

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report Nos.: 50-317/93-19  
50-318/93-19

Docket Nos.: 50-317  
50-318

License Nos.: DPR-53  
DPR-69

Licensee: Baltimore Gas and Electric Company

Facility Name: Calvert Cliffs Nuclear Power Plant, Units 1 and 2

Inspection At: Lusby, Maryland

Inspection Conducted: June 28 - July 2, 1993

Inspector:

Ronald J. Albert  
R. J. Albert, Physical Security Inspector

0722-93  
Date

Approved By:

R. R. Keimig  
R. R. Keimig, Chief, Safeguards Section  
Facilities Radiological Safety and Safeguards Branch

7-12-93  
Date

Areas Inspected: Follow-up of Previously Identified Item; Independent Spent Fuel Storage Installation; Audits; Vital Area Physical Barriers and Detection Aids; Protected and Vital Area Access Control of Personnel and Vehicles; Alarm Stations and Communications; Power Supply; and Compensatory Measures.

Results: The licensee's program was directed toward ensuring public health and safety and was in compliance with the NRC requirements in the areas inspected. Security program upgrades and enhancements continue to be made. No safety concerns or violations of regulatory requirements were identified.

## DETAILS

### 1.0 Key Personnel Contacted

#### 1.1 Licensee

- J. Alvey, Assistant General Supervisor
- \* M. Burrell, Supervisor, Security Screening
- \* D. Dean, Security Training Specialist
- \* J. Flinn, Quality Verification Technician
- \* J. Frost, Security Shift Supervisor
- \* L. Gibbs, Director, Nuclear Security
- \* C. Gradle, Compliance Engineer
- J. Kennedy, Supervisor, Security Training and Support
- \* M. Neyman, Security Program Specialist
- \* C. Schertle, Security System Analyst
- \* B. Thurston, Engineer, Quality Audits
- M. Ward, Site Access Coordinator
- \* M. Wells, Security Shift Supervisor

#### 1.2 U.S. Nuclear Regulatory Commission

- \* P. Wilson, Senior Resident Inspector

\* indicates those present at the exit meeting

The inspector also interviewed other licensee and contractor personnel during the inspection.

### 2.0 Follow-up of Previously Identified Item

Unresolved Issue (URI) 50-317/93-13-01 and 50-318/93-13-01: On May 10, 1993, an NRC Resident Inspector identified what appeared to be inadequate lighting underneath a vehicle parked within the protected area (PA). When this matter was brought to its attention, the licensee contended that adequate compensatory measures for the lighting deficiency had previously been implemented. However, the licensee also placed temporary lighting under the vehicle in this instance. Pending further NRC review and evaluation of this matter, it was deemed unresolved.

During this inspection, the inspector reviewed the licensee's compensatory measures, which included increased patrols and temporary lighting, for lighting deficiencies. In addition, the particulars of the unresolved matter were also reviewed. Based on that review, the inspector considered the matter to be an isolated case where a patrol officer failed to identify and report a lighting deficiency resulting in the inadequate lighting under the vehicle not being corrected. Therefore, URI 50-317/93-13-01 and 50-318/93-13-01 is closed.

However, the inspector found that the licensee did not appear to make a clear distinction between a major loss of lighting, which is covered by the NRC-approved security plan (Plan), and lesser lighting deficiencies, such as burned out bulbs. Compensatory measures for the latter were not as effective. The Plan includes increased patrols (frequency) as one means of compensation for a loss of lighting. That would be acceptable under most conditions. However, in the case of a lighting deficiency such as a burned out bulb, the patrol should identify and report the deficiency to security management for a decision regarding the necessity of a compensatory measure until repair can be effected. Based on review of the post order covering PA patrol and security implementing procedures, the inspector determined that the guidance provided to the PA patrol was not clear with regard to identifying and reporting lighting deficiencies. In addition, the guidance did not preclude the assumption that a patrol was adequate compensation for a lighting deficiency and that reporting it to management was not particularly necessary.

Despite the lack of clear guidance, the licensee provided the inspector with documentation to substantiate that several lighting deficiencies were identified in the recent past, and subsequently corrected, as the result of the PA patrol initiatives. In addition, the inspector verified that the licensee conducted weekly lighting surveys as another means of identifying lighting deficiencies.

The licensee was in the process of revising its procedures and post instructions as a result of this matter. This matter is considered an inspection follow-up item (IFI 50-317/93-19-01 and 50-318/93-19-01) and will be reviewed during a subsequent inspection.

