

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-352/85-22

Docket No. 50-352

License No. NPF-27

Licensee: Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Facility Name: Limerick Generating Station

Inspection At: Limerick, Pennsylvania

Inspection Conducted: April 17 - 19 and 22, 1985

Date of Last Physical Security Inspection: February 4 - 8, 1985

Type of Inspection: Special Physical Security Inspection

Inspectors: Roland J. Bailey
R. J. Bailey, Physical Security
Inspector
for Roland J. Bailey
W. G. Martin, Physical Security
Inspector

8-1-85
date

8-1-85
date

Approved by: James H. Keimig
for R. R. Keimig, Chief,
Safeguards Section, DRSS

8/1/85
date

Inspection Summary: Special Physical Security Inspection on April 17 - 19, and 22, 1985 (Inspection Report No. 50-352/85-22)

Areas Inspected: Special inspection to determine the state of training of security force personnel at the licensee's facility and their ability to carry out their assigned duties. The inspection consisted of: reexaminations of a statistically selected sample of security force personnel in qualification/re-qualification tasks; observations of examination administration; interviews of security personnel; reviews and evaluations of examination results; and, followup on previous violations and inspector concerns. Additionally, a review of a PECO letter dated April 3, 1985, which outlined planned improvements in the implementation of the security program for Limerick, was conducted. These plans for improvement were submitted in response to several security violations identified in a routine physical security inspection conducted on February 4-8, 1985, and to the licensee's commitments for corrective actions discussed at an Enforcement Conference held at Region I on March 11, 1985. In addition, a review of security events which was conducted during Inspection No. 85-12

(February 4-8, 1985) is included in this report. The inspection involved 64 manhours on site by two region-based inspectors and began during regular hours; 4 inspection manhours were accomplished during off shift periods.

Results: The inspectors determined that security force personnel are sufficiently knowledgeable to carry out their assigned duties.

DETAILS

1. Persons Contacted

G. Leitch, Station Superintendent
J. Franz, Assistant Station Superintendent
J. Basilio, Administrative Engineer
J. Larkin, Nuclear Security Specialist
P. Supplee, Site Security Supervisor
R. Weindorfer, Assistant Corporate Security Director
J. Wiggins, NRC Senior Resident Inspector

The inspectors also interviewed other licensee personnel and members of the YOH Contract Security Guard Force.

2. MC 30703 - Exit Interview

The inspectors met with the licensee representatives listed in paragraph 1 at the conclusion of the inspection on April 22, 1985. At that time, the purpose, scope and results of the inspection were reviewed. During this meeting, the licensee provided a status of security personnel reexaminations and requalification and stated that all testing would be completed by May 1, 1985. The licensee further stated that this would be confirmed in a letter to Region I. (By letter of April 30, 1985, PECO confirmed the commitments made during the exit interview and stated that all security personnel had been successfully requalified.)

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

3. Inspection Objective

The objective of this special inspection was to have the licensee demonstrate that individuals in the security force are trained to perform the security related tasks, identified in the licensee's physical security and/or contingency plan, to which they are assigned. To meet this objective, the inspectors utilized a statistical sampling plan, based upon Military Standard -105 D, "Sampling Procedures and Tables for Inspection by Attributes," to achieve results at a 95% confidence level. The inspectors requested the licensee to test a statistical sample of security force members in the tasks to which they were assigned, using the testing criteria by which they were previously deemed qualified for those tasks. The individuals who were to be tested were randomly selected by the inspectors from the roster of personnel qualified in each of three job categories: Supervisors/Armed Personnel; Watch Personnel; and, Central/Secondary Alarm Station (CAS/SAS) Operators. One hundred and fourteen examinations were administered by the licensee and monitored, on a random basis, by the inspectors. The inspectors reviewed and evaluated the examination results and interviewed examiners, other security force personnel, and licensee and security force contractor management representatives.

The inspection also included routine follow-up on licensee commitments contained in an April 3, 1985 letter to NRC Region I regarding improvements in the security program (Paragraph 7) and documents routine inspector follow-up on Security Event Reports which was inadvertently omitted from Inspection No. 85-12, February 4-8, 1985.

