

November 5, 2007

Mr. Christopher M. Crane
President and CNO
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION – NRC AUGMENTED
INSPECTION TEAM (AIT) REPORT 05000277/2007404 AND
05000278/2007404

Dear Mr. Crane:

On September 28, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed an augmented inspection at your Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3.

This inspection was initiated in accordance with NRC Management Directive 8.3, "NRC Incident Investigation Program," and Inspection Manual Chapter 0309, "Reactive Inspection Decision Basis for Reactors," and conducted in accordance with Inspection Procedure 93800, "Augmented Inspection Team." The enclosed inspection report documents the observations and issues developed by the team and discussed on September 28, 2007, with Mr. Joseph Grimes. A public exit meeting was conducted with Mr. Ron DeGregorio and other members of your staff on October 9, 2007.

The events that led to this inspection began when a PBAPS security officer videotaped multiple instances of several security officers inattentive to duty at the station's former and current power block "ready rooms." The NRC was made aware of the existence of these videos, by WCBS-TV (New York City), on September 10, 2007. While the validity and nature of inattentiveness was not yet known, the NRC began enhanced inspection oversight of security at PBAPS and verbally referred the information to Exelon management for investigation the same day. The NRC had the opportunity to first view these videos on September 19, 2007, which depicted multiple security officers inattentive to duty on four separate occasions in the station's ready room between March and August 2007. In response to the viewing of these videos and NRC knowledge of Exelon's investigation details, it was determined on September 19, 2007, that an augmented inspection team was warranted. A charter was developed on September 20, 2007, and the NRC commenced an Augmented Inspection Team at PBAPS on September 21, 2007.

The Augmented Inspection Team concluded that your staff's prompt compensatory measures and immediate actions, in response to the videotaped inattentive security officers, were appropriate to ensure the station's continued ability to properly implement the Security Plan. Additionally, the NRC issued confirmatory action letter 1-07-005, dated October 19, 2007, to ensure those compensatory measures remain in place until the NRC has completed its review of your causal evaluation and corrective action plan.

Notwithstanding the confirmatory action letter, the Augmented Inspection Team identified performance issues associated with security officer attentiveness, security management and supervisor effectiveness, implementation of the station's behavioral observation program, and the corrective action program. The augmented inspection was a fact-finding effort and, therefore, these performance issues will require additional NRC inspection follow-up and further review prior to determining what enforcement action, if any, is appropriate. The NRC AIT follow-up inspection will be conducted during the week of November 5, 2007.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Docket Nos: 50-277, 50-278
License Nos: DPR-44, DPR-56

Enclosure: Inspection Report 05000277/2007404 and 05000278/2007404
w/Attachments

Attachments:

- (A) Supplemental Information
- (B) Augmented Inspection Team Charter
- (C) Event Chronology

Notwithstanding the confirmatory action letter, the Augmented Inspection Team identified performance issues associated with security officer attentiveness, security management and supervisor effectiveness, implementation of the station's behavioral observation program, and the corrective action program. The augmented inspection was a fact-finding effort and, therefore, these performance issues will require additional NRC inspection follow-up and further review prior to determining what enforcement action, if any, is appropriate.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Docket Nos: 50-277, 50-278
License Nos: DPR-44, DPR-56

Enclosure: Inspection Report 05000277/2007404 and 05000278/2007404
w/Attachments

Attachments:

- (A) Supplemental Information
- (B) Augmented Inspection Team Charter
- (C) Event Chronology

ML073090061

SUNSI Review Complete: DCC (Reviewer's Initials)

DOCUMENT NAME: C:\FileNet\ML073090061.wpd

After declaring this document "An Official Agency Record" it will/will not be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI:DRP	RI:DRS	RI:DRS	RI:DRP	RI:DRP
NAME	BBickett* (BB)	DCaron (DC)*	JTrapp (JT)*	PKrohn (PK)*	DLew (DL)*
DATE	10/12/07	10/29/07	10/29/07	10/29/07	10/29/07
OFFICE	HQ:NSIR	RI:OI	RI:DRS	RI:RA	
NAME	RCorreia (via email)	EWilson (EW)	MGamberoni (MG)	SCollins (SC)	
DATE	10/18/07	10/30/07	10/31/07	11/02/07	

OFFICIAL RECORD COPY

*See Previous Concurrence Page

cc w/encl:

