

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report Nos. 50-277/88-23  
50-278/88-23

Docket Nos. 50-277 License Nos. DPR-44  
50-278 DPR-56

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

Facility Name: Peach Bottom Atomic Power Station Units 2 and 3

Inspection At: Delta, Pennsylvania

Inspection Conducted: June 27-30, 1988

Type of Inspection: Special, Unannounced Physical Security

Inspectors: W.K. Lancaster for 8/23/88  
Roland J. Bailey, Physical Security Inspector date

Julie A. Madden 8/23/88  
Julie Madden, Physical Security Inspector date

Approved by: R.R. Keimig 8-23-88  
R. R. Keimig, Chief, Safeguards Section date  
Division of Radiation Safety and Safeguards

Inspection Summary: Special unannounced Physical Security Inspection on  
June 27-30, 1988 (Combined Report Nos. 50-277/88-23 and 50-278/88-23)

Areas Inspected: Follow-up on the licensee's implementation of commitments identified in PECO correspondence to NRC Region I, dated June 3, 13, 17 and 24, 1988.

Results: No violations of NRC requirements were observed. The inspectors found that the licensee had implemented actions to correct identified deficiencies as stated in the correspondence.

## DETAILS

### 1. Key Personnel Contacted

#### Philadelphia Electric Company

D. M. Smith, Vice President, Peach Bottom Atomic Power Station (PBAPS)  
D. R. Meyers, Support Manager, PBAPS  
R. C. Hirzel, Assistant Superintendent, PBAPS  
D. J. Foss, Regulatory Affairs, PBAPS  
R. J. Weindorfer, Corporate Nuclear Security Director, PBAPS  
G. A. Bird, Senior Auditor, NQA, PBAPS  
R. J. Robinson, Root Cause Assessment Team, PBAPS  
J. C. Oddo, Nuclear Security Specialist, PBAPS  
S. Q. Tharpe, Chief, Security Coordinator, PBAPS  
P. R. Supplee, Analyst, Nuclear Security, PBAPS  
R. K. Bixler, Analyst, Nuclear Security, PBAPS  
F. J. Larkin, Nuclear Security Specialist, Limerick Generating Station (LGS)  
M. D. Berner, Shift Security Assistant, LGS  
R. L. Sweeney, Corporate Security Investigator, PECO  
E. M. Chin, Corporate Security Investigator, PECO

#### U. S. Nuclear Regulatory Commission

L. E. Meyers, Resident Inspector

### 2. Follow-up on Licensee Actions

- a. The inspectors conducted a review of the licensee's actions relative to corrective actions on items identified in correspondence from PECO to the NRC. References to that correspondence, and the status of the items, as determined by the inspectors, are provided below. (Item designations correspond to those in the referenced letters.)
  - PECO letter, dated June 3, 1988, concerning the status of PECO investigation and NQA Audit (AP88-48PL) pertaining to allegations related to the security force.

#### Item 1. Violations of Procedures and Rules

- A. Post Orders (Closed): The inspectors found that Burns corporals and PECO Shift Security Assistants (SSA) are regularly checking the condition of post orders. In addition, Burns issued a letter to all security force personnel instruction those assuming a post to read the post order and question their supervision if they do not understand it. Interviews by the inspectors with on-duty watchmen verified that there was a renewed emphasis on reading and following post orders.

- B. Radio, Batteries, Flashlights, Security Keys (Closed): Accountability has been enhanced by issuing radios with unique identification numbers to specific individuals. Radios and security keys are being issued by a supervisor or clerk. Additional radio batteries and chargers have been obtained to help assure that radios with partially charged batteries are not issued. Operating procedures have been established for security supervision to check equipment operability at guard mount and throughout the shift. Random checks conducted by the inspectors found that security force members had the appropriate equipment and that the equipment was functioning properly.
- C. Key Codes (Closed): The practice of recording personal identification numbers on identification badges has been forbidden. Interviews with Burns and PECO security personnel by the inspectors revealed that random checks were being conducted and no repetition of the problem has been found.
- F. Safety Equipment Standards: This item is not within the NRC's purview.
- G. Failure To Respond To A Vital Area Door Alarm (Closed): Apparently, a response guard did not fully respond to a vital area door alarm because another security force member informed him that he had just come from the door. The guard and the responsible CAS operator were counseled. This was confirmed by the inspectors.
- H. Failure To Perform Required ST On Search Equipment (Closed): The involved supervisor has resigned.
- I. Improper Door Response Request (Closed): The inspector confirmed by reviewing a security computer zone trace and alarm history that a proper response did take place.
- J. Improper Searches (Closed): Proper search procedures, including removal of hard hats, have been stressed at guard mounts. The inspectors observed, at various times during the inspection, that proper search procedures were being implemented.