4. Testing Program

Following is a description of the testing program directed by the inspectors and carried out by the licensee for the three job categories.

a. Basic Qualifications for Supervisors/Armed Personnel and Watch Personnel

Nine basic, task specific tests are used by the licensee to qualify individuals for assignment to the job categories of Supervisors/Armed Personnel and Watch Personnel. Eighty-six individuals were randomly selected by the inspectors from the total number of individuals in these two job categories and a total of 109 tests were administered by the licensee. Ten individuals failed a total of eleven tests. This indicated statistically that 85% of security force members in these two categories are able to carry out the duties and responsibilities associated with those nine tasks.

b. Additional Qualification for Supervisors/Armed Personnel

In addition to the nine basic, task specific tests discussed above, Supervisors/Armed Personnel are required to qualify in weapons through written and firing range testing.

(1) Weapons Qualification

All armed personnel were previously tested at a firing range on October 23, 1984. This testing was witnessed by an NRC inspector. There were no failures.

(2) Other Qualification

The written portion of the qualification in this job category was administered by the licensee during this inspection. Eight individuals were randomly selected by the inspectors from the total number of individuals in this category for testing. After four of the eight failed the test, further testing was discontinued since that indicated a statistically unacceptable failure rate and all individuals in that job category would have to be retrained and requalified. The licensee agreed to carry this out prior to May 1, 1985.

c. Qualification for CAS/SAS Operators

Five individuals were randomly selected by the inspectors from the total number of individuals in this job category. Each was tested and met the licensee's established qualification standard.

5. Testing Program Results

The inspectors determined that the security force members are adequately trained to carry out their assigned duties and responsibilities, with the exception of those in one job category (Supervisors/Armed Personnel) who are required to demonstrate certain additional qualification beyond the nine basic tasks.

Compensatory measures were immediately initiated and remedial training was promptly administered for all individuals who failed any portion of the tests included in the testing program.

With regard to the Supervisors/Armed Personnel job category, where statistical results of the written test indicated that personnel were not adequately trained to carry out the additional duties and responsibilities of their job assignment, the inspectors interviewed and monitored the on-the-job performance of several individuals carrying out those duties and responsibilities. The inspectors determined that these individuals were sufficiently capable of carrying out their assigned tasks to be permitted to remain on the job without adversely affecting the physical protection of the facility. The inspectors advised the licensee to reevaluate the training program and written test to determine their effectiveness in qualifying individuals for those additional duties and responsibilities.

6. MC 92700-Followup on Security Program Event Reports

During a routine safeguards inspection conducted on February 4-8, 1985 the inspector reviewed numerous security event reports that had been submitted by the licensee to Region I as reportable events in accordance with 10 CFR 73.71 (c). The inspector conducted an in-office and onsite review of Security Event Report Numbers 84-08 through 84-18 and 85-01 through 85-07. The inspector verified that adequate compensatory measures had been taken for each event. The licensee had provided adequate security force response to and documentation of the events. One generic problem was identified in that the majority of reportable events for 1984 and 1985 were as a result of computer failures, i.e., disk drive failure and transfer problems associated with the redundant security computer. The computer contractor was trying to isolate the problems. To date, the licensee has demonstrated they can provide adequate compensatory security measures when they experience computer problems.

7. MC 92703-Followup on PECO Correspondence dated April 3, 1985, Relating to Security Program Improvements

The following inspector findings address the licensee's short and long term security program improvement commitments as contained in a letter to Region I, dated April 3, 1985.

PART I - PECO INTERIM IMPROVEMENT PROGRAM

PECO QUALITY CONTROL INVOLVEMENT

A. Post Instructions

Inspector Findings:

The inspector verified that: (1) the post instruction format is a computer generated standardized form that can be changed to respond to various changes and contingencies; (2) security Instruction 001, dated March 13, 1985, establishes guidelines for the preparation, control and distribution of post orders (the terms security instruction and post order can be used interchangeably); (3) twenty-eight post orders were revised and distributed between March 15 and April 11, 1985; (4) currently, the PECO Quality Control Group is responsible for the monitoring of post orders. This responsibility will be transferred to the YOH Security Inc., corporate staff performance analysis group when it is formed.

B. Key Control

Inspector Findings:

The inspector verified that a revised instructional level document (SI-002) on Key Control was distributed on March 11, 1985. The security instruction provides clear and concise direction for key issue and inventory control. Monitoring by PECO Quality Control resulted in the revision. The licensee intends to transfer the monitoring function to the YOH Security, Inc., corporate staff performance analysis group when it is formed.