D. Deboer, Site Security Manager

J. Powers, Director, Office of Homeland Security, Pennsylvania

D. Allard, Director, Dept. Of Environmental Protection, Pennsylvania

S. Pattison, Maryland Department of Environment

A. Lauland, Director, Homeland Security Advisor, Maryland

Chief Operating Officer, Exelon Generation Company, LLC

Site Vice President, Peach Bottom Atomic Power Station

Plant Manager, Peach Bottom Atomic Power Station

Regulatory Assurance Manager - Peach Bottom

Manager, Financial Control & Co-Owner Affairs

Vice President, Licensing and Regulatory Affairs

Senior Vice President, Mid-Atlantic

Senior Vice President - Operations Support

Director, Licensing and Regulatory Affairs

J. Bradley Fewell, Assistant General Counsel, Exelon Nuclear

Manager Licensing, PBAPS

Director, Training

Correspondence Control Desk

R. McLean, Power Plant and Environmental Review Division (MD)

T. Snyder, Maryland Department of Environment

Public Service Commission of Maryland, Engineering Division

Board of Supervisors, Peach Bottom Township

B. Ruth, Council Administrator of Harford County Council

Mr. & Mrs. Dennis Hiebert, Peach Bottom Alliance

TMI - Alert (TMIA)

J. Johnsrud, National Energy Committee, Sierra Club

Mr. & Mrs. Kip Adams

E. Epstein, TMI Alert

R. Fletcher, Department of Environment, Radiological Health Program

R. French, Dir., PA Emergency Management Agency

K. McGinty, Secretary, PA Dept of Environmental Protection

R. Janati, Chief, Nuclear Safety Division (DEP)

B. Mertz, Deputy Director, PA Office of Homeland Security

Lieutenant T. Shannon, PA State Police

Distribution w/encl:

S. Collins, RA
M. Dapas, DRA
D. Lew, DRP
J. Clifford, DRP
G. West, OEDO
H. Chernoff, NRR
J. Lubinski, NRR
J. Hughey, PM NRR
P. Bamford, Backup NRR
P. Krohn, DRP
R. Fuhrmeister, DRP
F. Bower, DRP - Sr Resident Inspector
M. Brown, DRP - Resident Inspector
S. Schmitt - Resident OA
ROPreports@nrc.gov
Region I Docket Room (with concurrences)
R. Correia, NSIR
D. Riffle, NSIR
M. Gamberoni, DRS
D. Roberts, DRS
J. Trapp, DRS
D. Caron, DRS
B. Bickett, DRP
D. Holody, RI
K. Farrar, RI
R. Urban, RI
C. O'Daniell, RI
S. Figueroa, OE
Chairman Klein
Commissioner Jaczko
Commissioner Lyons

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos: 50-277, 50-278

License Nos: DPR-44, DPR-56

Report No: 05000277/2007004 and 05000278/2007004

Licensee: Exelon Generation Company, LLC (Exelon)

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

Location: Delta, Pennsylvania

Dates: September 21 - September 28, 2007

Team Manager: M. Gamberoni, Director, Division of Reactor Safety (DRS)

Inspectors: J. Trapp, Chief, DRS, Branch 1 (Team Leader)
D. Caron, Senior Physical Security Inspector (Asst. Team Leader)
B. Bickett, Senior Project Engineer
J. Teator, Senior Special Agent
M. Mullen, Senior Special Agent
G. Smith, Physical Security Inspector
J. Willis, Security Specialist
A. Cabrelli, Special Agent

Approved by: Samuel J. Collins
Regional Administrator

Enclosure

SUMMARY OF FINDINGS

IR 05000277/2007-404, 05000278/2007-404; 09/21/2007 - 09/28/2007; Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3; Augmented Inspection.

The augmented inspection was conducted by a team consisting of inspectors from the NRC's Region I office, special agents from the Office of Investigation, and a security specialist from Nuclear Security and Incident Response (NSIR). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006. An Augmented Inspection Team (AIT) was initiated in accordance with NRC Management Directive 8.3, "NRC Incident Investigation Program," and Inspection Manual Chapter 0309, "Reactive Inspection Decision Basis for Reactors," and implemented using Inspection Procedure (IP) 93800, "Augmented Inspection Team."

Cornerstone: Physical Protection

The team concluded that Exelon's prompt compensatory measures and corrective actions in response to the videotaped inattentive security officers at PBAPS were appropriate and ensured the station's ability to satisfy the Security Plan. Overall, Security Plan implementation provided assurance that the health and safety of the public was adequately protected at all times. Notwithstanding, the security officer inattentiveness adversely impacted elements of the defense-in-depth security strategy. In addition, actions by security guard force supervision were not effective in ensuring that unacceptable security officer behavior was promptly identified and properly addressed.

