

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-387/89-17
50-388/89-15

Docket Nos. 50-387
50-388

License Nos. NPF-14
NPF-22

Licensee: Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Facility Name: Susquehanna Steam Electric Station, Units 1 and 2

Inspection At: Salem Township, Pennsylvania

Inspection Conducted: June 19-23, and July 18 and 19, 1989

Type of Inspection: Routine, Unannounced Physical Security

Inspectors:

G. Smith
G. Smith, Safeguards Specialist

8/9/89
date

A. Della Ratta
A. Della Ratta, Safeguards Auditor

8-15-89
date

Approved by:

R. R. Keimig
R. R. Keimig, Chief, Safeguards Section
Division of Radiation Safety and Safeguards

8-15-89
date

Inspection Summary: Routine, Unannounced Inspection on June 19-23, and July 18 and 19, 1989 (Combined Inspection Nos. 50-387/89-17 and 50-388/89-15)

Areas Inspected: Management Support, Security Program Plans and Audits; Protected and Vital Area Physical Barriers, Detection and Assessment Aids; Protected and Vital Area Access Control of Personnel, Packages and Vehicles; Alarm Stations and Communications; Emergency Power Supply; Testing, Maintenance and Compensatory Measures; Security Training, and Qualifications; and the Safeguards Information Program.

Results: The licensee was in compliance with NRC requirements in the areas inspected.

DETAILS

1. Key Persons Contacted

- *R. Byram, Superintendent of Plant
- *D. Roth, Senior Compliance Engineer
- *R. Stotler, Supervisor of Security
 - R. Gribble, Assistant to Supervisor of Security
 - F. Malek, Senior Security Shift Supervisor
 - R. Gaudreau, Security Systems Coordinator/Training Supervisor
- *G. Barber, USNRC Senior Resident Inspector

The inspectors also interviewed other licensee security personnel.

*present at exit interview

2. Management Support, Security Program Plans, and Audits

- a. Management Support - Management support for the licensee's physical security program was determined to be adequate by the inspectors. This determination was based upon the inspectors' review of various aspects of the licensee's program during this inspection, as documented in this report.
- b. Security Program Plans - The inspectors verified that changes to the licensee's Security, Contingency, and Security Officer Training and Qualification Plan, as implemented, did not decrease the effectiveness of the respective plans, and had been submitted in accordance with NRC requirements.
- c. Audits - The inspectors reviewed the 1987 and 1988 annual security program audit reports and verified that the audits had been conducted in accordance with the Security Plan (the Plan). The audits were comprehensive in scope with the results reported to the appropriate levels of management. The inspectors' review included the response of the security organization to the audit findings. The documented corrective actions appeared appropriate for the findings.

3. Protected and Vital Area Physical Barriers, Detection and Assessment Aids

- a. Protected Area (PA) Barriers - The inspectors conducted a physical inspection of the PA Barrier on June 20 and 21, 1989. The inspectors determined, by observation, that the barriers were installed and maintained as described in the Plan.
- b. Protected Area Detection Aids - The inspectors observed testing of the PA perimeter detection aids on June 20, 1989 and determined that they were installed, maintained and operated as committed to in the Plan.

- c. Isolation Zones - The inspectors verified that isolation zones were adequately maintained to permit observation of activities on both sides of the PA barrier.
 - d. Protected Area and Isolation Zone Lighting - The inspectors observed the licensee conducting a lighting survey of the PA and isolation zones on June 22, 1989. The inspectors determined, by observation, that lighting in the PA and isolation zones was adequate.
 - e. Assessment Aids - The inspectors observed the PA perimeter assessment aids and determined that they were installed, maintained, and operated as committed to in the Plan. The inspectors identified several alarm station monitors where improvement in clarity could be effected. Licensee security management agreed to evaluate these monitors.
 - f. Vital Area Barriers - The inspectors conducted a physical inspection of vital area (VA) barriers on June 21, 1989. The inspectors determined, by observation, that the barriers were installed and maintained as described in the Plan.
 - g. Vital Area Detection Aids - The inspectors observed the VA detection aids and determined that they were installed, maintained and operated as committed to in the Plan.
4. Protected and Vital Area Access Control of Personnel, Packages and Vehicles
- a. The inspectors determined that the licensee was exercising positive control over personnel access to the PA and VAs. This determination was based on the following:
 - 1) The inspectors verified that personnel are properly identified and authorized prior to issuance of badges/keycards.
 - 2) The inspectors verified that the licensee has a program to confirm the trustworthiness and reliability of employees and contractor personnel. This program includes checks on employment history, criminal history, physical examination, and a psychological examination.
 - 3) The inspectors reviewed the security lock and key procedures and determined that they were consistent with commitments in the Plan. The inspectors also reviewed the PA and VA key inventory logs, and discussed lock and key procedures with members of the security force and the licensee's security staff.

