA supervisors. In addition to each audit being reviewed by an offsite committee member, the audit program status is presented to the committees at each meeting.

3.4 Findings

No violations were identified.

4. Quality Assurance Surveillance (Monitoring) and Overview of the Safety Related Surveillance Program

4.1 Reference

The requirements governing the quality assurance program for performance of quality control inspections and surveillances of safety-related areas are specified in the following documents:

- 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants

- Regulatory Guide 1.30/ANSI N45.2.4 - 1972, Quality Assurance Requirements for Inspection and Testing of Instrumentation and Electrical Equipment
- Regulatory Guide 1.33/ANSI N18.7 - 1976, Quality Assurance Program Requirements
- Regulatory Guide 1.58/ANSI N45.2.6 - 1973, Qualification of Inspection Personnel
- Regulatory Guide 1.116/ANSI N45.2.8 - 1975, Quality Assurance Requirements for Inspection and Testing of Mechanical Equipment

4.2 Program Review

The above documents specify that quality control (QC) work achieve the following:

- Inspections are performed by trained personnel, independent of the work being inspected and qualified for the applicable inspection
- Administrative procedures provide sufficient guidance to direct the overall inspection effort
- Detailed instructions are used to ensure thorough inspections
- Documentation exists for the results of the inspection

The inspector reviewed the following procedures to verify that the licensee maintains an administrative system to meet the above requirements:

- OQASP-1, Control of Nonconformance Reports, Rev. 18
- OASP-4, Control of Safety-Related Material at Nuclear Power Plants, Rev. 7
- OQASP-6, Training Quality Control Personnel, Rev. 9
- OQASP-20, Reports, Records and Filing for the Surveillance Section of the Surveillance/Receipt Inspection Q.C. Unit, Rev. 0

4.3 Implementation

The inspector reviewed the following areas to verify compliance with the quality control (QC) program requirements:

- Operations QC organization chart, April 1, 1984

- 7-QC General Inspection Reports completed in 1984
- QA Department Surveillance Log
- Qualification for 4 QC inspectors

Over five hundred surveillances have been performed in 1984 to date. The majority of these surveillances involved T.S. surveillances, calibration and preventive maintenance.

In addition the QA audits for the T.S. surveillance and calibration programs were reviewed and discussed with QA to ensure that adequate and timely corrective action was taken for audit findings and recommendations.

4.4 Findings

No violations were identified.

5. Safety-Related Surveillance Tests

5.1 References/Requirements

- Technical Specifications, Section 6. Administrative Controls
- ANSI N18.7-1976, Administrative Control and Quality Assurance for the Operational Phase of Nuclear Power Plants
- Regulatory Guide 1.33-1978, Quality Assurance Program Requirements
- ANSI N18.1-1971, Selection & Training of Nuclear Power Plant Personnel

The following procedural controls were reviewed to verify their conformance to the requirements listed above.

- Calvert Cliffs Instruction (CCI)-104F, Surveillance Test Program
- CCI-120C, Calibration Program for Measuring and Test Equipment
- CCI-209B, Test Equipment Calibration Procedure
- CCI-221B, Preventive Maintenance Program
- CCI-613B, Qualification of Test and Inspection Personnel
- Quality Assurance Procedure (QAP)-16, Surveillance Testing
- QAP-17, Control and Calibration of Measuring and Test Equipment

5.2 Review and Implementation

On a sampling basis, the inspectors reviewed safety-related calibration and surveillance procedures and associated data sheets to verify that the program had been implemented in accordance with the applicable procedures detailed above. This review included a verification of the following:

- A master schedule for each responsible department was developed and maintained for surveillance and surveillance calibration testing
- Responsibilities were assigned for the performance of tests and the assurance that test schedules were completed.
- Tests required by Technical Specifications were covered by properly approved procedures
- Tests were performed within the required time frequencies specified by the Technical Specifications
- Test data results met acceptance criteria and, if not, appropriate corrective action was taken
- Completed tests were reviewed as required by procedure
- Tests were performed by qualified individuals

A random sampling of completed surveillance and surveillance calibration tests were reviewed by the inspector to verify the performance of the applicable requirements listed above. This sampling included a review of various Operations, Electrical and Controls, Maintenance and Modification, and Technical Support Surveillance Tests.

Discussions were also held with the E&C Preventive Maintenance Coordinator and the Unit 1 I&E Preventive Maintenance Supervisor to determine the controls and responsibilities that had been established for the calibration of components associated with safety-related systems, but not specifically covered by the Technical Specifications. The calibration of these components are controlled thru coverage under the preventive maintenance program. Several completed calibrations were reviewed by the inspectors. Currently, all calibration procedures are being revised such that detailed steps are being incorporated into the procedure to ensure that all safety-related systems will be returned to their normal system line-up.

During the review of completed surveillances, the inspectors selected four individuals (two instrument and electrical technicians and two technical support personnel) who had participated in the performance of several surveillances. A review of each individual's level of qualification was conducted to ensure that they were qualified to perform those surveillances selected.

5.3 Findings

No violations were identified, however it was determined that a disparity exists between QAP-16, "Surveillance Testing" and CCI-104F "Surveillance Test Program". QAP-16 requires that surveillance test procedures (STP) performed less often than every two years, be reviewed within 60 days of the performance of that test. All other STP's are to be reviewed biennially. CCI-104F requires all STP's to be reviewed at least biennially but makes no mention of a 60 day review requirement for those procedures to which this type of review would apply.

The licensee stated that appropriate changes would be made to CCI-104F to agree with those review requirements stated in QAP-16. This area of concern will be reviewed in a subsequent NRC inspection.

6. Offsite Support Staff

6.1 References

The requirements governing the performance of safety-related activities to support plant operations are specified in the following documents.

- 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants
- Technical Specifications, Section 6. Administrative Controls
- Regulatory Guide 1.33/ANSI 18.7-1976, Quality Assurance Program Requirements

6.2 Program Review

The following procedures were reviewed to ensure the procedures conformed to the licensee's approved QA program and adequately delineated responsibilities, authority and interfaces.

- CCI-126C, Administrative Control of Facility Change Requests
- Electric Engineering Department Procedures (EEDP)-2, Control of Changes, Tests and Equipment, Rev. 11
- EEDP-4, Establishment and Control of the List of Safety-Related Items, Rev. 10
- EEDP-13, Design and Design Review, Rev. 6
- EEDP-5, Procurement Rev. 16
- Procurement and Stores Manual (selected portions)

6.3 Implementation

The design and procurement processes were discussed in detail with supervisors and engineers from the Electric Engineering Department to verify that the licensee personnel understood their responsibilities and authorities associated with Facility Change Requests, the design and design review process and the procurement process.

The Field Engineering Change Request processes and drawing control was discussed with the onsite Electric Engineering Department Section to ensure they understood their responsibilities and had developed a adequate interface with corporate engineering to control the design process.

Training records were reviewed for several engineers, including those involved in the previous discussions, to ensure the engineers meet the minimum qualifications of ANSI 18.1

6.4 Findings

No violations were identified.

7. Management Meetings

Licensee management was informed of the scope and purpose of the inspection at an entrance interview conducted on May 14, 1984. The findings of the inspection were periodically discussed with licensee representatives during the course of the inspection. An exit interview was conducted on May 18, 1984 (see Paragraph 1 for attendees) at which time the findings of the inspection were presented.

At no time during the inspection was written material provided to the licensee by the inspectors.