AIT Inspection Follow-Up Issues

In accordance with guidance in IP 93800, the AIT was principally a fact-finding inspection and the team did not make a determination whether NRC rules or requirements were violated. However, based on the team's observations, the following issues warrant additional NRC follow-up and review:

- 1) Corrective actions for identified security officer concerns (Section 2.4)
- 2) Security officer attentiveness and extent of condition (Section 2.5)
- 3) Effectiveness of security management and supervisory oversight (Section 2.6)
- 4) Behavioral Observation Program effectiveness (Section 2.7)
- 5) Root cause analysis and extent of condition (Section 2.9)

REPORT DETAILS

1.0 Inspection Background Information

On September 10, 2007, the NRC was contacted by representatives of WCBS-TV (New York City), stating that videotapes of inattentive security officers (SOs) at the Peach Bottom Atomic Power Station (PBAPS) were in their possession. Based upon this information, the Region I Regional Administrator directed implementation of enhanced inspection oversight of security activities by the resident inspectors at PBAPS. That same day, the NRC verbally informed Exelon management of the information received, whereupon Exelon commenced an internal investigation. During the subsequent days before the NRC staff made arrangements to view the videotapes, Region I engaged Exelon several times to discuss the status of their investigation, results achieved, and actions taken to address the alleged security officer inattentiveness issues. On September 19, 2007, the videos were made available by WCBS-TV and viewed by the NRC staff. Based on the viewing of these videos and NRC knowledge of Exelon's investigation details, it was determined on September 19, 2007, that an augmented inspection team was warranted. A charter was developed on September 20, 2007, and the NRC commenced an Augmented Inspection Team at PBAPS on September 21, 2007.

The NRC staff learned that the videos were taken by a station SO on-shift using a personal video device and a cell phone video camera on four different occasions between March and August 2007. Video images depicted multiple SOs inattentive to duty in the station's "ready room" during security shifts on March 12, June 9, June 20, and August 10, 2007. The ready room is a location within the protected area boundary where officers are staged for response functions, while not conducting security patrols. The videos showed a total of ten SOs all working on Security Team No. 1 that appeared to be inattentive. The video clips were taken at various times during both day and night shifts.

Exelon formed an issues management team based upon NRC information passed verbally on September 10, 2007. One of Exelon's initial actions was to re-emphasize to the PBAPS security guard force and Exelon fleet security staffs the need for continued fitness for duty (FFD), with emphasis in the area of fatigue, and their responsibilities to remain alert on duty and report any inattentiveness to supervision. On September 19, 2007, Exelon management and Wackenhut established enhanced security staff oversight at PBAPS, including Wackenhut corporate management providing 24-hour oversight and observation of the security officers. On September 20, 2007, Wackenhut implemented 24-hour on-site security supervision in the "ready room." By letter to the Regional Administrator, dated September 21, 2007, Exelon highlighted their immediate efforts to address security officer attentiveness concerns and their investigation findings, to date. Exelon removed site access privileges and placed the security officers, identified as being inattentive in the videotapes, on administrative hold, pending the outcome of Exelon's internal investigation.

Attachment C contains the detailed chronology associated with this event.

Enclosure

1.1 Augmented Inspection Objectives (93800)

Based on the deterministic criteria specified in Management Directive 8.3, "NRC Incident Investigation Program," and Inspection Manual Chapter 0309, "Reactive Inspection Decision Basis for Reactors," an Augmented Inspection Team was initiated using the inspection guidance of IP 93800, "Augmented Inspection Team."

As outlined in the AIT charter (Attachment B), the inspection team's objectives were to: (1) review the facts surrounding the specific security events identified and Exelon's corrective actions; (2) understand Exelon's short and long-term approach to address the observed performance issues; (3) assess the Peach Bottom security program to assure that the current security program is effective and meeting the security plan; and (4) identify any generic issues associated with the events.

2.1 Independent Review of Events (AIT Charter Items No. 2 and 3)

a. Inspection Scope

The team conducted 38 interviews to understand the circumstances and facts surrounding the events, including the probable causes and extent of inattentiveness of SOs at the site. The NRC interviewed security personnel from each of the four security teams, Wackenhut supervision, maintenance personnel, and Exelon management to gather information and evaluate the station's response to the event and current oversight of security. In addition to interviews, the team reviewed the videotapes of the inattentive SOs; and examined station documentation, procedures, and corrective actions associated with the security program and this event.

b. Observations

Based on a review of the videos, the team confirmed what appeared to be inattentive, on-duty SOs on four separate occasions (March 12; June 9; June 20; and August 10, 2007). There were a total of ten SOs that appeared inattentive to duty while working on Security Team No. 1. Based upon interviews and documentation reviews, the team did not identify any additional inattentive officers working on teams other than Security Team No.1. The NRC review of inattentive SOs is on-going. The team noted that none of the ten videotaped SOs who were interviewed admitted to being inattentive to duty or seeing anyone inattentive to duty.

The team identified that a maintenance technician and maintenance supervisor were made aware of the videos prior to NRC becoming aware of the issues on September 10, 2007. The maintenance technician reported the issue to his supervisor who did not provide the information to site management. The maintenance supervisor informed the maintenance technician to have the SO report the issue to his security supervisor. The licensee had initiated corrective actions to address this issue.

