The Honorable Thomas R. Carper Chairman, Subcommittee on Clean Air and Nuclear Safety Committee on Environment and Public Works United States Senate Washington, D.C. 20510

Dear Mr. Chairman:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated January 7, 2008, on the matter of inattentive security officers at Peach Bottom Atomic Power Station. Specifically, you requested that the NRC provide a description of (1) inspection findings, (2) follow-up actions, and (3) analysis of the adequacy of the NRC's allegation review to be addressed at the NRC oversight hearing on February 28, 2008. Enclosed is the information you requested.

I want to assure you that the NRC takes its responsibility for protecting the public health and safety very seriously. The Commission considers inattentive security officers a very serious and unacceptable condition. Instances of inattentive security officers identified either by licensees or the NRC are reviewed in accordance with the NRC's Reactor Oversight Process (ROP); assessed for safety significance, the results of which are documented in inspection reports; and enforcement action is taken when warranted. The NRC has several ongoing reviews of the Peach Bottom incident to correct any underlying problems and also to verify that Exelon, the licensee, continues to take appropriate actions.

In September 2007, when the NRC was provided video evidence of inattentive security officers at Peach Bottom, agency staff immediately contacted Exelon to confirm that short-term compensatory actions were taken. Shortly afterwards, the NRC dispatched an Augmented Inspection Team (AIT) and a follow-up inspection team to investigate. The NRC determined that the inattentive security officers and deficiencies in Exelon's behavioral observation program, which could have identified and corrected the problem, represent a low-to-moderate significance finding in accordance with the NRC's ROP. Copies of both inspection reports are enclosed.

The NRC has taken extensive actions to confirm that the Peach Bottom security force remains attentive to its duties, including the issuance of a Confirmatory Action Letter to Exelon to confirm NRC expectations regarding the licensee's root cause determinations and effective

implementation of corrective actions. The NRC has also provided significant oversight of the transition from the Wackenhut contracted security organization to an in-house security organization managed by Exelon. As noted in the enclosed memorandum, the NRC has significantly enhanced the inspection oversight of Peach Bottom security.

The NRC has also made security officer attentiveness a priority at other facilities nationwide. NRC on-site resident inspectors now conduct additional checks and unannounced inspections, including night and weekend inspections, at nuclear power plant security posts. On September 27, 2007, the NRC issued a security advisory (SA-07-06) to reinforce with facility managers and other security personnel their responsibility for protecting nuclear facilities and to address the importance of remaining attentive while on duty. A copy of the advisory is enclosed. NRC senior managers conducted conference calls with senior executives from all NRC reactor licensees to discuss the significance of maintaining an attentive security force. The nuclear industry, through the Nuclear Energy Institute, has also implemented initiatives regarding inattentive security officers. Finally, through issuance of Bulletin 2007-01, "Security Officer Attentiveness," dated December 12, 2007, the NRC has requested information from power reactor and Category I fuel facilities concerning the specific actions licensees have taken or plan to take to address these issues. A copy of the bulletin is enclosed. The NRC will evaluate the information gathered to determine what further actions are necessary.

The NRC recently completed a lessons-learned review regarding NRC's response to allegations of inattentive security officers at Peach Bottom. The review team's report, which was published on February 11, 2008, identified several recommendations to improve our inspection and allegation processes. On the same date, the NRC's Executive Director for Operations issued a memorandum directing senior agency officials to evaluate the recommendations identified in the report and propose appropriate follow-up actions. The report, the Executive Director's memorandum, and a related press release are enclosed. Furthermore, the Office of the Inspector General is also conducting an independent review of the agency's response to the Peach Bottom situation, and the Commission hopes to learn more from those findings.

You and I toured the Peach Bottom facility on February 8, 2008 to see for ourselves the measures that Exelon has put in place. I would like to thank you for taking time out of your busy schedule to tour the facility with me.

I look forward to the upcoming hearing and to address these issues and NRC actions to mitigate further occurrences. If you need additional information in this matter, please do not hesitate to call me.

Sincerely,

/RA/

Dale E. Klein

Enclosures: See next page

#### Enclosures:

- 1. Peach Bottom Augmented Inspection Team Inspection Report
- 2. Peach Bottom Follow-up Inspection Report
- 3. Security Advisory SA-07-06, "Security Officers Inattentive To Duty"
- 4. NRC Bulletin 2007-01, "Security Officer Attentiveness"
- "Review Team Findings with Respect to Inattentive Security Officers at Peach Bottom;" February 11, 2008 Executive Director for Operations memorandum, "Peach Bottom Lessons Learned;" and February 12, 2008 NRC NEWS Press Release
- Memorandum: Heightened NRC Oversight of Security Issues at Peach Bottom

## Similar letter sent to:

The Honorable Thomas R. Carper Chairman, Subcommittee on Clean Air and Nuclear Safety Committee on Environment and Public Works United States Senate Washington, D.C. 20510

The Honorable George V. Voinovich Ranking Member, Subcommittee on Clean Air and Nuclear Safety Committee on Environment and Public Works United States Senate Washington, D.C. 20510

## 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 <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (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

#### 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

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Vice President, Licensing and Regulatory Affairs

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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)

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## <u>Distribution w/encl</u>:

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**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 EngineerJ. Teator, Senior Special AgentM. Mullen, Senior Special AgentG. Smith, Physical Security Inspector

J. Willis, Security Specialist A. Cabrelli, Special Agent

Approved by: Samuel J. Collins

Regional Administrator

#### **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)

ii Enclosure

iii Enclosure

#### **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.

#### 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 <u>Independent Review of Events</u> (AIT Charter Items No. 2 and 3)

## a. <u>Inspection Scope</u>

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. <u>Inspection Scope</u>

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

#### September 20, 2007

/RA/

MEMORANDUM TO: James M. Trapp, Team Leader

Augmented Inspection Team

FROM: Marsha K. Gamberoni, Team Manager

**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

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

<u>Basis for the Formation of the AIT</u> – Videotape provided by the alleger 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 factfinding 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.

December 21, 2007

EA-07-296

Mr. Charles G. Pardee Chief Nuclear Officer and Senior Vice President Exelon Generation Company, LLC 4300 Winfield Rd Warrenville, IL 60555

SUBJECT: NRC AUGMENTED INSPECTION TEAM (AIT) FOLLOW-UP REPORT

05000277/2007405 AND 05000278/2007405; PRELIMINARY GREATER THAN

GREEN FINDING - PEACH BOTTOM ATOMIC POWER STATION

#### Dear Mr. Pardee:

On November 9, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed an AIT follow-up inspection at your Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3. This inspection was conducted to provide additional assessment and determine the significance of issues identified by an Augmented Inspection Team (AIT) in September 2007 regarding security officer inattentiveness. The enclosed inspection report documents the AIT follow-up inspection results, which were discussed at the public exit meeting on December 3, 2007, with Mr. Joseph Grimes and other members of your staff. Following the inspection exit, the NRC responded to questions from those stakeholders in attendance. It should be noted that the findings documented in this report do not represent new or different issues or incidents of inattentiveness other than those identified during the September 2007 AIT inspection.

