# U. S. NUCLEAR REGULATORY COMMISSION REGION 1

- REPORT NOS: 50-317/93-18 50-318/93-18
- DOCKET NOS: 50-317 50-318
- LICENSE NOS: DPR-53 DPR-69

LICENSEE: Baltimore Gas and Electric Company Maryland Route 2 and 4, P.O. Box 1535 Lusby, Maryland

FACILITY NAME: Calvert Cliffs Nuclear Power Plant, Units 1 and 2

INSPECTION AT: Lusby, Maryland

INSPECTION CONDUCTED: June 21 - 25, 1993

INSPECTOR:

APPROVED BY:

A. Finkel, Senior Reactor Engineer Performance Programs Section Operations Branch, DRS

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Norman J. Blumberg, Chief Performance Programs Section Operations Branch, DRS

# Inspection Summary: Inspection from June 21 - 25, 1993 (Inspection Nos. 50-317/93-18 and 50-318/93/18)

Areas Inspected: An announced safety inspection by one region-based inspector to follow up on corrective actions taken by the licensee to update warehouse procedures, training, inspection requirements and warehouse protection of safety-related and augmented quality parts and materials that were identified in NRC Inspection Report 50-317/91-22 and 50-318/91-22.

<u>Results</u>: The licensee's Warehouse Upgrade Program (WUP) has corrected the problems discussed in NRC inspection report 50-317/91-22 and 50-318/91-22. The WUP task force has issued Calvert Cliffs Warehouse Procedures (CCWPs) and trained warehouse personnel to be certified Level 1, 2 and 3 inspectors. The CCWPs and the training program meets the requirements of both ANSI N45.2.2-1972 and ANSI N45.2.6.-1978 which are endorsed in their UFSAR. In addition, safety-related and augmented quality parts and materials that were stored in the warehouse have been reinspected, repackaged and placed in protective areas of the warehouse.

One violation was identified. The inspector identified that the maintenance personnel in the plant "Drop Off" locations, were receiving, storing, and issuing returned Safety-Related and Augmented Quality Parts and Materials without providing the required protection, storing, controls and inspection tasks as described in their "Quality Assurance Program for the Operations Phase" and Calvert Cliffs Instruction (CCI) 162, "Procurement and Control of Items and Services for Calvert Cliffs." Maintenance instruction CCI-207, "Control of Safety-Related and Augmented Quality Spare Parts," does not require the maintenance personnel, who operate the "Drop Off" locations, to meet the requirements of CCI-162 when receiving and storing parts and materials in the "Drop Off" areas. A licensee's quality audit was performed on the "Drop Off" areas, Report No. 93-02, March 26, 1993; however, the NRC findings described in paragraph 4.0 of this report were not identified or documented by the audit inspection team in their audit report.

#### DETAILS

#### 1.0 PERSONS CONTACTED

Attachment 1 provides a listing of persons contacted during the inspection.

# 2.0 INSPECTION SCOPE

NRC Inspection Report 50-317/91-22 and 50-318/91-22 identified that the licensee's warehouse procedures lacked detailed inspection direction, inspector certification training was not maintained through a scheduled retraining program, and the warehouse Level "A" and "B" storage requirements were not well identified. These warehouse conditions for Safety-Related and Augmented Quality parts and materials were deficient in complying with their "Quality Assurance Program for the Operating Phase" requirements; therefore, this inspection was conducted to review the licensee's corrective actions.

## 3.0 PROCUREMENT AND WAREHOUSE PROGRAM (38701)1

To correct these conditions, the licensee instituted a Warehouse Upgrade Program (WUP) which upgraded their warehouse procedures and their inspector certification program, established a retraining program plan and upgraded their warehouse storage and handling procedures to meet a Level "A" and "B" storage requirement. The inspector interviewed warehouse personnel, procurement engineering and reviewed the documents referenced in Attachment 2 of this report to evaluate the effectiveness of the licensee's Warehouse Upgrade Program.