2.2 Security Plan Impact (AIT Charter Item No. 6)

a. Inspection Scope

The team conducted interviews and observations of the security organization to determine current security program effectiveness and implementation. The team reviewed the Security Plan and verified that Peach Bottom was able to implement Security Plan requirements. The team performed walk downs of the site's protective strategy to evaluate the potential effect of degraded security officer response, due to inattentiveness, on Security Plan implementation. The team evaluated critical SO defensive position response times, for a variety of potential threats, to evaluate the potential significance of the SO performance issues on Security Plan effectiveness.

b. Observations

The team concluded that inattentive SOs would have an adverse impact on elements of the defense-in-depth security strategy at PBAPS. SOs in response positions are required, by procedure, to remain alert and attentive. Based upon the information gathered by the team, it appears that the videotaped SOs allowed themselves to become inattentive and potentially compromised their ability to fulfill their duties regarding the site's protective strategy. However, based on the team's review of the Security Plan and security strategy, the level of security at PBAPS was not significantly degraded as a result of these SO performance issues. The following observations were used by the team to assess the significance of SO inattentiveness on station security:

- All inattentive SOs were inside the plant's "ready room" and were in a response only function that did not involve surveillance or detection duties;
- Each of the identified SOs satisfactorily conducted patrols and rounds on the dates associated with the inattentive events;
- All the SOs in the "ready room" carried two communication devices at all times that could be used to alert the officers, if required to respond;
- SOs in the "ready room" and SOs at other posts were contacted via radio at 15 minute intervals on backshifts and 30 minute intervals on day shifts;
- All time-lines for these responders (estimated times to reach defensive positions) were determined to be conservative, with margin built into the response time, when compared to the time-lines associated with postulated threats; and
- The responders involved were part of the layered defense-in-depth strategy and were not credited as initial engagement responders.

2.3 Probable Causes (AIT Charter Items No. 2 and 3)

a. Inspection Scope

The team used formal and informal interviews, plant walkdowns, and unannounced observations during day and night shifts to independently assess the extent that inattentive SOs may go undetected at the station. The team reviewed the station's employee concern program files, Wackenhut's Safe-2-Say program, and corrective action documents to determine station effectiveness in addressing security program and personnel issues related to the behavior exhibited during these events. The team reviewed security corrective action documents, audits, surveillances, and drill documentation to determine station opportunities to identify an adverse trend in security performance prior to the videotaping events.

b. Observations

The team determined the following causal factors contributed to inattentive behavior in the security organization:

- Adverse behavior had developed among SOs on Security Team No. 1 that treated inattentiveness in the "ready room" as an acceptable practice;
- The "ready room" was not accessible for adequate supervisory oversight. Specifically, the room was locked and did not permit unannounced supervisory checks, and the single room window was blocked from supervisory observations by a file cabinet;
- Management failed to effectively communicate and reinforce station attentiveness expectations. Although generic briefings were given to security teams on alertness and behavior observations, the communications were not effectively received or specific to actual conditions at the plant;
- Security supervisors failed to properly address concerns involving inattentive SOs and were not receptive to these concerns being brought forward. At least two security supervisors were informed that SOs were inattentive and appropriate actions were not taken;
- The environmental conditions in the "ready room" were not conducive to attentiveness and station management failed to address these known adverse conditions. The "ready room" had high background noise, was dimly lit, and was poorly ventilated;

- Management failed to identify human factor issues related to 12-hour shifts spent, in part, at the “ready room” post with low physical activity. For some SOs, a significant portion of the shift could be spent sitting in the ready room when not on patrol or performing other duties; and
- Management failed to provide adequate attentiveness stimuli to the SOs in the “ready room.”

2.4 Corrective Actions and Compensatory Measures (AIT Charter Items No. 1, 8, and 9)

a. Inspection Scope

The team performed reviews to verify that compensatory measures implemented at PBAPS were appropriate, maintained, and consistent with the site’s Security Plan. The team conducted interviews with the SOs and supervisors performing compensatory measures and conducted walkdowns of those measures. The team reviewed supervisory observation and coaching documentation. The team also reviewed Exelon initiated nuclear event reports and Exelon’s transition plan for the security guard force.

b. Observations

The station’s prompt compensatory measures and corrective actions implemented to address SOs inattentiveness were appropriate and assured Exelon’s ability to implement the security strategy. The following is a list of prompt measures implemented at PBAPS by Exelon:

- Briefed all SOs on fatigue and responsibilities for self-reporting;
- Enhanced Wackenhut Corporate oversight at the site for 24-hour coverage and a security supervisor was placed in the “ready room” 24 hours a day;
- Exelon senior site management and site security oversight observations performed daily;
- Security Team No. 1 removed from the security shift rotation, denied site access, and placed on administrative hold, pending investigation results;
- Exelon issued Nuclear Event Report (NER), NC-07-034, with fleet-wide actions and issued a generic communication to the industry;
- All SOs were interviewed;
- Exelon plans to terminate the Wackenhut security contract for security services, effective November 1, 2007; and
- Exelon implemented enhanced radio checks on September 27, 2007, based upon NRC observations.