<b>EXEMPT FROM PUBLIC DISCLOSURE</b> May be exempt from public release under the Freedom of Information Act (5 U.S.C. 552)				
Exemption number:5 Nuclear Regulatory Commission review required before public release.				
<u>James Trapp, RI/DRS/PSB1</u> /RA by D. Roberts for/ Name and organization of person making determination.				
Date of determination: 12/20/2007				

Attachment C Contains Sensitive Unclassified Non-Safeguards Information. Upon separation, the cover letter, enclosure, and Attachments A and B are decontrolled.

C. Pardee 2

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The team reviewed selected procedures and records, observed activities, and interviewed personnel.

As initially described in the NRC Augmented Inspection Team report dated November 5, 2007, the enclosed report documents one finding regarding inattentive security officers and an ineffective behavior observation program that was preliminarily determined to be greater than Green, as determined by the Physical Protection Significance Determination Process (i.e., a finding of at least low to moderate security significance). The Significance Determination Process analysis contains security sensitive information and will not be made publicly available (Attachment C). When notified of this issue by the NRC, compensatory measures were put in place by Exelon that addressed this finding while longer term corrective actions were being implemented. In accordance with Inspection Manual Chapter 0305, "Operating Reactor Assessment Program" this finding has cross-cutting aspects in the areas of Human Performance and Safety Conscious Work Environment.

As mentioned previously, this inspection was conducted as a follow-up to an earlier AIT inspection that took place from September 21-28, 2007. Following the earlier inspection, the NRC took several actions to ensure that the overall effectiveness of the security program at Peach Bottom was not compromised as a result of the incidents of inattentiveness. These actions included issuing a Confirmatory Action Letter (CAL) to Exelon to ensure that immediate and long term corrective actions were being implemented at the site. The NRC supplemented its own routine inspection effort by increasing it's monitoring while Exelon transitioned to a proprietary security force at Peach Bottom in November 2007. On November 28, 2007, the NRC's Executive Director for Operations approved a Reactor Oversight Process (ROP) Deviation Memorandum allowing the NRC Region I staff to increase its inspection and oversight of Peach Bottom beyond that which would normally be prescribed by the ROP. These actions ensured that adequate NRC oversight was provided to address the performance deficiencies described in this report while the NRC's significance determination and enforcement process were being completed. The NRC has made the public aware of these actions by holding public inspection exit meetings and making related documents publicly available in ADAMS.

Before we make a final significance decision regarding this preliminary "greater than Green" finding, we are providing you an opportunity (1) to attend a Regulatory Conference where you can present to the NRC your perspective on the facts and assumptions the NRC used to arrive at the finding and assess its significance, or (2) submit your position on the finding to the NRC in writing. If you request a Regulatory Conference, it should be held within 30 days of the receipt of this letter and we encourage you to submit supporting documentation at least one week prior to the conference in an effort to make the conference more efficient and effective. If a Regulatory Conference is held, it will be closed for public observation because it involves security sensitive information. If you decide to submit only a written response, such submittal should be sent to the NRC within 30 days of the receipt of this letter. If you decline a Regulatory Conference and choose not to submit a written response, the NRC will proceed with its final significance determination.

C. Pardee 3

Please contact Mr. James Trapp of my staff at (610) 337-5186 within 10 business days of the date of your receipt of this letter to notify the NRC of your intentions. If we have not heard from you within 10 days, we will continue with our significance determination decision. You will be advised by separate correspondence of the results of our deliberations on this matter and matters involving future enforcement decisions. In addition, please be advised that the characterization of the performance issue described in the enclosed inspection report may change as a result of further NRC review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and Attachments A (Supplemental Information) and B (Event Chronology) 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 <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room). However, because of the security-related information contained in Attachment C, and in accordance with 10 CFR 2.390, a copy of Attachment C will not be available for public inspection.

In accordance with 10 CFR 2.390(b)(1)(ii), the NRC is waiving the affidavit requirements for your response, if any. This will ensure that your response will <u>not</u> be made publicly available. If Safeguards Information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Sincerely,

/RA/

Darrell J. Roberts, Deputy Director Division of Reactor Safety

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

Enclosure: Inspection Report 05000277/2007405 and 05000278/2007405

w/Attachments

#### Attachments:

(A) Supplemental Information

(B) Event Chronology

#### Non-Public Attachment:

(C) Physical Protection Significance Determination Process Review Results (Official Use Only - Security Related Information)

# C. Pardee

cc w/encl; w/Att. C:

- J. Kovalchick, Acting Site Security Manager
- D. Allard, Director, Dept. Of Environmental Protection, Pennsylvania
- S. Pattison, Maryland Department of Environment
- J. Powers, Director, Office of Homeland Security, Pennsylvania
- A. Lauland, Director, Homeland Security Advisor, Maryland
- N. Lowey, U.S. House of Representatives

cc w/encl; w/o Att. C:

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

Public Service Commission of Maryland, Engineering Division

Board of Supervisors, Peach Bottom Township

B. Ruth, Council Administrator of Harford County Council

- R. Ayers, Harford County Emergency
- E. Crist, Harford County Emergency
- L. Ploener, Harford County Emergency
- R. Brooks, Cecil County

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

C. Pardee 5

## Distribution w/encl; w/Att. C:

- S. Collins, RA
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- R. Correia, NSIR
- D. Riffle, NSIR
- M. Gamberoni, DRS
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- J. Trapp, DRS
- D. Caron, DRS
- B. Bickett, DRP
- J. Larsen, RIV
- J. Willis, NSIR
- D. Holody, RI
- K. Farrar, RI
- R. Urban, RI
- C. O'Daniell, RI
- S. Figueroa, OE

#### U. S. NUCLEAR REGULATORY COMMISSION

#### **REGION I**

Docket Nos: 50-277, 50-278

License Nos: DPR-44, DPR-56

Report No: 05000277/2007405 and 05000278/2007405

Licensee: Exelon Generation Company, LLC (Exelon)

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

Location: Delta, Pennsylvania

Dates: November 5 - 9, 2007

Inspectors: D. Caron, Senior Physical Security Inspector (Team Leader)

J. Larsen, Senior Physical Security Inspector, Region IV

B. Bickett, Senior Project Engineer J. Willis, Security Specialist, NSIR

Approved by: Darrell J. Roberts, Deputy Director

Division of Reactor Safety

#### SUMMARY OF FINDINGS

IR 05000277/2007-405, 05000278/2007-405; 11/05/2007 - 11/09/2007; Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3; Access Authorization and Protective Strategy

The augmented inspection follow-up was conducted by a team consisting of inspectors from the NRC's Region I office, Region IV office, and a security specialist from Nuclear Security and Incident Response (NSIR). One finding with preliminary greater than Green security significance was identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. 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.