The licensee's Procurement, Warehouse and Quality Assurance personnel took the following actions to upgrade their procurement and warehouse programs:

- Procurement Engineering Procedures (PEP's) and Calvert Cliffs Warehouse Procedures (CCWPs) have been reviewed for adequacy and updated to comply with their Quality Assurance Program.
- Warehouse personnel have been trained to meet the requirements of ANSI N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants" for inspection Levels 1, 2 and 3. Parts and materials in the warehouse have been packaged and stored in protected areas.

<sup>&#</sup>x27;The parenthetical notation following the paragraph title denotes the NRC inspection procedure that was used by the inspector in conducting this inspection.

A level "A"<sup>2</sup> storage area has been upgraded to comply with the requirements of ANSI N45.2.2-1972, "Quality Assurance Requirements for Nuclear Power Plants."

To ensure that the Warehouse Upgrade program was implemented as described in their revised procedures, the inspector toured the on-site warehouse facility including the "A" level storage area. The inspector found that the stored equipment was protected and stored as required by the issued engineering procurement documents. The warehouse personnel were trained to the CCWPs, and their training program and records were on file and in an updated status. An inspection of the parts holding cabinets revealed that the items were stored and protected as required by the PEP requirements. The "A" level storage area was under both temperature and humidity control. Materials and equipment were stored in protective cabinets with shelf life items marked and identified in the warehouse computer program. The warehouse area access was under limited control and maintained in a clean and organized fashion. Based on the above inspection results, the inspector determined that the warehouse was maintained as described in the licensee's Warehouse Upgrade Plan described in their Quality Assurance Program.

# 4.0 MAINTENANCE "DROP OFF" POINTS

Maintenance "Drop Off" points are areas within the site and under the control of the maintenance organization where the warehouse sends staged material and equipment to support a scheduled maintenance work order task. Maintenance personnel withdraw the staged work order material/equipment from various "Drop Off" locations to perform the maintenance work order task. At the completion of the work order, any leftover material/equipment is returned to the "Drop Off" locations to be returned to the warehouse for reinspection and then disposition for return to stock, scrap or sale. However, the "Drop Off" points over time have become mini-warehouses where the maintenance clerks receive, stock and reissue safety-related and augmented quality assurance parts and materials. During an inspection of these "Drop Off" points, the NRC inspector identified that safety-related and augmented quality assurance parts and materials were on stock shelves without being placed in protective packaging while being stored. Also, the maintenance clerks did not perform an inspection on returned parts and materials prior to placing the items in their "Drop Off" stock shelves as required by CCI-162 and Calvert Cliffs Warehouse Procedure (CCWP-10), "Maintenance and Control of Stored Items." The inspector also determined that the Calvert Cliffs Unit Nos. 1 and 2 maintenance personnel working in the maintenance "Drop Off" areas were performing a watchouse function without receiving the required training for storing, protective packaging, segregation of materials and storage inspection to meet the requirements for wardhouse personnel as defined in CCI-162.

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<sup>&</sup>lt;sup>2</sup>An "A" level storage area is one that is temperature and humidity controlled and is generally locked to provide limited access control.

To correct the above conditions, the licensee temporarily placed the "Drop Off" locations under the control of the warehouse supervisor. An assigned procurement engineer is to establish a required inspection criteria, method of cleaning the various types of parts and equipment and repackaging instructions. Warehouse personnel were assigned to inspect the stored parts and materials in the plant's "Drop Off" locations and repackage the items for storage. The short-term actior taken by the licensee is to have the warehouse supervisor responsible for the control of the "Drop Off" storage areas until a long-term decision is made on how these "Drop Off" locations will function and which organization will manage the function.