The team identified one corrective action improvement associated with the predictability of radio communication checks for the various security posts. The team noted that a random order radio check would enhance alertness. Exelon implemented this change on September 27, 2007. In addition, Exelon communicated that any actions to change compensatory measures established would be discussed with the NRC, in advance.

The team identified one example where the corrective actions, prior to September 2007, were not effectively implemented. The security organization did not enter instances of inappropriate SO behavior from early 2007 into the station corrective action program (CAP). There was no indication that station corrective actions regarding unacceptable SO behavior were effectively received or acted upon by security supervisors or managers at PBAPS.

2.5 Extent of Inattentive Security Officers (AIT Charter item No. 5)

a. Inspection Scope

The team conducted 38 interviews to ascertain the extent of potential inattentive SO behavior at the site. The interview population included a sample of individuals from all security teams. The team reviewed Exelon's interview results to understand their investigative findings which included an interview sample of nearly 100 percent of SOs. Additionally, the team conducted unannounced backshift observations at various security posts, including the "ready room."

b. Observations

All security officers were interviewed at least once by either NRC or Exelon. Based on videos and interviews conducted, all ten SOs in the video, were working on Security Team No. 1. None of the SOs interviewed claimed to have ever been inattentive or witnessed inattentive behavior by fellow officers on duty. Seven of the SOs identified as inattentive by video were interviewed by the NRC during the AIT. These seven SOs denied being inattentive or seeing anybody inattentive.

2.6 Management and Supervisory Oversight (AIT Charter Item No. 7)

a. Inspection Scope

The team reviewed Exelon's and Wackenhut's actions preceding the event to assess the effectiveness of management oversight and engagement with the PBAPS security organization. The team reviewed procedures, corrective actions, and nuclear event reports related to both Exelon and Wackenhut management oversight. The team reviewed Exelon and Wackenhut backshift and paired observation documentation to evaluate the frequency and quality of oversight activities.

b. Observations

The team identified a lack of effective supervisory oversight on Security Team No. 1 that had a direct adverse impact on this event and prolonged identification. In addition, the team determined that station management failed to effectively engage the security personnel when adverse behavior occurred. The following examples were specific instances of ineffective management and supervisory oversight:

- Two individuals indicated that on-shift supervisors on Security Team No. 1 were provided information regarding inattentive SOs. Two supervisors took no action when notified and one supervisor discouraged bringing forward safety concerns;
- Station management failed to take appropriate corrective actions for environmental conditions in the “ready room” which contributed to inattentive behavior;
- Station management failed to take into consideration human factors when determining shift rotation of internal/external responders. Specifically, SOs were allowed to remain on the same security post for 12-hour shifts which was not conducive to attentiveness; and
- PBAPS security management staffing was not maintained to fleet standards. For a total period of approximately six months over the past year, Exelon’s fleet standard of a security manager and two security operations supervisors was not maintained. For that time period, Exelon maintained just one acting security manager and one operations security supervisor at the station.

2.7 Behavioral Observation Program (BOP) (AIT Charter Item No. 3)

a. Inspection Scope

The team reviewed Exelon’s FFD program procedures and the station’s general employee training manual with regards to the BOP. The team conducted interviews with SOs and supervisors to determine the level of knowledge and willingness to participate in the reporting of SO behaviors potentially adverse to safety.

b. Observations

The team identified the following examples where the station was not effective in promoting and supporting the BOP:

- Some SOs interviewed did not consider closing their eyes or putting their head down on a table for periods of time an example of inattentiveness or fatigue;
- There were multiple opportunities for several SOs to have reported inattentive SO behavior exhibited during the associated security events; and

- There were several opportunities for SOs to have reported aberrant or unacceptable SO behavior during previous security events in early 2007.

2.8 Overtime and Fatigue (AIT Charter Item No. 3)

a. Inspection Scope

The team reviewed schedules, payroll records, and work hour tracking documentation to identify if any security officers that appeared inattentive in the videotape had worked excessive hours or violated NRC work hour requirements.

b. Observations

The team determined that the hours worked by the ten SOs, on the four events videotaped, did not exceed NRC individual work hour requirements. The most hours worked by any of these security officers was 12.5 hours on the day of the event and 57 hours total for the week of the event. NRC individual limits are 16 hours worked in 24 hours and 72 hours worked in seven days. The majority of the ten SOs were working the standard work schedule with little or no overtime. The inattentive behavior occurred on both weekdays and on weekends at various times of the day and night. Additionally, the inattentive behavior was exhibited at different times throughout the 12 hour shifts, not just near the end of the shifts. The team did not find a strong correlation between inattentive behavior and work hours.