# A. <u>NRC-Identified and Self-Revealing Findings</u>

## **Cornerstone: Physical Protection**

• <u>TBD.</u> A preliminary greater than Green finding was identified for failure to maintain the minimum number of available responders and failure to maintain an effective behavior observation program (BOP). The licensee implemented immediate compensatory measures and conducted a root cause analysis that resulted in additional corrective actions.

This finding is considered more than minor because it is associated with the Response to Contingency Events and Access Authorization attributes and it affected the cornerstone objective to provide assurance that the licensee's security system uses a defense-in-depth approach and can protect against (1) the design basis threat of radiological sabotage from external and internal threats, and (2) the theft or loss of radiological materials. Specifically, an inadequate BOP led to inattentive responders. With multiple inattentive response team members at one time, the licensee was below minimum numbers of available responders, which increased the potential for degradation in the protective strategy of the site. Using the Physical Protection Significance Determination Process (PPSDP), the team determined that the finding was of greater than very low security significance. The cause of the finding is related to the cross cutting elements of safety conscious work environment (SCWE)(S.1.a) and management/supervisory oversight element (H.4.c) of the human performance cross-cutting area. (Section 3.3)

## B. Licensee-Identified Findings

None

#### 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. The NRC verbally informed Exelon management of the information and initiated enhanced oversight of security activities at Peach Bottom that same day. On September 19, 2007, after viewing the videos, the NRC determined an augmented inspection team (AIT) was warranted to gather facts related to these events. On September 21, 2007, an augmented team inspection was initiated. On September 27, 2007, the NRC issued an advisory (SA-07-06) to the nuclear industry regarding inattentive security officers and related fitness for duty and behavior observation issues.

On October 9, 2007, the NRC held a public exit for the AIT inspection. The team identified that immediate corrective actions were adequate, but also identified additional areas for follow-up inspection. On October 19, 2007, the NRC issued a confirmatory action letter (CAL) to ensure immediate compensatory measures were maintained and to document a schedule for planned long term corrective actions. On October 24, 2007, the NRC instituted a weekly status call with Exelon to discuss CAL actions and the status of transitioning from a contract security force to an Exelon force. On November 5, 2007, the AIT inspection report was issued and an AIT follow-up inspection began to review issues identified by the AIT in detail and assess the significance of any performance deficiencies. On November 28, 2007, the NRC's Executive Director of Operations approved a Deviation Memorandum which provided additional NRC inspection and oversight of Peach Bottom security beyond what would normally be prescribed by the reactor oversight process.

Attachment B contains the detailed chronology associated with this issue.

#### 2.0 Augmented Inspection Follow-up Objectives (93800)

This inspection was conducted to provide additional NRC review and significance determination of performance issues identified by the NRC Augmented Inspection Team. The specifics reviewed by the follow-up inspection team and previously documented in the AIT inspection report (IR 05000277/278-2007404) were:

- Root cause analysis and extent of condition (Section 3.1)
- Corrective actions for identified security officer concerns (Section 3.2)
- Security officer inattentiveness and extent of condition (Section 3.3)
- Effectiveness of security management and supervisory oversight (Section 3.3)
- Behavioral Observation Program effectiveness (Section 3.3)

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#### 3.0 AIT Follow-up Inspection Team Findings and Observations

#### 3.1 Review of Exelon Root Cause Analysis and Extent of Condition

#### a. <u>Inspection Scope</u>

The team assessed the adequacy of the licensee's initial evaluation of the issue, the thoroughness of the licensee's root cause analyses, and whether the corrective actions specified were sufficient to prevent recurrence (see Section 3.2). This assessment included a review of the licensee's investigation reports (IR), root cause analyses, completed and scheduled corrective actions, procedures, additional related documents, and interviews with key plant personnel.

The team reviewed the methodology and results of Exelon's root cause analysis as documented in the root cause report (IR 673505), "Security program degradation due to inattentiveness." Additionally, the team reviewed the root cause analysis to determine if Exelon had appropriately identified the extent of condition to ensure that the scope and station-wide applicability of any performance issues were appropriately evaluated.

#### b. <u>Findings and Observations</u>

The team found the level of detail of the root cause analysis, including its extent of condition review, to be thorough and acceptable with a self-critical review of the station and its management of security. The team concluded that Exelon appropriately identified the root and contributing causes.

The analyses used several formal systematic processes to identify root and contributing causes. Per LS-AA-125-1001, "Root Cause Analysis Manual," Exelon formed a root cause team consisting of a Mid-Atlantic corporate manager as the lead, supported by an Exelon fleet security manager, a PBAPS human performance manager, site regulatory and licensing personnel, and three external consultants. Time line analysis, cause and effect analysis, and barrier analysis methodologies were utilized. The root cause team appropriately evaluated information including past history and industry experience along with interviews of personnel conducted by Exelon's incident investigation team.

#### 3.2 Review of Corrective Actions

#### a. Inspection Scope

The inspection team reviewed security condition reports, employee concerns program files, station cultural surveys and Exelon's root cause analysis on inattentive security officers to assess whether the PBAPS adequately identified security adverse conditions,

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including missed opportunities to identify unacceptable SO behavior, prior to being informed of the videotapes in September 2007.

The team conducted interviews and reviewed corrective actions associated with previous adverse security conditions to determine whether the actions taken by the station properly identified and evaluated causes of the problems. The team reviewed security condition reports for repetitive problems to determine whether previous corrective actions were effective. The team also reviewed the timeliness of the implementation of corrective actions and the effectiveness of corrective actions to preclude recurrence for significant conditions adverse to quality.

#### b. <u>Findings and Observations</u>

The team concluded that, following September 2007, Exelon has implemented or developed appropriate corrective actions to prevent recurrence that address the principle areas of: 1) Exelon management not providing adequate contractual oversight and leadership; 2) Wackenhut failure to provide adequate management and supervisory oversight; and, 3) security officer inattentiveness and non-compliance with the BOP within the PBAPS security organization.

The team also concluded that Exelon's Corrective Action Program (CAP), prior to September 2007, had not been an effective tool in addressing the adverse conditions and trends which led to SO inattentiveness. The team determined that there were several missed opportunities in the area of security problem identification and resolution prior to the inattentive security officer events being made public in September 2007. The team determined that these opportunities, while not primary causal factors for the inattentive security officer events, indicated an adverse performance trend in the PBAPS security organization. The following were examples of these missed opportunities:

1) the results of two safety culture surveys were not properly evaluated for indications of negative performance trends in the security organization; 2) longstanding environmental issues in the ready room were not properly evaluated and resolved; and,
3) attentiveness aids for security officers were not properly evaluated in the CAP. The team concluded that following September 2007, the corrective actions implemented or planned by Exelon for these CAP shortcomings were appropriate.