C. Personnel Qualifications

Inspector Findings:

The inspector verified by review that the YOH Security Force Duty Roster had been revised. The roster provides guard force supervision with a list of qualified individuals to perform various post duties. The duty roster is computerized which eases its updating and maintenance. Additionally, no individual is allowed to perform security duties until all phases of the employment process are completed. Review by the inspector of Quality

Control Audit L-85-QC-008, dated March 1, 1985, revealed that auditors were monitoring post assignments to ensure that only fully qualified personnel were performing security duties.

D. Security Plant Procedures

Inspector Findings:

The inspector verified that Quality Control Audit L-85-OC-007, dated March 1, 1985, supported commitments made by the licensee that plant procedures were being reviewed against actual operational security methods. For example, the QC auditors observed that the security organization was recording key control on an unapproved form. As a result, Plant Procedures PP-031-1 (CAS/SAS System) and PP-028-1 (Lock and Key Control) were revised to reflect current operating procedures. Security instructions SI-002 (Lock and Key Control), dated March 11, 1985, SI-005 (Performance of Security Surveillance Testing), dated March 26, 1985 and SI-006 (Site Security CAS/SAS Implementation), dated March 27, 1985, were cited as not being definitive. These instructions were subsequently revised to reflect current operating procedures. The revised procedures and instructions appeared adequate.

E. Surveillance Testing

Inspector Findings:

The inspector verified that Security Instruction SI-005 - Performance of Security Surveillance Testing was distributed on March 26, 1985. This document was developed to coordinate the surveillance testing activities. YOH Security, Inc. conducted a training session on March 18, 1985 for YOH security supervisors to make them aware of the enhanced surveillance testing instruction. YOH Security has identified a supervisor to coordinate and manage performance testing and surveillance of all security related equipment on a scheduled basis.

F. Central/Secondary Alarm Stations

Inspector Findings:

The inspector verified that Security Instruction SI-006 (Site Security CAS/SAS Implementation) dated March 27, 1985, was distributed to consolidate program requirements for routine operations in the CAS/SAS.

G. Weapons and Miscellaneous Security Equipment

Inspector Findings:

The inspector verified that security supplies were procured and were in the equipment room. A draft of Security Instruction SI-014 (Weapon Control) had been developed by the Quality Control Section on April 15, 1985. Interim instructions were posted in the armory until approval of the instruction. The licensee expected this to occur by May 3, 1985. In a telephone discussion on May 9, 1985, the licensee informed the inspector that SI-014 (Weapon Control) was distributed for use on April 30, 1985 and that a copy was posted in the armory.

H. Delegation of Authority

Inspector Findings:

The inspector verified that job responsibilities for supervisory personnel were clarified and were included in each appropriate security instruction. In addition, the inspector reviewed proposed job descriptions for each position within the security organization. These appeared to include the required crucial task identified in the Training and Qualification Plan. The Physical Security Plan describes the authority and responsibility assigned to each supervisory level within the security organization. In a telephone discussion on May 7, 1985, the licensee informed the inspector that job descriptions for all jobs within the security organization will be published on May 13, 1985. In a telephone discussion on May 22, 1985, the licensee informed the inspector that this task was completed on May 9, 1985.

I. Communications

Inspector Findings:

The inspector verified that during the month of March, 1985, a review of the different types of communication devices and capabilities was conducted by Quality Control personnel along the barrier interface of Units 1 and 2. The purpose of the review was to determine if there were adequate communication capabilities available to security officers. The review revealed that additional equipment was required. The inspector confirmed that this equipment had been installed.

J. Summary Statement

Inspector Findings:

The inspector observed that the Quality Assurance Audit completed on April 15, 1985, identified five administrative procedural deficiencies and no operational deficiencies. The Administrative Engineer was in the

process of replying to the audit. The security program deficiencies identified by an earlier Quality Control Audit were also in the process of being answered by the Administrative Engineer.

K. YOH Security Consultant

Inspector Findings:

The inspector observed Mr. M. Annast, a consultant to YOH Security, Inc., on site. The consultant had proposed several changes to strengthen implementation of the security program by YOH Security.

PART II - PERSONNEL TURNOVER REDUCTION

A. Reduce Scheduled Overtime

Inspector Findings:

The inspector reviewed payroll records for the period December 28 - January 3, for sergeants, corporals and CAS/SAS operators and observed that these personnel had their hours, including overtime, reduced from an average of 60 hours to 45 hours per week. Guards continued to work 60 hours per week until April 15, 1985, at which time they were placed on three eight hour shifts. Total hours, including overtime, were 45. During the week of April 15, 1985, the licensee had to alter the work hours of the guard force in order to respond to NRC security inspectors who observed the licensee reexamining a sample of the force. The licensee stated that long delays were being experienced in receiving the Pennsylvania Lethal Weapons Act Firearms Certification. This delay has had an impact on the number of qualified armed personnel available and, therefore, the amount of overtime they must work.

