

U. S. NUCLEAR REGULATORY COMMISSION  
REGION I

DOCKET/REPORT NO.: 50-293/96-04  
LICENSEE: Boston Edison Company  
Plymouth, Massachusetts 02360  
FACILITY: Pilgrim Nuclear Power Station  
INSPECTION AT: Plymouth, Massachusetts  
INSPECTION DATES: March 18-22, 1996

INSPECTOR:

Ronald J. Albert  
R. J. Albert, Safeguards Inspector  
Emergency Preparedness and  
Safeguards Branch  
Division of Reactor Safety

04-17-96  
Date

APPROVED BY:

Richard R. Keimig  
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Emergency Preparedness and  
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Division of Reactor Safety

4-17-96  
Date

**Areas Inspected:** Potential problems; audits, corrective actions and management support; protected area detection equipment; alarm stations and communications; and review of a Physical Security Plan commitment.

**Results:** The licensee's Physical Security program was directed toward assuring public health and safety. No safety concerns or violations of NRC regulatory requirements were identified. However, weaknesses were identified in the areas of assessment aids, alarm-station communications, and documentation of security-related issues.

## DETAILS

### 1.0 INDIVIDUALS CONTACTED

#### 1.1 Principal Licensee Employees

- \*T. Campbell, Security Services Supervisor
- \*T. Flaherty, Corporate Security
  - L. Healey, Fitness for Duty Coordinator
- \*J. Keene, Regulatory Affairs Manager
- \*M. Lenhart, Senior Regulatory Affairs Engineer
- \*M. McAlister, Security Operations Supervisor
- \*J. Neal, Acting NSG Manager
- \*E. Neary, Acting Protection Services Department Manager
- \*L. Olivier, Vice President - Nuclear Operations
- \*T. Venkataraman, Quality Assurance Department Manager

#### 1.2 Principal Contractor Employees

- \*W. Snyder, Security Officer, Protection Technology Incorporated (PTI)
- \*R. Wheat, Project Manager, PTI

#### 1.3 NRC Employees

- \* B. Korona, Resident Inspector
- R. Laura, Senior Resident Inspector

\*denotes those present at the exit meeting on March 22, 1996

The inspector also interviewed other licensee and contractor personnel.

### 2.0 PURPOSE OF INSPECTION

This inspection was performed to evaluate key aspects of the physical security program, to determine effectiveness of the program with regard to protection of public health and safety, and to review licensee actions relative to two potential problems of which both the NRC and the licensee had been apprised.

### 3.0 POTENTIAL PROBLEMS

#### 3.1 Fitness for Duty (FFD)

On November 7, 1995, the NRC received information concerning a station employee relative to compliance with the station's FFD program. Discussions on this issue were held between NRC personnel and licensee management on December 8, 1995. That discussion was followed by a January 16, 1996 NRC letter which requested the licensee to review the matter and to report its findings and resultant actions to the NRC within 60 days. The NRC's request was fulfilled in a March 18, 1996 licensee letter.

During this inspection, the inspector discussed this issue with the licensee and reviewed relevant documentation. The licensee informed the inspector that it had received similar information relative to this issue on two previous occasions. However, the inspector found that a documented account was available for only one of the occasions, and documentation of pertinent information was not readily available. Nonetheless, the available documentation reflected sufficient indicators to foster an appropriate resolution.

The licensee's March 18, 1996 letter indicated that, since the previous information received could not be substantiated, it did not plan to conduct any additional investigation into the matter. However, prompted by the inspector's inquiries during this inspection, the licensee decided to pursue the matter further. The investigation, again, did not substantiate the information. The licensee indicated that its subsequent actions, and results, would be forwarded to the NRC in an addendum to the March 18, 1996 letter.

However, the inspector found that the lack of documentation made an assessment of the licensee's previous actions difficult and inconclusive. The licensee relied heavily on empirical data, such as the behavioral observation program, in its decision making process. A more objective review of the indicators might have prompted the licensee to pursue the matter more rigorously sooner. No further action is deemed necessary relative to this matter, at this time.

### 3.2 Potential Vital Area Door Improprieties

On January 30, 1996, the NRC received information, which also had been provided to the licensee, concerning potential improprieties relative to security activities for a vital area door. In a February 13, 1996 letter, the NRC requested the licensee to review information and to report its findings and resultant actions within 60 days.

During this inspection, the inspector discussed this matter with the licensee and reviewed relevant documentation, which included security computer records and an investigation conducted by the licensee's security contractor. The licensee's real-time documentation was vague, inconclusive, and did not reflect an account of the matter as accurate as did the after-the-fact statements by the individuals involved, who had been interviewed during the contractor's investigation, and by the computer records. For example, neither the "Daily Security Activity Report" nor the investigation report accurately reflected the number of times compensatory measures had been implemented for the vital area door. Nonetheless, based on reviews of all associated documentation and discussions with the licensee, the inspector could not confirm that the security of the vital area had been compromised.