Item 2. Training Irregularities (Closed)

The licensee stated that allegations of irregularities had been discussed between PECO and Burns management. Recent monitoring of classes by PECO security representatives revealed no irregularities; therefore, the allegation, that the testing process is being compromised, could not be substantiated.

Review of training lesson plans by the inspectors verified that they are in the process of being reviewed and revised, as necessary, to ensure that they reflect updated plant protection procedures. Random inspection of individual training records by the inspectors revealed no irregularities or signs of falsification.

Four armed responders who failed to meet minimum weapons qualification during the NQA audit had been retrained and requalified. Inspection of their training files by the inspectors showed dates and passing scores for the requalifications.

Item 3. SFM's Sleeping or Otherwise Inattentive (Closed)

The inspectors confirmed that the three security force members named in allegation were dismissed. Another allegation of sleeping was downgraded to possible inattentiveness but remains unsubstantiated. The last allegation, involving a firewatch, was investigated by Burns and found to be one of illness, and not sleeping.

Random checking throughout evening shifts by the inspectors found all security and firewatches to be alert and attentive to their duties.

Item 4. Security Force Members' Abuse of Drugs - Both On and Off-Site (Closed)

All security force members were tested for alcohol and drug abuse on February 24, 1988, or shortly thereafter. Seven individuals were dismissed as a result of that testing. PECO is continuing to conduct drug and alcohol testing on a random and unannounced basis. This was verified by the inspectors.

5. Security Force Member's Abuse Of Alcohol On Site Or Reporting To Work In An Unfit Condition (Closed)

One security force member who was alleged to abuse alcohol was dismissed for other reasons. Burns management reprimanded two other security force members who admitted to drinking a beer in the site parking lot (outside of the Protected Area) after work. This was confirmed by the inspectors.

6. Other Inappropriate Conduct (Closed)

Neither of the supervisors accused of sexual harassment are now employed at the plant. One resigned and the other was dismissed. This was confirmed by the inspectors.

- PECO letter dated June 13, 1988, concerning PECO corrective actions as a result of the NQA Audit report (AP88-48PL).

Attachment 1

- AP88-48-01 A Security Force member assumed a compensatory post without adequate communication (Closed): The inspectors confirmed by a review of security logs that as soon as the discrepancy was discovered, the security force member was given a radio and a communications check was conducted to ensure that all posts had functioning communications equipment. Follow-up corrective action included instructions by Burns supervision to the guard force to not accept a post without properly functioning equipment. The sergeant of the guard has been instructed to re-emphasize checking equipment for serviceability during guard mount. An entry was made in the Burns supervisor's Pass-On-Book that requires an armed responder to check any post not responding to communications and to stay at that post until functional communications have been re-established. Random observations by the inspectors revealed that personnel at each post did have functioning radios. The inspectors also verified that the foregoing corrective actions had been taken.
- AP88-48-01 Security force members were instructed by Burns supervision to assume compensatory posts without communications capabilities (Closed): Burns site management was formally notified by a letter from PECO that assignment of personnel to posts without proper communications equipment is a violation of the PBAPS Physical Security Program, and as such, is unacceptable. No deficiencies were identified by the inspectors during this inspection.
- AP88-48-01 There are not enough radios, batteries or chargers available to meet the communications needs of the security force (Closed): Through reduction of three long term posts and improved control of radio issue, sufficient radios have been made available to the guard force. Random inspections of guards posts by the inspectors verified that each person had a radio, and that it was functioning properly.
- AP88-48-01 Two way radios are not being accounted for in that one was lost and issuance is casual (Closed): Since the problem was detected, Burns has implemented an improved radio issuance system and has obtained a lockable cabinet for storing radios, batteries and chargers.

Attachment 2

- AP88-48-02 No formal program for training of security force members on newly issued security equipment, conducted by qualified instructors, exists (Closed): The only recently acquired security equipment for the use of the guard force are gas masks and bullet proof vests. Since the finding was identified, personnel designated to use this equipment were given training, and demonstrated proficiency, in using the equipment. Review of the training records for designated personnel by the inspector verified that they received the training.