The failure to protect, store, control and inspect safety-related and augmented quality assurance items in these "Drop Off" locations is a violation of the licensee's " Quality Assurance Program Section 1B.13, "Handling, Storage and Shipping," requirement that states, in part, "...special handling, preservation, storage, cleaning, packaging, and shipping activities associated with safety-related and designated nonsafety-related items are performed by suitably trained personnel in accordance with specific written procedures." The protection, storing, controlling and inspection of safety-related and augmented quality parts and materials from the "Drop Off" locations were not performed by qualified personnel as described in the licensee's Calvert Cliffs Instruction (CCI)-162, " Procurement and Control of Items and Services for Calvert Cliffs." This is a violation (50-317/93-18-01 and 50-318/93-18-01).

#### 5.0 QUALITY ASSURANCE AUDIT

The licensee performed a quality audit of their "Procurement and Materials Management" program (Audit Report No. 93-02, March 26, 1993). The audit evaluated activities related to procurement document control, control of purchase materials, equipment and services, identification and control of materials, parts and components, handling, storage, and shipping, and nonconforming materials, parts and components. As part of the audit inspection, the "DROP Off" locations were reviewed. The audit identified four findings and five recommendations. However, the licensee's audit inspection did not identify the conditions in the "Drop Off" locations that the NRC inspector described in paragraph 4.0 of this inspection report. The licensee is in the evaluation stage of answering their audit finding; however, the NRC inspector's review of their audit findings determined that the procedure formate type of findings would not affect the safety operation of the plant.

### 6.0 EXIT MEETING

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on June 21, 1993.

The findings of the inspection were discussed periodically with licensee representatives during the course of the inspection. An exit meeting was conducted on June 25, 1993, at which time the licensee committed to place the in-plant maintenance "Drop Off" locations

under the control of the warehouse supervisor until the areas are in compliance with the Quality Assurance Program plan. The licensee also committed to review their procedures to be compatible with the Warehouse Upgraded Plan.

Attachments:

- 1. Persons Contacted
- 2. Documentation Reviewed During the Inspection

## ATTACHMENT 1

#### Persons Contacted

#### Baltimore Gas and Electric Company

\*A. Anuje, Supervisor - Quality Audits

\*J. Lemons, Manager - Nuclear Support Services Department

\*T. Loukides, Engineering

\*E. Matthias, Supervisor - Calvert Cliffs Warehouse

\*D. Shaw, Maintenance

\*C. Sly, Compliance

\*J. Snyder, Procedures and Support

\*J. Spina, Principal Engineer - procurement Engineering

\*W. Sullivan, Quality Assurance Auditor

\*B. Thurston, Engineering

\*L. Wenger, Compliance

\*J. Yoe, Supervisor - Contracts Administration

United States Nuclear Regulatory Commission

\*P. Wilson, Senior Resident Inspector

\*Denotes those at the exit meeting held on June 25, 1993

During the course of this inspection the inspector contacted other members of the licensee's Technical, Quality Assurance, and Procurement staffs.

## **ATTACHMENT 2**

## **Documentation Reviewed During The Inspection**

#### Quality Assurance Documentation

Quality Assurance Policy, Revision 37

Quality Assurance Manual, Revision 7, September 15, 1992

UFSAR, Appendix 1B, "Quality Assurance Program for the Operating Phase," Revision 11, January 1991

Quality Assurance Audit Report No.93-02, "Procurement and Material Management."

## Calvert Cliffs Warehouse Procedures (CCWPs)

CCWP-2, "Control of Storage Condition" CCWP-4, "Packaging and Storage" CCWP-5, "Issue and Delivery" CCWP-6, "Staging" CCWP-10, "Maintenance and Control of Stored Items" CCWP-15, "Qualification and Training of CCWU Personnel"

#### Calvert Cliffs Instructions (CCIs)

CCI-162, "Procurement and Control of Items and Services for Calvert Cliffs" CCI-207, "Control of Safety-Related and Augmented Quality Spare Parts"

#### Referenced Documents

- ANSI N45.2.2-1972, "Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants"
- ANSI N45.2.6-1978, "Qualifications of Inspection, Examination and Testing Personnel for Power Plants"