2.9 Root Cause Evaluation (AIT Charter Item No. 4)

a. Inspection Scope

The team reviewed Exelon's root cause team charter and interviewed the root cause team to understand goals and milestones associated with the performance of their root cause evaluation, including determination of causal factors and extent of condition. The inspectors reviewed the scope and depth of the barrier analysis associated with the causal evaluation.

b. Observations

Exelon's root cause team and charter were established during the week of September 24, 2007. The Exelon team leader discussed their preliminary event chronology and scope of efforts with the team on September 28, 2007. Exelon has a completion milestone for the documented root cause evaluation by October 26, 2007. The NRC AIT follow-up inspection will review Exelon's root cause and extent of condition when this evaluation is completed.

2.10 Generic Issues and Implications (AIT Charter Item No. 11)

a. Inspection Scope

The team reviewed the methodology and content of Exelon communications to their fleet and to the industry regarding the security officer issues at PBAPS. The team also considered what potential NRC generic communications and lessons learned should be disseminated to the industry.

b. Observations

Exelon issued an NER to the Exelon fleet with actions to address inattentiveness issues at each of their sites. This NER communicated information and directed actions for the other Exelon sites in order to ensure similar behaviors are not occurring fleet-wide. Exelon has also submitted a generic communication to the industry about the event and actions taken, to date.

The NRC has submitted a security advisory (SA-07-06) to the industry regarding inattentive security officers. NRC Resident Inspectors conducted random, unannounced checks of ready rooms and security posts in all four Regions. Additionally, the team identified the following issues for generic communication consideration:

- Licensee SO shift rotation frequency and susceptibility to inattentive behavior;
- Licensee evaluation of attentiveness stimuli for security posts where it would be appropriate, based on the nature of their duties;
- Licensee supervision of SOs with regard to utilization of supervisory tools to detect inattentiveness; and
- Licensee environmental conditions for security posts.

3.0 Meetings

Exit Meeting Summary

On October 9, 2007, the inspection team presented the inspection results at a public exit meeting to Mr. Ron DeGregorio and other PBAPS staff. Exelon acknowledged the teams observations and issues for follow-up.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

J. Grimes Site Vice President
P. Cowan Director, Licensing and Regulatory Affairs
S. Craig Security Manager
J. Mallon Licensing Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Procedures

LS-AA-125, "Corrective Action Program Procedure," Revision 11
SY-AA-1016, "Watchstanding Practices," Revision 0
SY-AA-1016, "Watchstanding Practices," Revision 4
SY-AA-1020, "Supervisor Post Checks and Post Orders," Revision 0
SY-AA-1020, "Supervisor Post Checks and Post Orders," Revision 1
SY-AA-102, "Exelon's Nuclear Fitness-For-Duty Program," Revision 11
SY-AA-101-130, "Security Responsibilities for Station Personnel," Revision 8
SY-AA-101-130, "Security Responsibilities for Station Personnel," Revision 9
SY-PB-101-124-1001, "Security Control Center Operations," Revision 3
SY-AA-101-126, "Duties and Responsibilities of the Station Security Organization,"
Revision 5
SY-AA-103-513, "Behavioral Observation Program," Revision 6

Condition Reports

00673505	00328348	00344637	00354611	00358703
00369474	00425158	00486903	00509110	00525923
00537333	00570418	00613537	00656946	00657271
00670392	00677089	00210084	00504830	

Miscellaneous

NER NC-07-034, "Inattentive Security Officer Investigation Fleet Actions," September 24, 2007
NER NC-06-010, "Increased Field Observation and Coaching of the Site Security Force,"
Revision 2
SA-07-06, "NRC Security Advisory - Security officers inattentive to duty," September 27, 2007
Nuclear Oversight Quarterly Reports, 2005 - 2007
NOSA-PEA-06-02, Security Plan, FFD, and Personnel Access Data System, February 1, 2006
NOSA-PEA-07-03, Security Plan, FFD, and Personnel Access Data System, January 21, 2007
Exelon General Employee Training, FFD Module, Revision 4
Exelon's Security Transition Plan, September 24, 2007

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
AIT	Augmented Inspection Team
BOP	Behavioral Observation Program
CFR	Code of Federal Regulations
FFD	Fitness For Duty
IP	Inspection Procedure
NER	Nuclear Event Report
NRC	Nuclear Regulatory Commission
NSIR	Nuclear Security and Incident Response
PARS	Publicly Available Records
PBAPS	Peach Bottom Atomic Power Station
SO	Security Officer
WNS	Wackenhut Nuclear Services

B-1

September 20, 2007

MEMORANDUM TO: James M. Trapp, Team Leader
Augmented Inspection Team

FROM: Marsha K. Gamberoni, Team Manager /RA/
Augmented Inspection Team

SUBJECT: AUGMENTED INSPECTION TEAM CHARTER

An Augmented Inspection Team (AIT) has been established for Peach Bottom to inspect and assess several security events and assess the licensee's security program. The team composition is as follows:

Team Manager:	M. Gamberoni, RI, DRS
Team Leader:	J. Trapp, RI, DRS
Assistant Team Leader:	D. Caron, DRS
Team Members:	G. Smith, RI, DRS B. Bickett, RI, DRP J. Willis, NSIR
OI Investigators:	(2) Names to be Determined

The objectives of the inspection are to: (1) review the facts surrounding the specific security issues identified and the licensee's corrective action; (2) understand the licensee's short term and long term approach to address the issues; (3) assess the Peach Bottom security program to assure that the current security program is effective and meeting the security plan; and (4) identify any generic issues associated with the events.