- AP88-48-02 No formal on-the-job training (OJT) program has been established for the on-going training needs of the security force (Closed): The inspectors confirmed that Burns had developed a formal 16-hour OJT program, complete with lesson plans and appropriate references and is scheduling all watchmen and armed guards to participate. In addition, a formal guard mount is being conducted at the start of each shift. During guard mount, the sergeant of the guard updates security force members regarding changes to ongoing security activities.
- AP88-48-02 PBAPS Safeguards Contingency Plan Training Drills (Closed): The functions of the security force during emergencies were discussed at guard mounts and are being re-emphasized in training classes. The inspectors confirmed that written guidelines were developed by Burns and distributed to first line supervisors. These guidelines outline the proper development of scenarios, and the appropriate conduct and documentation of drills. These guidelines have been added as an attachment to Plant Protection Procedure #40.
- AP88-48-02 Security force members were often unable to demonstrate their knowledge of PBAPS plant exterior/interior layout or knowledge of the vital areas (Closed): The inspectors confirmed that on-the-job training for watchmen now includes 16 hours of plant and alarm system familiarization. Armed guards receive additional plant familiarization. During random interviews by the inspectors with on-duty watchmen and armed guards, the individuals were able to demonstrate their knowledge of the plant and vital area layouts.
- AP88-48-02 Minimum remedial training requirements for security force members who fail to demonstrate job knowledge during performance testing are not specified (Closed): The licensee stated that the successful bidder for the new security force contract will be required to delineate specific remedial training procedures and requirements. In the interim, any security force member identified by PECO or Burns as unable to demonstrate competency in an assigned task is immediately relieved of duties, re-trained and retested. This was confirmed by the inspectors.

#### Attachment 3

- AP88-48-03 This was a follow-up to a previous audit finding. No additional corrective actions were required.

#### Attachment 4

- AP88-48-04 This finding was issued for items previously identified and for which the corrective action taken was apparently ineffective (Closed):



- Security keys are now issued by a security force supervisor or his designee. Essential security keys are stored separately from non-essential keys, and are stored in a key cabinet in a designated location.
- Burns has established administrative controls to ensure that security force members returning from leave or vacation will be informed of changes that occurred during their absence by requiring those personnel to read previous guard mount instructions. Burns training personnel have been tasked with ensuring that guard mounts and on-the-job training are being used effectively for exchanging information on additions, modifications and deletions to on-going security activities.
- A draft of the Safeguards Contingency Plan has been developed to incorporate patrol watchmen. The draft is under internal review.

The foregoing corrective actions were confirmed by the inspectors.

- PECO letter, dated June 17, 1988, concerning additional information on PECO actions to implement an increased monitoring plan as a result of NQA Audit Report AP88-48PL (Closed):
  1. PECO shift managers were instructed to focus more attention on security force performance issues during plant tours. Written guidelines were provided to assist them in evaluating specific performance areas that had previously been found to be deficient. Review of the written guidelines and completed check lists by the inspectors found that the guidelines are thorough and monitoring is being performed, as required.
  2. Site management personnel who perform random site-wide back shift monitoring three times a week were provided the same written guidelines and checklists as noted in paragraph 1 above, with instructions to focus additional attention on security force job performance.
  3. An additional level of monitoring was also provided by establishing a temporary Performance Assessment Group (PAG) to assess security force activities on a 24-hour basis. Four personnel (two shift security assistants, one security coordinator from Limerick, and one analyst from the PECO corporate Nuclear Security Section) were assigned to each security shift. Their functions are to conduct critical task testing, evaluate drills, review post orders, check equipment and, in general, assess that the security force members are capable of carrying out their functions. Members of the PAG were interviewed by the inspectors throughout the inspection and they were found knowledgeable of their functions, and the corrective action to take for any deficiencies identified.

4. The existing Quality Technical Monitoring Program (conducted by Nuclear Quality Assurance) has been expanded to provide inspection activities on 10 of 21 shifts each week (each security shift is monitored at least twice each week.)

- PECO letter, dated June 24, 1988, concerning the status of a root cause analysis of security program related problems (Open):

In the attachment to the PECO letter on June 17, 1988, a commitment was made to conduct a root cause analysis of security problems that have occurred during the period 1984 to the present. The analysis team was to consist of individuals with experience in nuclear security, organization effectiveness and root cause determination, and would be under the direction of PECO's corporate Independent Safety Engineering Division.

At the end of the inspection, the analysis team had completed most of its research and data gathering efforts, and was in the process of analyzing the data and preparing the report.

The licensee stated that the report would be submitted to NRC:RI when it is completed, along with a plan for any corrective action(s) deemed necessary.

- b. The following items in the aforementioned correspondence remained open at the conclusion of this inspection. The items are listed for tracking purposes and will be reviewed during subsequent inspections of the licensee's program.

June 3, 1988 Letter: Item D - Fitness for Duty Training.  
Item E - Firewatch

June 13, 1988 Letter.

Attachment 2; APR8-48-02

- Complete training of PBAPS Shift Security Assistants
- Formalize Training Program for Contingency Drills and Establish a Mechanism for Tracking Participation by Members of the Security Force
- Training of Search Train Operators
- Weapons Requalification for Armed Responders
- Require next successful Security Contract Bidder to Establish Performance Oriented Training Programs



Attachment 3; AP88-44-03

- Ensure Operability and Maintenance of Security Related Equipment

3. Exit Interview

The inspectors met with the licensee representatives indicated in Details, Paragraph 1, at the conclusion of the inspection on June 30, 1988, and reviewed the purpose and scope of the inspection and presented the inspection findings.

No written material was provided the licensee during the inspection.