Issues involving inadequate corrective actions can be treated as findings in their own right, however, the above stated examples of ineffective corrective actions and CAP shortcomings directly contributed to the inattentive security officers and ineffective BOP performance deficiencies for which a preliminary greater than Green finding is discussed in Section 3.3 of this report. As such, these contributing causes and related performance deficiencies were not treated as separate findings.

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#### 3.3 Review of Security Officer Inattentiveness and Behavior Observation Program

#### a. <u>Inspection Scope</u>

The team conducted interviews and observations of the security organization to determine the overall security program effectiveness and implementation during the time frame of the inattentive security officer events. The team reviewed the Security Plan and evaluated PBAP's ability 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. The team also evaluated critical SO defensive position response times, for a variety of potential threats, to evaluate the potential significance of SO inattentiveness on Security Plan effectiveness.

The team reviewed Exelon's and Wackenhut's actions preceding September 2007, to assess the effectiveness of management and supervisory oversight and their engagement with the station security organization. The team evaluated management and supervisory inadequacies that may have contributed to the inattentiveness and BOP performance issues present in the security organization.

The team reviewed implementing procedures for the BOP, the FFD program, and related training. Interviews were conducted to evaluate the level of understanding of these programs by the security officers and supervisors. The team reviewed records related to self reporting fatigue, work hours, deviations from normal work hours, testing for cause, and Employee Assistance Program utilization.

#### b. Findings and Observations

<u>Introduction:</u> A self-revealing preliminary greater than Green finding was identified for failure to maintain the minimum required number of available responders and the associated failure to maintain an effective behavior observation program.

<u>Description:</u> On four separate occasions (March 12; June 9; June 20; and August 10, 2007), multiple security officers, who were all members of the security response team, were videotaped while they were inattentive in the security ready room. On March 12, 2007, five officers were inattentive at the same time. The ready room is a location within the protected area boundary where officers are staged for response functions, while not conducting security patrols. The officers in the ready room are required to be readily available to respond and effectively implement their role within the Security Plan's protective strategy.

In addition, the Behavior Observation Program (BOP) was determined to be ineffective. Security officers are required to self-report to supervision when they feel fatigued and when they observe others who are fatigued. Although the security officers in the ready room were in close proximity to each other, only one stated that he reported other security officers being inattentive. Supervisors who had information regarding

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inattentive security officers failed to take appropriate action, as required by the BOP. The ineffective implementation of the BOP was directly linked to the events of inattentive officers. An effective BOP could have mitigated the inattentive officer events.

The team's interviews with a number of security force members identified that security officers were discouraged from bringing forward safety concerns to supervision. The security officers stated that they did not raise safety issues, such as these involving inattentive officers, because they were afraid of an adverse consequence. Based upon these interview results, the team concluded that an adverse safety conscious work environment (SCWE) was a contributing cause to the finding.

As discussed in Section 3.2.b above, Exelon and Wackenhut management/supervision failed to properly evaluate attentiveness aids for officers, failed to adequately address environmental issues associated with the ready room, failed to conduct adequate and effective post checks, and failed to ensure effective radio checks were conducted. Some of these issues were raised during previously conducted security officer surveys, but no effective action was taken to address these security-officer-identified concerns. The follow-up team concluded that each of these issues was a contributor to the inattentiveness events.

The team determined that the licensee's failure to maintain the minimum number of response team members and the associated failure to maintain an effective BOP constituted a performance deficiency.

Analysis: This performance deficiency is greater than minor because it is associated with the Physical Protection Cornerstone attributes of Response to Contingency Events and Access Authorization, and affected the cornerstone objective to provide assurance that the licensee's security system and material control and accountability program use a defense-in-depth approach and can protect against (1) the design basis threat of radiological sabotage from external and internal threats, and (2) the theft or loss of radiological materials. Specifically, an inadequate BOP was a direct contributor to the inattentive responders. With multiple inattentive response team members at one time, the minimum numbers of available responders was adversely impacted. This affected the defense-in-depth strategy and increased the potential for degradation in the protective strategy for the site.

The team reviewed IMC 0609, Appendix E, "Baseline Physical Protection Significance Determination Process (PPSDP) for Power Reactors," for security findings. Using the PPSDP, the team determined that the finding was of more than very low security significance (i.e., preliminary greater than Green). The PPSDP takes into consideration the security cornerstone key attributes, various levels of defense-in-depth, and prioritized elements of security programs to determine the significance of findings. The details of the PPSDP analysis contain sensitive security information and will not be made publicly available. The analysis is included as a security sensitive attachment to this report (Attachment C).

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This finding has a cross-cutting aspect in the area of SCWE (S.1.a) because Exelon and Wackenhut supervision did not encourage the free flow of information related to raising safety concerns. Security supervisors who had information regarding inattentive officers did not respond to employee safety concerns in an open, honest, and non-defensive manner. This finding also has a cross-cutting aspect in the area of human performance (H.4.c) because Exelon did not ensure that supervisory and management oversight of security activities supported nuclear safety. The team concluded that, following notification of the inattentiveness issues by the NRC, Exelon's root cause analysis appropriately identified weaknesses in the station's security management and supervisory oversight and SCWE.

<u>Enforcement:</u> The enforcement aspects of the security officer inattentiveness and ineffective BOP issues are still under NRC review. Upon completion of this review, enforcement action will be considered, consistent with the Enforcement Policy. The safety significance of this finding is preliminarily greater than Green. (FIN 05000277/278, 2007405-01, Failure to Maintain Minimum Available Responders and an Effective BOP.)

#### 4.0 Meetings

#### **Exit Meeting Summary**

On December 3, 2007, the inspection team presented the inspection results at a public exit meeting to Mr. Joseph Grimes and other members of the PBAPS staff. Exelon acknowledged the team's findings.