B. Improved Working Conditions

Inspector Findings:

The inspector verified that the licensee had constructed a special ready room for security force personnel located across from the Main Guard House. The area includes communications, toilet facilities and individual lockers. Startup problems with certain security equipment required manning compensatory posts during inclement weather which was partly responsible for a high personnel attrition rate. The licensee had installed weatherized guard booths and they were observed at several compensatory posts throughout the site. The equipment problems are currently being corrected and work is expected to be completed in July, 1985.

C. Wage and Benefit Package

Inspector Findings:

The inspector reviewed a PECO letter to YOH Security, Inc. dated February 28, 1985, relative to the results of a wage and benefit comparative analysis with other industries and similar work forces in the region. The results indicated that with the exception of one item in which improvement could be made (medical benefits), the remaining pay rates and compensation package appears equitable for the region.

D. Resignation Interviews

Inspector Findings:

The inspector verified that during interviews with YOH Security staff personnel, the security force Captain conducted approximately 20 resignation interviews since January, 1985. With the exception of personnel citing working conditions and long working hours as the cause for resignation, there appeared to be no one predominant cause for the high rate of resignations.

E. Screening

Inspector Findings:

Because of a finding that a member of the security force had falsified his employment history record, NRC Region I issued a Confirmatory Action Letter (CAL No. 84-24) on November 9, 1984, requiring the licensee to review the screening program for security personnel and to ensure that an adequate background investigation was conducted on each member of the guard force, with particular emphasis on covering all periods of past employment and personal history. The inspector verified that the licensee notified the security force contractor by letter on March 13, 1985, to completely screen all guard force personnel before they are sent to training and to ensure that all periods of employment were validated. To reinforce this procedure, the licensee submitted a revision to the Training and Qualification Plan (Revision 3), dated April 19, 1985, to NRC Region I outlining new background screening requirements for employment and guard qualification. The inspector verified that since January 1, 1985 all personnel accepted for employment with the security force have had their background information verified for completeness by key PECO staff personnel.

F. Performance Evaluations

Inspector Findings:

The inspector verified that a performance rating system was in effect. However, the performance rating system was undergoing review to make improvements.

G. Classroom Training

Inspector Findings:

The inspector verified that classroom training lesson plans on lock and key control, the security contingency plan, and notification of security events to NRC were revised by March 28, 1985. Security force supervision attended a remedial training session involving security awareness and key control on March 18, 1985. The inspector verified that the remainder of the security force was trained on those topics by April 5, 1985. Four individuals initially failed their examinations, were retested and passed on April 10, 1985. Expanded security training on security program deficiencies identified by NRC has been included in appropriate annual security requalification training.

H. Security Awareness Information

Inspector Findings:

The inspector verified that security awareness information was published by the security force contractor in the form of notices and daily bulletins. In addition, the inspector reviewed special checklists that contained security awareness information. This information was being presented at each guardmount.

I. YOH Corporate Performance Analysis Group

Inspector Findings:

The inspector verified that three individuals were assigned to the corporate performance analysis group and a fourth was in process of being selected. The inspector reviewed the resumes of the four individuals and found that they have a minimum of three years training and experience in supervision, management, or quality assurance at a nuclear facility. The three assigned individuals had been making periodic visits to the site, lasting two to three days, for orientation. On May 10, 1985, in a telephone conversation, the licensee stated that the fourth member of the group had been selected.

J. Site Performance Analysis Group

Inspector Findings:

During discussion with a licensee representative, the inspector was informed that five individuals have been selected to form a site performance analysis group under YOH Security. This matter will be reviewed in a subsequent inspection. (IFI 85-22-01)

K. Security Organization

Inspector Findings:

In discussions with security representatives, the inspector was provided a security organizational and functional chart which reflected the existing structure of the Limerick security organization. (See Attachment 1 to this report). The chart reflected those changes and commitments made to NRC Region I at the Enforcement Conference held on March 11, 1985.