- 4) The inspectors verified that the licensee takes precautions to ensure that only authorized individuals can be added to the VA access list by requiring a member of management to authorize additions to the list and also to review the list every 31 days as committed to in the Plan.

The inspectors also verified that the licensee has a search program, as committed to in the Plan, for firearms, explosives, incendiary devices and other unauthorized materials. The inspectors observed personnel access processing during shift changes and visitor access processing, and interviewed members of the security force and licensee's security staff about personnel access procedures. The inspectors also observed the licensee test all search equipment which disclosed that certain portal metal detectors were deficient. The licensee immediately took them out of service and initiated action to procure replacement portal metal detectors. On July 18, 1989, the inspectors noted that all new portal metal detectors were installed. The inspectors also observed tests of the new portal metal detectors which indicated that the equipment was operating in accordance with the manufacturer's specification.

- 5) The inspectors determined, by observation, that individuals in the PA and VAs display their access badges as required.
- 6) The inspectors verified that the licensee has escort procedures for visitors to the PA and VAs and that the procedures were being complied with by the station staff.
- 7) The inspectors verified that the licensee has provisions for expediting prompt access to vital equipment during emergencies and that the provisions are adequate for the purpose.
- d. The inspectors determined that the licensee was exercising positive control over packages and material that are brought into the PA. The inspectors reviewed the package and material control procedures and found that they were consistent with commitments in the Plan. The inspectors also observed package and material processing and interviewed members of the security force and the licensee's security staff about package and material control procedures. No deficiencies were noted.
- c. The inspectors determined that the licensee properly controls vehicle access to and within the PA. The inspectors verified that vehicles are properly processed prior to entering the PA. The process was consistent with commitments in the Plan. The inspectors 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 members of the security force and licensee's security staff about vehicle processing and search procedures. No deficiencies were noted.

5. Alarm Stations and Communications

- a. The inspectors observed the operation of the CAS and SAS and determined that they were maintained and operated as committed to in the Plan. CAS and SAS operators were interviewed by the inspectors and found to be knowledgeable of their duties and responsibilities. The inspectors verified that the CAS and SAS do not contain any operational activities that would interfere with the assessment and response functions.
- b. The inspectors observed tests of all communications capabilities in both the CAS and the SAS and reviewed the testing records for the communications channels. All were found to be as committed to in the Plan.

6. Emergency Power Supply

- a. The inspectors verified that there are several systems (batteries, dedicated diesel generator, and plant on-site AC power) that provide normal and backup power to the security systems and reviewed the accompanying test and maintenance procedures for these systems. The systems and procedures were consistent with the Plan. The batteries, battery chargers and the diesel generators are located in vital areas.
- b. The inspectors verified that the access control system for VA doors will permit emergency ingress and egress when normal power is lost.

7. Testing, Maintenance and Compensatory Measures

- a. The inspectors reviewed testing and maintenance records and confirmed that the records committed to in the Plan were on file and readily available for NRC review. The station provides instrumentation and control technicians to repair/replace and test any security equipment which requires preventive or corrective maintenance. A check of repair records indicated that repairs/replacements and testing has been accomplished in a timely manner.
- b. The inspectors reviewed the licensee's use of compensatory measures and determined them to be as committed to in the Plan.

8. Security Training and Qualification

- a. The inspectors randomly selected and reviewed the training and qualification records for ten security officers (SOs). Physical qualifications and firearms qualifications records were inspected.

These records were for armed guards, security monitors and supervisory personnel. The inspectors determined that the required training had been conducted in accordance with the security program plans and that it was properly documented.

- b. Several SOs were interviewed to determine if they possessed the requisite knowledge and ability to carry out their assigned duties. The interview results indicated that the SOs were very professional and knowledgeable of their job requirements. No deficiencies were noted.

9. Safeguards Information Program

The inspectors found that the handling and storage of Safeguards Information was in accordance with regulatory requirements in all areas inspected.

10. Exit Interview

The inspectors met with the licensee representatives indicated in paragraph 1 at the conclusion of the inspection on July 19, 1989. At that time, the purpose and scope of the inspection were reviewed and the findings were presented.

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