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#### **ATTACHMENT**

#### SUPPLEMENTAL INFORMATION

#### **KEY POINTS OF CONTACT**

#### Licensee Personnel

J. Grimes Site Vice President

P. Cowan Director, Licensing and Regulatory Affairs

D. Deboer Security Manager

S. Craig Security Operations Supervisor

J. Mallon Licensing Manager

#### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### **Opened**

05000277/278-2007405-01

FIN

Failure to maintain minimum number of responders and an effective BOP (Section 3.3)

#### 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

SY-AA-150-1001, Security Training and Qualification Manual, Revision 3

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#### 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

Card Reader Transaction History 3/11-12/07 - 6/09/07 - 6/20-21/07 - 8/10/07

Vital Area Patrol Forms Fox 2/3/5/6/7

Drill/Exercise Reports 2006 (4<sup>th</sup> Qtr) - (2007 1<sup>st</sup> Qtr-3rd Qtr) (All Teams) Weekly Work Hour Averages from March 4, 2007 through October 28, 2007

#### LIST OF ACRONYMS

ADAMS Agency-wide Documents Access and Management System
AIT Augmented Inspection Team
BOP Behavioral Observation Program
CAP Corrective Action Program
CFR Code of Federal Regulations

CR Condition Report FFD Fitness For Duty

IMC Inspection Manual Chapter
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

PPSDP Physical Protection Significance Determination Process

SCWE Safety Conscious Work Environment SDP Significance Determination Process

SO Security Officer

WNS Wackenhut Nuclear Services

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#### **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 factfinding 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.
- September 28, 2007 AIT completes on-site portion of inspection.
- October 4, 2007 NRC issues letter to Exelon requesting the actions taken or planned to assure the following: (1) security officers remain attentive at all times while on duty in all required locations at the facility; (2) security officers are both willing and able to recognize instances of inattentiveness and promptly take all appropriate actions; (3) supervisors and personnel take the necessary actions to encourage officers and all plant staff to bring forward any concerns, including indications of inattentiveness, and promptly address such concerns when raised; and (4) inattentiveness does not extend to other departments or contractors at Peach Bottom. The NRC also requested that Exelon address why this issue was apparently not self-identified.

- October 4, 2007 Letter from Exelon to NRC Regional Administrator describing preliminary results of investigation, additional interim actions taken, and actions planned for the near term.
- October 9, 2007 NRC conducted a public exit for the AIT inspection. A public question and answer session was held following the exit meeting.
- October 19, 2007 NRC issued Confirmatory Action Letter (CAL ML072920283) to ensure continued security plan effectiveness.
- October 24, 2007 NRC instituted a weekly status call with Exelon concerning CAL actions and the status of transitioning from a contract security force to an Exelon force.
- November 1, 2007 Peach Bottom transitioned to an Exelon security force. NRC enhanced monitoring included observation of the transition, attendance at shift turnover meetings, and interviews with selected officers.
- November 2, 2007 Exelon responded to NRC October 4, 2007, inattentiveness letter on the docket (ML073180128).
- November 5, 2007 AIT inspection report issued (ML073090061).
- November 5 9, 2007 NRC AIT follow-up inspection conducted to assess Exelon's root cause analysis, corrective actions, and significance of performance deficiencies.
- November 28, 2007 NRC's Executive Director of Operations approved a Deviation Memo which provided additional inspection and oversight of security activities at Peach Bottom (ML 073320344).
- December 3, 2007 NRC conducted a public exit for the AIT follow-up inspection with one potentially greater than green finding and two cross-cutting aspects. A public question and answer session was held following the exit meeting.

#### **September 27, 2007**

## SECURITY ADVISORY FOR POWER REACTORS, CATEGORY I FUEL CYCLE FACILITIES, CATEGORY III FUEL CYCLE FACILITIES, INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS, CONVERSION FACILITIES, AND GASEOUS DIFFUSION PLANTS

#### SA-07-06

#### SUBJECT: SECURITY OFFICERS INATTENTIVE TO DUTY

This advisory is being provided to reinforce with facility managers and other security personnel responsible for protecting U.S. Nuclear Regulatory Commission (NRC)-licensed facilities and radioactive materials their responsibilities when implementing security duties in accordance with 10 CFR Part 73, NRC Orders and the licensees' NRC-approved security plans.

The general performance objectives and requirements outlined in 10 CFR Part 73 state, in part, that the licensee shall establish and maintain an onsite physical protection system and security organization which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety.

In accordance with 10 CFR Part 73, licensees must demonstrate the ability of their physical security personnel to perform assigned duties and responsibilities in carrying out the provisions of their Security Plan and NRC requirements. Each security officer, watchman or armed response individual on duty shall be capable of maintaining continuous communication with an individual in each continuously-manned alarm station, who shall be capable of calling for assistance from other security officers, watchmen, and armed response personnel and from local law enforcement authorities. Detection of penetration or attempted penetration of the protected area (PA) or the isolation zone adjacent to the PA barrier is essential to assure that adequate response by the security organization can be initiated. The licensee shall establish, maintain, and follow an NRC-approved safeguards contingency plan for responding to threats, thefts, and radiological sabotage related to the nuclear facilities.

The NRC issued Security Orders to licensees after the terrorist attacks of September 11, 2001. One of the many objectives of the Orders was to enhance the minimum number of armed response personnel to be immediately available at the facility for responding to threats, thefts, and radiological sabotage required by 10 CFR 73.55(h)(3). The NRC also determined, by

Order, that it was reasonable and prudent to establish requirements to limit security force personnel work hours as a means of providing reasonable assurance that the effects of fatigue will not adversely impact the readiness of nuclear security officers in the performance of their duties and required licensee behavior observation programs to recognize behaviors adverse to the safe operation and security of the facility.

#### **Discussion**

Licensees are required to demonstrate the ability of physical security personnel to perform their assigned duties and responsibilities in carrying out the provisions of the security plans, including contingency response plans, and maintain continuous communication with each continuously-manned alarm station. This requirement includes all on-duty security officers in locations such as bullet resistant enclosures (BREs), ready rooms, alarm stations and other posts and staging areas.

All armed responders and armed security officers identified in the licensee's contingency plan to successfully implement the site's protective strategy are required to be immediately available at all times. This requirement includes security officers identified in the site's protective strategy and performing compensatory measures who are located in BREs, ready rooms, alarm stations and other posts and staging areas.

The licensee's behavior observation program (BOP) is the primary means for determining continued trustworthiness and reliability of licensee personnel with unescorted access to protected and vital areas. The BOP must include training in techniques related to recognition of behaviors adverse to the safe operation and security of the facility, with an expectation of promptly addressing those behaviors, e.g., inattentive on-duty security officers.

In the past, the NRC has issued notices of violation to its licensees for security officers who are found to be inattentive while on duty. These violations include examples identified by the licensees, by NRC inspectors and through allegations brought to the NRC. The inattentive individuals failed to implement their assigned security duties in accordance with 10 CFR Part 73, NRC Orders and the licensees' NRC-approved security plans.

Some examples of related NRC violations include:

- Inattentive (sleeping) security officer while posted as a compensatory measure for degraded security equipment and barriers.
- Inattentive (sleeping) security officer while posted in a ready room as an armed responder.
- Inattentive (computer/internet use) security officer while posted as a compensatory measure for degraded security equipment and barriers.
- Inattentive (sleeping) security officer while posted in a BRE located at the Owner Controlled Area Checkpoint.