However, the inspector identified a potential weakness relative to the licensee's testing procedure for vital doors. Upon review of Security Procedure No. 8.21, Revision 17, titled "Operational Alarm Test of Zones with Access Control," the inspector determined that the operability testing of vital area doors adversely impacted by fluctuating atmospheric pressure within the station was not covered by this or any other procedure. Also not covered by a procedure was the protocol for returning a door to service after it had

been declared inoperable because of atmospheric conditions. The inspector concluded that such non-proceduralized testing could allow for inconsistencies and, thereby, could raise questions about that testing activity. The licensee agreed to review this aspect of its security program. No further action on this issue is deemed necessary.

#### **4.0 AUDITS, CORRECTIVE ACTIONS AND MANAGEMENT SUPPORT**

##### **4.1 Audits**

The inspector reviewed the annual security program audit report No. 95-08A, Security Program, which was conducted from July 31 - August 18, 1995. The inspector verified that the audit had been conducted in accordance with the NRC-approved Physical Security Plan (the Plan). The audit identified one deficiency and made nine recommendations. The deficiency was issued against the access authorization program for a failure to review and maintain contracted audit reports on self-screening vendors. The recommendations involved enhancements to the security program and were not indicative of program weaknesses. The inspector determined by a review of the licensee response to the audit finding, that the deficiency had been properly addressed and that the recommendations had been implemented as the licensee deemed appropriate. The inspector's review concluded that the audit was comprehensive in scope and depth, the findings were reported to the appropriate levels of management and that the program was being properly administered.

##### **4.2 Corrective Actions**

The inspector reviewed the security organization's self-assessment program, which was formally implemented in January 1993. The inspector also reviewed a sample of corrective actions that had resulted from program findings since the last inspection. In addition, the inspector reviewed loggable security events that had been compiled since the last inspection and corrective actions resulting from them. Based on those reviews, the inspector concluded that the corrective actions were generally appropriate and effective. However, in several instances the inspector found that documentation was incomplete and not centrally located, which could prove detrimental to the program. The licensee agreed to look into the matter.

In recent years, the nuclear industry has experienced attempts by some individuals to circumvent the fitness-for-duty (FFD) testing process through hydration, the consumption of large quantities of liquids to reduce the concentration of drugs in a urine sample. During a discussion with the FFD program administrator, the inspector determined that the licensee had implemented aggressive, proactive measures to combat the effects of hydration. As a result, the licensee's FFD testing program has been even more effective in identifying drug users who had attempted to circumvent the testing process via hydration. The licensee's initiatives is considered a program strength.

### 4.3 Management Support

Management support for the licensee's physical security program was generally consistent with program needs. This determination was based upon the inspector's review of various program activities during this inspection, as documented in this report. Aside from some deteriorating security systems (See Sections 6.1, 6.2 and 7.0), the security program continued to be implemented without appreciable negative trends.

## 5.0 PROTECTED AREA DETECTION EQUIPMENT

The inspector physically inspected the PA intrusion detection system (IDS) on March 19, 1996. The inspector observed the IDS in alarm from both the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS) and verified that the generated alarms annunciated at both alarm stations. Based on physical inspection, discussions with the licensee and observations from the alarm stations, the inspector concluded that IDS was installed and maintained as committed to in the Plan.

## 6.0 ALARM STATIONS AND COMMUNICATIONS

### 6.1 Alarm Stations

The inspector observed Central Alarm Station (CAS) and Secondary Alarm Station (SAS) operations. Both the CAS and SAS were being maintained and operated as committed to in the Plan. The inspector interviewed CAS and SAS operators and found that they were generally knowledgeable of their duties and responsibilities. The inspector verified that both the CAS and the SAS did not contain any operational activities that would interfere with the execution of detection, assessment and response functions.

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The assessment-aid problem is an inspector follow-up item (IFI) that will be reviewed during subsequent inspections (IFI 50-393/96-04-01).

## 6.2 Communications

The inspector verified that the licensee had communications capabilities with local law enforcement agencies as committed to in the Plan and that both stations maintained continuous intercommunications and communications with security force members.

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## 7.0 REVIEW OF PLAN COMMITMENTS

A recent discovery of a licensee operating its facility in a manner contrary to the Updated Final Safety Analysis Review (UFSAR) description highlighted the need for a special focused review that compares station practices, procedures and/or parameters to the UFSAR description. The UFSAR does not specifically include security requirements, therefore, the inspector compared licensee activities to portions of the Plan which is the applicable document. The following inconsistency was noted between the Plan and the station practices, procedures and/or parameters observed by the inspector.

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The licensee agreed to review this matter.

#### **8.0 EXIT MEETING**

The inspector met with the licensee representatives indicated in Section 1.0 of this report at the conclusion of the inspection on March 22, 1996. The inspector summarized the purpose, scope, and findings of the inspection. The licensee acknowledged the inspection findings.