For the period during which you are leading this inspection and documenting the results, you will report directly to me. The guidance in Inspection Procedure 93800, "Augmented Inspection Team," and Management Directive 8.3, "NRC Incident Investigation Procedures," apply to your inspection.

Enclosure: AIT Charter

Attachment

**AUGMENTED INSPECTION TEAM (AIT) CHARTER
PEACH BOTTOM UNITS 2 AND 3
SECURITY EVENTS**

Basis for the Formation of the AIT – Videotape provided by the alleged shows multiple instances of multiple security officers sleeping in the former power block ready room. These events meet the deterministic criteria for an AIT in Management Directive 8.3, in that they involved a significant infraction or repeated instances of safeguards infractions that demonstrate the ineffectiveness of facility security provisions.

Objectives of the AIT - The objectives of the inspection are to: (1) review the facts surrounding the specific security issues identified and the licensee's corrective action; (2) understand the licensee's short term and long term approach to address the issues; (3) assess the Peach Bottom security program to assure that the current security program is effective and meeting the security plan; and (4) identify any generic issues associated with the events.

To accomplish these objectives, the following will be performed:

1. Verify that compensatory measures implemented by the licensee for this problem are adequate and have been implemented and maintained. Review any licensee proposals to modify the compensatory measures.
2. Independently conduct interviews and inspections to fully understand the circumstances surrounding the event and probable cause(s).
3. AIT fact finding should include the conditions preceding the event, applicable chronology, any event precursors, human factor considerations, safeguards considerations, and safety culture component considerations (as defined in IMC 0305, paragraphs 06.07c and d).
4. Assess Exelon's root cause evaluation for adequacy with respect to the identification of performance deficiencies, extent of condition review, root cause(s), contributing cause(s), and corrective actions.
5. Determine the extent of inattentive security officers.
6. Determine inattentive security officer's impact on the Peach Bottom Security Plan.
7. Evaluate Peach Bottom's supervision and management oversight of security.
8. Evaluate adequacy of licensee response to the event.
9. Consider and evaluate any Exelon decisions regarding security force transitions.

10. Document the inspection findings and conclusions in an AIT final report within 30 calendar days of inspection completion (the day of the exit meeting).
11. Consider providing appropriate information and feedback to the operating experience program.

EVENT CHRONOLOGY

- 2004 - PBAPS security power block “ready room” established to support Security Plan implementation and provide increased defense-in-depth for NRC Force on Force exercises.
- April 16, 2006 - NRC Force-on-Force exercise conducted (No findings).
- January 2007 - Wackenhut Corporation issues improvement plan for Safety Conscious Work Environment (SCWE) improvement actions for its security forces at all sites.
- February 2007 - Security Officer (SO) responsible for video recordings has first observation of inattentive SOs in the power block ready room but did not record the observations.
- March 2, 2007 - SY-AA-1016, Revision 4, implemented to add ‘attentiveness tools’ based on attentiveness issue experienced at an Exelon plant.
- March 12, 2007 - Five SOs inattentive to duty in the ready room captured by a SO’s personal cell phone. All five SOs are on Security Team No. 1.
- March 27, 2007 - NRC receives concerns involving Peach Bottom SOs that are inattentive to duty at PBAPS.
- April 2007 – SO shows videotapes of inattentive SOs to a maintenance technician at a little league ball game. Maintenance technician tells the SO to inform his security supervisor. The following day the maintenance technician informs his supervisor who responds that the SO’s concern should be brought up to the security supervisor.
- April 2007 – Wackenhut Corporate investigation reveals two separate SO unacceptable behavior issues received through Wackenhut Safe-2-Say program. In the course of this investigation, it was determined by Wackenhut that multiple SOs on Team No. 2 were initially untruthful to investigators and tried to hide and cover-up the events. Several officers were disciplined for their lack of candor and not reporting a safety concern.
- April 18, 2007 - Plant review committee rejects \$150K expense of further renovations to “ready room.” PBAPS senior management notified of decision to not fund improvements.
- April 30, 2007 - NRC provided Exelon management with written referral for concerns associated with Peach Bottom SOs that were inattentive to duty.
- May 30, 2007 - NRC received Exelon’s response stating the three referred concerns associated with inattentive SO behavior were not substantiated. Exelon conducted interviews that did not substantiate the issue. Exelon referenced enhancements in their

response that included radio check improvements and procedure changes to implement fixed post checks twice a shift. Exelon also referenced 15 minute stand-ups on back shifts and randomly on day shift.