This advisory emphasizes that licensees should have effective processes and procedures in place to ensure individuals performing specific security duties in accordance with 10 CFR Part 73, NRC Orders and the licensees' NRC-approved security plans are attentive to those duties.

**Backfit Analysis Statement:** This Security Advisory does not amend or impose new requirements or constitute a new regulatory staff position interpreting Commission rules and is, therefore, not a backfit under 10 CFR 50.109. Consequently, the staff did not perform a backfit analysis.

**Congressional Review Act:** The NRC has determined that this advisory does not contain a new staff position and, therefore, is not a "rule" under the Congressional Review Act (5 U.S.C. 801-808).

**Paperwork Reduction Act Statement:** This security advisory does not contain information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

Approved by /RA/

Roy P. Zimmerman, Director Office of Nuclear Security and Incident Response

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OMB Control No.: 3150-0012

# UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS OFFICE OF NUCLEAR REACTOR REGULATION WASHINGTON, DC 20555-0001

December 12, 2007

NRC BULLETIN 2007-01: SECURITY OFFICER ATTENTIVENESS

#### **ADDRESSEES**

All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operation and have certified that fuel has been removed from the reactor vessel, and Category I fuel facilities.

The contents of this bulletin are for information to Category III fuel facilities, independent spent fuel storage installations, conversion facilities and gaseous diffusion plants.

#### **PURPOSE**

The U.S. Nuclear Regulatory Commission (NRC) is issuing this bulletin to achieve the following three objectives:

- The agency is notifying addressees about the NRC staff's need for information
  associated with licensee security program administrative and management controls as a
  result of security personnel inattentiveness, especially involving complicity, and related
  concerns with the behavior observation program (BOP). The information is needed to
  determine if further regulatory action is warranted, if the necessary inspection program
  needs to be enhanced, or if additional assessment of security program implementation is
  needed.
- 2. The NRC seeks to obtain information on licensee administrative and managerial controls to deter and address inattentiveness and complicity among licensee security personnel including contractors and subcontractors.
- 3. This bulletin requires that addressees provide a written response to the NRC in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) or 10 CFR 70.22(d).

#### **BACKGROUND**

Following the events of September 11, 2001, security requirements at NRC facilities were enhanced through a series of orders and subsequent security plan revisions. These actions improved the general performance objective of 10 CFR 73.55(a) and 10 CFR 73.20(a) to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety. The actions of the NRC subsequent to the events of September 11, 2001, also enhanced the behavioral observation techniques for detecting degradation in performance, impairment, or changes in employee behavior under 10 CFR 26.22(a). As part of

#### ML073400150

performance objectives in 10 CFR 73.55(a) and 10 CFR 73.20(a) NRC expects that licensee security programs will include the appropriate managerial and administrative controls needed to ensure that security force members can effectively implement the site protective strategy. In addition, the NRC requires that licensees maintain an environment in which security personnel and others can raise concerns related to the effectiveness of the security program without fear of retaliation.

Licensee-identified occurrences and NRC inspection findings at several sites have raised questions about the effectiveness of security program managerial and administrative controls. Examples include: (1) security personnel circumventing management controls to facilitate inattentiveness while assigned to positions requiring timely armed response to actual security threats; (2) ineffective management resolution of security personnel concerns regarding individual performance issues; and, (3) failure of individuals included in BOPs either to identify or effectively respond to inappropriate conduct (e.g. inattentiveness, complicity, equipment tampering, falsification of records and exam results). In isolation, these incidents did not result in a significant degradation of security performance at the affected sites and the staff recognizes that most sites have not had occurrences of such events. However, when assessed holistically across the Nation, they indicate a negative trend regarding the priority placed on the effective implementation, management and administrative controls for site security.

On September 27, 2007, the NRC issued SA-07-06 "Security Officers Inattentive to Duty" to emphasize that licensees should have effective processes and procedures in place to ensure that individuals performing specific security duties in accordance with 10 CFR Part 73, "Physical Protection of Plants and Materials," NRC Orders, and the licensees' NRC-approved security plans are attentive to those duties.

#### **DISCUSSION**

The NRC is concerned with the licensees' ability to deter, identify, and correct non-compliances with security requirements, such as security personnel inattentiveness while on duty and the facilitation by other security personnel of inattentive behavior on the part of fellow security personnel on duty. Additionally, a licensee's BOP is the primary means for determining the continued trustworthiness and reliability of personnel granted unescorted access to site protected and vital areas. As required, BOP training must include techniques related to the recognition of behaviors adverse to the safe operation and security of the facility, and the reporting of these behaviors to site management. Licensees are required to address identified issues promptly to ensure continued compliance with regulatory requirements. Furthermore, the licensee is responsible for assessing security force personnel readiness, including the potential for complacency. Consequently, the NRC is requesting licensees to provide information regarding the security program administrative and managerial controls established to prevent, identify, and correct security personnel inattentiveness and complicity and failures of individuals to implement the BOP among licensee security personnel, including security contractors and subcontractors. Licensees are required to address identified issues promptly to ensure continued compliance with regulatory requirements.

#### APPLICABLE REGULATORY REQUIREMENTS

Licensees are responsible for implementing the applicable security requirements in 10 CFR Part 73, NRC Orders, and the NRC-approved site security plans.

In accordance with 10 CFR 73.55, and 10 CFR 73.20 licensees must demonstrate the ability of their physical security personnel to perform assigned duties and responsibilities in carrying out the provisions of their security plans and NRC requirements. In addition, each security officer, watchman or armed response individual on duty must be capable of maintaining continuous communication with an individual in each continuously manned alarm station. The alarm station shall be capable of calling for assistance from other security personnel, watchmen, and armed response personnel and from local law enforcement authorities. Detection of penetration or attempted penetration of the protected area or the isolation zone adjacent to the protected area barrier is essential to ensure that the security organization can initiate an adequate and timely response. In addition, licensees must establish and maintain an access authorization program in accordance with 10 CFR 73.56(b) granting individuals unescorted access to protected and vital areas with the objective of providing high assurance that individuals granted unescorted access are trustworthy and reliable and do not constitute an unreasonable risk to the public health and safety. Furthermore, 10 CFR 73.56(b)(2)(iii) and 10 CFR 26.22(a)(4) require licensees to implement a BOP designed to detect individual behavioral changes that if left unattended, could lead to acts detrimental to the public health and safety. Order EA-02-261, "Compensatory Measures for Access Authorization" expands this requirement beyond supervisors to all personnel with unescorted access which includes BOP training and an expectation of all personnel to promptly report noticeable changes in behavior. Discrimination by a licensee, an applicant, or a contractor or subcontractor against an employee for reporting violations is prohibited, as delineated in 10 CFR 50.7 and 10 CFR 70.7 "Employee Protection."