### **3.0 Independent Spent Fuel Storage Installation (ISFSI)**

The inspector reviewed various aspects of the licensee's physical security program for the ISFSI and found that the program was commensurate with the requirements of 10 CFR Part 72 and the licensee's ISFSI security plan commitments. One minor deficiency was identified in assessment capabilities in that a barrier obstructed visibility in certain locations. The licensee agreed to review the deficiency and implement corrective measures. No other deficiencies were identified.

### **4.0 Audits**

The inspector reviewed annual security program Audit No. 92-23 and verified that the audit had been conducted in accordance with the Plan. The audit resulted in one finding and three observations which were not programmatic in nature. The inspector verified that the results were reported to the appropriate levels of management and satisfactorily resolved. No deficiencies were identified.

## 5.0 Vital Area (VA) Physical Barriers and Detection Aids

### 5.1 VA Barriers

The inspector conducted a physical inspection of selected VA barriers on July 1, 1993, and determined by observation that the barriers were installed and maintained as described in the Plan.

### 5.2 VA Detection Aids

The inspector observed selected VA detection aids on July 1, 1993, and determined that they were installed and maintained as committed to in the Plan.

No deficiencies were identified in these areas.

## 6.0 Protected and Vital Area Access Control of Personnel and Vehicles

### 6.1 Personnel Access Control

The inspector determined that the licensee was exercising positive control over personnel access to the PA and VAs. This determination was based on the following:

- 6.1.1 The inspector verified that the licensee took precautions to ensure that an unauthorized name cannot be added to the access list by having a member of management review the list every 31 days.
- 6.1.2 The inspector reviewed the security lock and key procedures and determined that they were consistent with commitments in the Plan. The inspector also reviewed the PA and VA key inventory logs, and interviewed members of the licensee's security staff concerning lock and key procedures.
- 6.1.3 The inspector verified that the licensee has a mechanism for expediting access to vital equipment during emergencies and that the mechanism was adequate for its purpose.
- 6.1.4 The inspector verified that unescorted access to VAs was limited to authorized individuals. The access list was revalidated at least once every 31 days as committed to in the Plan.

## **6.2 Vehicle Access Control**

The inspector determined that the licensee properly controls vehicle access to and within the PA. The inspector verified that vehicles were properly processed prior to entering the PA and that the process was consistent with commitments in the Plan. The inspector also reviewed the vehicle search procedures and determined that they were consistent with commitments in the Plan. This determination was made by observing vehicle processing and search, inspection of vehicle logs, and by interviewing security officers and licensee's security staff about vehicle processing and search procedures.

No deficiencies were identified in these areas.

## **7.0 Alarm Stations and Communications**

The inspector observed the operations of the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS) and determined that they were maintained and operated as committed to in the Plan. The CAS and SAS operators were interviewed by the inspector and found to be knowledgeable of their duties and responsibilities. The inspector verified that the CAS and SAS operators were not required to engage in any activities that would interfere with their assessment and response functions. No deficiencies were identified.

## **8.0 Emergency Power Supply**

The inspector verified that there were several systems (dedicated security diesel generator and dedicated plant diesel generator within a VA) that provide backup power to the security systems. The inspector reviewed the test and maintenance records and procedures for these systems and found that they were consistent with the Plan.

On three occasions, two in late 1992 and one in June, 1993, the security diesel generator failed to perform as it should have during actual loss-of-power events. During this inspection, the inspector reviewed the circumstances surrounding these events. Based on the review, the inspector determined that the first and second event resulted from a faulty relay switch and the third resulted from a failed coolant system hose. The licensee's root-cause analysis showed that the manner in which the diesel was being tested failed to identify the faulty relay switch. The licensee replaced the faulty relay switch and revised the testing procedures. The failed hose was replaced immediately on the date of its failure. The licensee had identified that the hose needed to be replaced, ordered replacement parts and scheduled the work. Ironically, the work was to have been performed the very next day after the hose failed. No other deficiencies were identified in this area.

## 9.0 Compensatory Measures

The inspector reviewed the licensee's use of compensatory measures and determined it to be as committed to in the Plan. No discrepancies were noted.

## 10.0 Exit Interview

The inspector met with the licensee representatives indicated in Section 1.0 at the conclusion of the inspection on July 2, 1993. At that time, the purpose and scope of the inspection were reviewed and the findings were presented. The licensee acknowledged the findings.