- June 9, 2007 - Three SOs inattentive on-duty in the “ready room” captured by a SO’s personal video device (ARCOS camera).
- Mid June 2007 - SO informs a field supervisor of inattentive guards on duty that were videotaped. Field supervisor told lead supervisor of this information including names of guards who were inattentive to duty on video.
- Late June 2007 - Security shift supervisor and lead supervisor of Team No. 1 inform SO to stop bringing video devices into the plant’s protected area.
- July 19, 2007 - Security force transitions to new “ready room” that is considered larger and a more moderate temperature.
- June 20, 2007 – One SO inattentive on duty in the “ready room” captured by a SO’s personal cell phone.
- August 10, 2007 - Three SOs inattentive on duty in the “ready room” captured by a personal cell phone.
- August 22, 2007 - NRC reviews Exelon response that did not substantiate inattentive SOs. NRC considers Exelon response acceptable after follow-up questions.
- August 28, 2007 - Exelon Corporate nuclear safety review board identified Wackenhut performance as an area for improvement fleet-wide.
- September 10, 2007 - NRC received and verbally referred concerns to Exelon based on WCBS-TV (New York) telephone call with information about videos that shows inattentive SOs on shift at Peach Bottom. NRC resident inspectors begin enhanced security inspections by performing increased number of observations at various security posts during both normal and backshift hours.
- September 10, 2007 - Exelon forms an Issues Management Team based on NRC information passed verbally. Exelon briefed PBAPS security force regarding heightened awareness, fatigue, and responsibilities to report inattentiveness.
- September 11, 2007 – Exelon briefed their fleet security regarding heightened awareness, fatigue, and responsibilities to report inattentiveness.
- September 15 - 20, 2007 - Exelon corporate security interviews approximately 95 percent on-site members of Wackenhut organization at Peach Bottom.
- September 17, 2007 – SO responsible for videotaping inattentiveness has unescorted access suspended because of trustworthiness concerns and procedure violations.

- September 17, 2007 - Maintenance technician acknowledged after a site communication on inattentiveness that he had knowledge of a SO who taped inattentive SOs on duty and showed him the videos.
- September 17, 2007 - Exelon is contacted by WCBS-TV.
- September 18, 2007 - NRC received and verbally referred inattentive SO concerns that were received based upon telephone conversation that specified "ready room" as area of concern for inattentive SOs.
- September 18, 2007 - Letter from President – Wackenhut Nuclear Services (WNS), to WNS security force emphasizing fitness for duty and fatigue standards.
- September 18, 2007 – Exelon makes decision for outside legal counsel to take over investigation in response to allegations. Exelon issues first press release at 11:00 am.
- September 19, 2007 – NRC views WCBS-TV videotapes and initiates AIT charter. NRC verbally refers to Exelon additional information to be considered in their investigation.
- September 19, 2007 – Exelon management and Wackenhut establish enhanced security oversight at PBAPS. Additional Wackenhut supervision brought in providing 24-hour oversight and observation.
- September 20, 2007 - Exelon implements 24-hour on-site security supervision in the "ready room." Additionally, on-site Wackenhut supervision providing enhanced oversight and observation.
- September 20, 2007 – NRC informs Exelon that an AIT will be dispatched to Peach Bottom the following morning to begin inspection on the security events surrounding inattentive SOs. NRC issues press release announcing the augmented inspection at PBAPS for inattentive SO concerns.
- September 21, 2007 - WCBS-TV supplies Exelon with videos for viewing. Exelon confirms that videos contain Peach Bottom SOs in the "ready room."
- September 21, 2007 – NRC commences AIT and arrives on site for inattentive SO events.
- September 21, 2007 - Letter from Exelon to NRC Regional Administrator highlighting Exelon's efforts to immediately address SO inattentiveness concerns and current fact-finding investigative efforts.
- September 21, 2007 – Nine SOs inattentive to duty placed on administrative hold pending outcome of investigation.

- September 22, 2007 - NRC Region I security inspectors supplement resident staff in conducting backshift inspection and observation of the security posts and compensatory measures throughout the weekend until full AIT arrives on-site.
- September 24, 2007 - Exelon initiates termination of Wackenhut security contract at Peach Bottom.
- September 24, 2007 – Exelon issues NER NC-07-034 to fleet for mandatory fleet actions in light of inattentive SO issues at Peach Bottom.
- September 25, 2007 – Exelon places remainder of Security Team No. 1 on administrative hold pending outcome of investigation.
- September 25, 2007 - Exelon issues an Operations Experience item regarding Security Officers Inattentive to Duty on the NEI security web site
- September 26, 2007 - Exelon announces transition of security force from Wackenhut to a proprietary guard force (Exelon).
- September 27, 2007 - Exelon enhances compensatory measures for BREs.
- September 27, 2007 - NRC issues advisory SA-07-06 regarding Security Officers Inattentive to Duty.