Section C (1.9) of EA-02-261 and 10 CFR 73.56(g) require each licensee to audit its access authorization program including program effectiveness. The audit results are reported to licensee management and must include any findings and corrective actions, as specified in Nuclear Energy Institute (NEI) 03-01, "Nuclear Power Plant Access Authorization Program," which licensees are committed to in their security plans.

The NRC issued security Orders<sup>1</sup> to licensees following the terrorist attacks of September 11, 2001. One of the requirements of these orders was to increase the minimum number of armed response personnel immediately available at the facility for responding to threats, thefts, and radiological sabotage, as required by 10 CFR 73.55(h)(3) and 10 CFR 73.45, "Performance Capabilities for Fixed Site Physical Protection Systems." The NRC also established, (by Orders) limits on security force personnel work hours as a means of providing assurance that the effects of fatigue would not adversely impact the readiness of nuclear security personnel in the performance of their duties. The NRC also required licensees to expand their BOPs to all site employees so that they could recognize behaviors adverse to the safe operation and security of their facilities. NRC-approved security plans establish specific qualifications for employment in security, including work hour controls, access authorization, fitness-for-duty and insider mitigation programs.

<sup>&</sup>lt;sup>1</sup> EA-02-026, "Interim Compensatory Measures (ICM) Order".

EA-02-261, " Compensatory Measures for Access Authorization," and associated guidance documents.

EA-03-038, "Requirements Related to Fitness-for-Duty Enhancements Applicable To Nuclear Facility Security Force Personnel".

#### **REQUESTED ACTION**

Within 60 days of the date of this bulletin, the NRC requests licensees to provide information regarding administrative programs and managerial programs and controls established to prevent, identify and correct security personnel inattentiveness and, especially complicity, and failures to implement the BOP by individuals among licensee security personnel including security contractors and subcontractors. In particular, the NRC requests a response to the questions below, including specific examples for each. Licensees must appropriately mark any information submitted to the NRC that is proprietary, sensitive, safeguards, classified information.

In responding to each of the following five questions, licensees should provide information that addresses measures that are currently in place noting changes made after the review and evaluation of SA-07-06, and any additional planned actions with expected completion dates.

How do you identify, report and document human performance issues involving
inattentiveness, especially complicity among licensee security personnel including
security contractors and subcontractors? Include a description of actions staff and
supervisors take to prevent, identify and correct instances of security personnel
inattentiveness, especially complicity, and address how employee concerns related to
security personnel inattentiveness and complicity are addressed.

Examples of the types of information to include when providing your response to Question (1) are:

- a. Describe the means used to maintain the attentiveness and vigilance of your security personnel such as through the effective use of job/post rotations: communication checks (audio/visual) audio stimuli; (e.g. radio), and other attentiveness stimuli for security posts where appropriate, based on the nature of duties.
- b. Describe how you ensure that environmental conditions such as temperature, humidity, lighting, and noise levels do not degrade attentiveness or vigilance.
- c. Describe how you monitor the attentiveness and vigilance of security personnel, such as through behavioral observation by supervisors/managers, behavioral observation by peers, and video surveillance.

These examples are not meant to limit your response if you use other methods to address the issues described in the first paragraph.

- 2. How do you ensure that all employees and contractors report security concerns and any perceived security conditions that reduce the safety or security of a licensee facility? How do you ensure that staff is aware that there is no retaliation for self-reporting of inattentiveness or complicity or for reporting others?
- 3. How do you ensure that managers and supervisors provide oversight of BOP adherence to ensure there is no complicity to circumvent the program or failure to report wrong doing or careless disregard of the regulations?
- 4. What are the results of any self-assessments performed within the last 2 years

associated with the items above? Specifically, what do you do to assess the effectiveness of your employee access authorization program?

- a. Provide a summary of each assessment that details the objective and the identified results of each assessment.
- b. Summarize any program changes and enhancements, follow-up activities and other actions you have taken as a result of each self assessment.
- 5. How do you assess the effectiveness of your oversight of contractors and subcontractors?

#### REQUIRED RESPONSE

Licensees should address the required written response to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, 11555 Rockville Pike, Rockville, MD 20852, pursuant to the provisions of 10 CFR 50.54(f) and 10 CFR 70.22(d). In addition, submit a copy of the response to the appropriate Regional Administrator. Before submitting responses to the NRC, licensees must evaluate them for proprietary, sensitive, safeguards, or classified information and mark such information appropriately. The addressees have two options for submitting responses:

- 1. Addressees may choose to submit written responses providing the information requested above within the requested time periods.
- 2. Addressees, who cannot meet the requested completion date must submit written responses within 15 days of the date of this bulletin that address any alternative course of action proposed, including the basis for the acceptability of the proposed alternate course of action.

#### **REASONS FOR INFORMATION REQUEST**

This information request is necessary to determine the status of licensee programs regarding the adequate and consistent implementation of their security programs in light of recent security-based incidents at certain sites. The staff will use the information received to inform the Commission and to determine if further regulatory action is warranted. The staff will also review the information to determine if inspection programs need to be enhanced or if additional assessment of licensee security program implementation is needed.

#### **RELATED DOCUMENTATION**

- Regulatory Issue Summary 2004-15, "Emergency Preparedness Issues: Post 9/11," dated October 18, 2004
- Information Notice No. 87-21 "Shutdown Order Issued Because Licensed Operators Asleep While on Duty," May 11, 1987
- Information Notice 2006-09 "Performance of NRC-Licensed Individuals While on Duty with Respect to Control Room Attentiveness," April 11, 2006

 NRC Policy Statement on "Conduct of Nuclear Power Plant Operations" (54FR3424, January, 24, 1989)

#### **BACKFIT DISCUSSION**

Under the provisions of Section 182a of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f), or 10 CFR 70.22(d), this bulletin transmits an information request for the purpose of verifying compliance with existing applicable regulatory requirements (see the Applicable Regulatory Requirements section of this bulletin). No backfit is either intended or approved by the issuance of this bulletin, and the staff has not performed a backfit analysis.

#### FEDERAL REGISTER NOTIFICATION

The NRC did not publish a notice of opportunity for public comment in the *Federal Register* because the agency is requesting information from affected licensees on an expedited basis to assess the adequacy and consistency of security programs.

#### **CONGRESSIONAL REVIEW ACT**

The NRC determined that this bulletin is not a rule under the Congressional Review Act.

#### PAPERWORK REDUCTION ACT STATEMENT

This bulletin contains information collections that are covered by the Office of Management and Budget clearance number 3150-0012, which expires October 31, 2009. The burden to the public for these information collections is estimated to average 200 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of these information collections, including suggestions for reducing the burden, to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail to <a href="INFOCOLLECTS@NRC.GOV">INFOCOLLECTS@NRC.GOV</a>; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0012), Office of Management and Budget (OMB), Washington, DC 20503.