L. Quality Assurance/Quality Control Activities

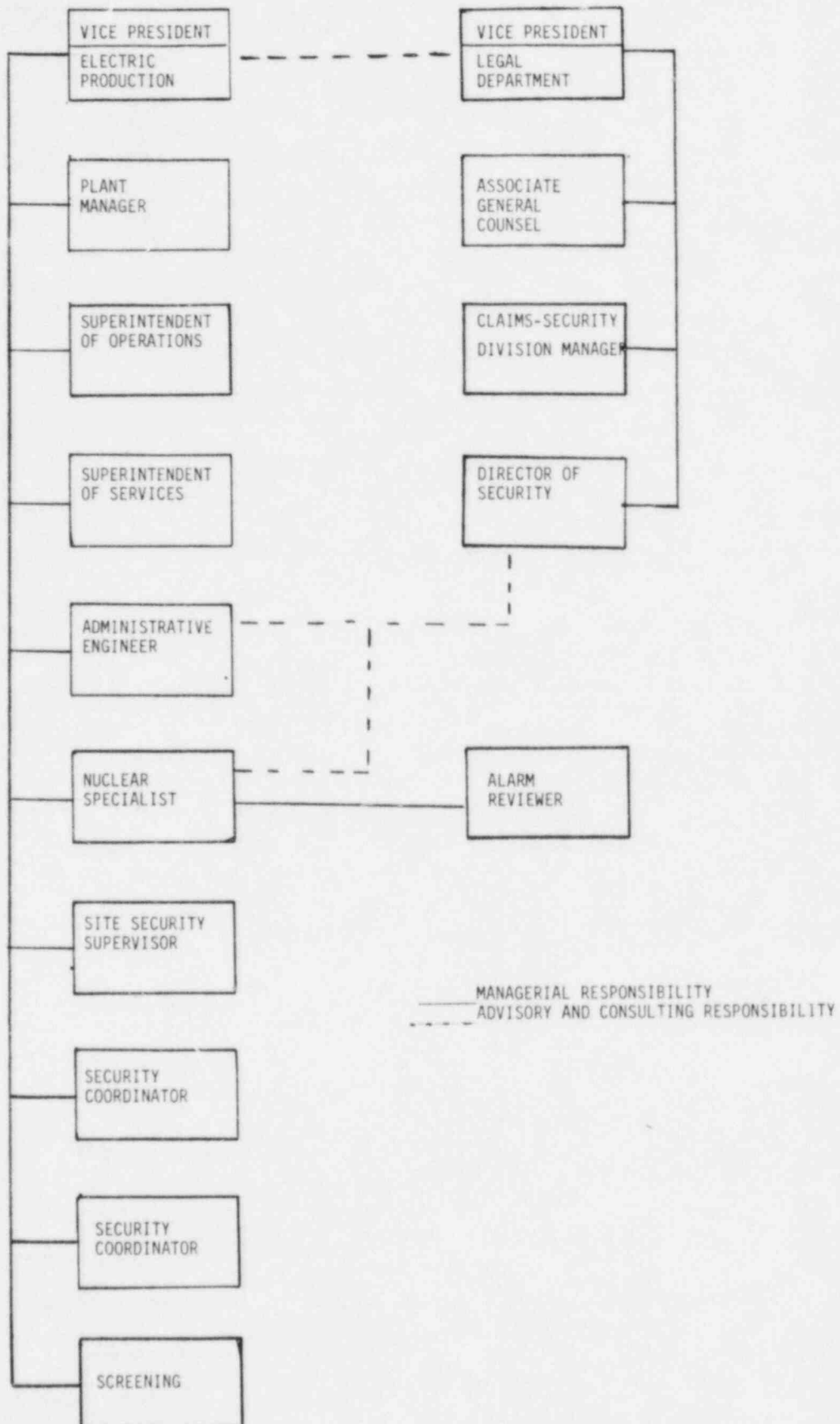
Inspector Findings:

The inspector verified that a Quality Assurance audit, AL 85-19-PL, was performed on March 21, 1985. The licensee stated that after the security contractor implements the five man site performance analysis group, the PECO Quality Control Section will conduct a minimum of three days of monitoring of the security force on a quarterly basis.

M. Audits

Inspector Findings:

The inspector verified that, since November, 1984, the licensee had initiated security program audits by two professional security organizations, Burns International Security Agency and J. Devlin Associates, in an effort to strengthen the program in several operational security areas. Additionally, the inspector verified that the Quality Assurance Audit for 1985 was completed on March 21, 1985, and that the annual independent audit by the PECO Claims Security Division was completed by April 15, 1985.



YOH CONTRACT SECURITY ORGANIZATION