#### **PUBLIC PROTECTION NOTIFICATION**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

#### CONTACT

Please direct any questions about this matter to the technical contact or the lead project managers listed below.

/RA/ /RA/

Robert C. Pierson, Director Division of Fuel Cycle Safety and Safeguards Office of Nuclear Material Safety and Safeguards Michael J. Case, Director Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

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Note: NRC Generic Communications may be found on the NRC public Web site, <a href="http://www.nrc.gov">http://www.nrc.gov</a>, under Electronic Reading Room/Document Collections

#### February 11, 2008

MEMORANDUM TO: Bruce S. Mallett

Deputy Executive Director for Reactor

and Preparedness Programs

Office of the Executive Director for Operations

Martin J. Virgilio

Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance Programs

Office of the Executive Director for Operations

James E. Dyer, Director

Office of Nuclear Reactor Regulation

Cynthia A. Carpenter, Director

Office of Enforcement

FROM: Luis A. Reyes /RA/

**Executive Director for Operations** 

SUBJECT: PEACH BOTTOM LESSONS LEARNED

In December 2007, Bruce S. Mallett, Deputy Executive Director for Reactor and Emergency Preparedness Programs, tasked a team to evaluate NRC actions associated with the review of allegations and inspection activities related to inattentive security officers at the Peach Bottom nuclear power plant in 2007 and determine lessons learned. This lessons learned review team, led by Marc L. Dapas, Deputy Regional Administrator, Region I, focused on answering three questions: (1) whether the NRC's allegation process was followed; (2) whether the process should be changed to more effectively evaluate and respond to allegations; and (3) whether the guidance for inspection of allegations or for baseline inspections should be changed to more effectively detect inattentive security officers at nuclear facilities. The team completed its review in January and provided a report to Dr. Mallett on February 6, 2008.

I have determined that the review was thorough, addressed the appropriate questions, and included a broad spectrum of input from individuals in Region I, the Office of Enforcement, other regional offices, and the Office of the Executive Director for Operations. The team made recommendations for improvement in the NRC's allegation and inspection programs, which would apply to fuel cycle and other large materials facilities with required security officers, as well as, the nuclear reactor facilities. The team's report wrote these recommendations in the form of areas for further evaluation.

While I agree with the recommendations and have grouped them into a list of actions to address the lessons learned findings (below), we should not loose sight that this is only one of several activities underway regarding Peach Bottom. Both the Office of the Inspector General and the Office of Investigation are moving forward with investigations of this issue, and I may modify these tasks based on the outcome of the investigations.

#### Forwarding Allegations and Evaluating Licensee Responses

- Expand the guidance for obtaining additional information from the alleger to adequately scope the problem.
- Modify the allegation review board procedure to document how allegation follow up history, allegation trends, inspection findings, etc. are evaluated in the decision to forward an allegation for licensee follow up.
- Provide direction to include specific, descriptive information and scope of expected review when forwarding an allegation to a licensee.
- Modify the allegation process to include a more formal, structured review of licensee responses to forwarded allegations, including the extent of NRC, independent follow up.

#### Communications/Interactions with Concerned Individuals

- Change the guidance to require contact with the concerned individual to obtain information to scope the complete concern in all instances.
- Modify the procedure for documenting closure of allegations to include sections on how the licensee followed up on forwarded concerns, the NRC evaluation of the adequacy of the licensee follow up, and how the NRC independently verified the licensee's follow up.

#### NRC Inspection Process for Detecting Inattentiveness

- Modify the inspection procedures to include specific guidance on techniques for maximizing methods to detect inattentiveness. Factor licensee responses to Bulletin 2007-01 into this guidance.
- Expand the inspection procedures to include a review of all open allegations or past allegation trends pertaining to areas to be inspected during preparation for baseline inspections at a facility.
- Modify the allegation review process to include a structured method to inform NRC resident inspectors of all allegation concerns and allegation board direction to follow up for their assigned site.

By this memorandum, I am establishing a senior executive review panel to decide how best to act upon the recommendations and the list of actions in this memorandum (e.g., who should be tasked to implement actions and a schedule to address each recommendation). The panel should also determine if the list of recommendations and actions should be expanded. The panel members should be: Bruce S. Mallett (Chair), Martin J. Virgilio, James E. Dyer, and Cynthia A. Carpenter. The panel should convene and make this determination and provide a response to me within two weeks of the date of this memorandum.

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In parallel, I have directed Bruce S. Mallett to forward the review team's findings, recommendations, and a copy of this memorandum to the Agency's Lessons Learned Oversight Board for review.

A copy of the team's report is attached for your use. If you have any question or desire to discuss, please contact me.

#### Enclosure:

Review Team Findings with Respect to Inattentive Security Officers at Peach Bottom





Review Team Findings with Respect to Inattentive Security Officers at Peach Bottom





#### **BASIS AND SCOPE**

In December 2007, the U.S. NRC's Deputy Executive Director for Reactor and Preparedness Programs tasked an independent team to review and evaluate activities associated with inattentive security officers identified at the Peach Bottom Nuclear Station in September 2007. The team was overseen by the Region I Deputy Regional Administrator, and included input from staff in the Office of Enforcement and the other three regional offices.

This report reflects the recommendations of the review team, some of which the NRC has already begun to address. The recommendations in this report represent the first of three phases of activities NRC plans to take regarding this initiative, which are:

- Consider and take actions on certain review team findings in this report
- Establish a Senior Executive Review Panel to determine the best method for implementing these recommendations
- Refer the report to the agency's Lessons Learned Oversight Board for its consideration as a formal lessons learned item.

The Inspector General is also planning a review of this issue, and its findings will be incorporated into overall agency actions.



#### February 6, 2008

MEMORANDUM TO: Bruce S. Mallett

Deputy Executive Director of Reactor

and Preparedness Programs

FROM: Marc L. Dapas /RA/

Deputy Regional Administrator

Region I

THRU: Samuel J. Collins /RA/

Regional Administrator

Region I

SUBJECT: PEACH BOTTOM REVIEW TEAM FINDINGS

The attached report documents the results of the Peach Bottom lessons-learned review conducted by the NRC staff to evaluate allegation and inspection program activities associated with the condition of inattentive security officers identified at the Peach Bottom Station in September 2007. As noted in the Executive Summary of the attached report, this lessons-learned initiative involved an assessment of whether the allegation process, as currently defined, was appropriately followed; whether additional process flexibilities could have been exercised; if inspection procedures for the security function provide sufficient guidance for identifying conditions of inattentiveness among the security force; and if changes to the allegation and inspection program, policies, or processes should be further considered. A summary of the overall conclusions by the review team relative to these specific focus areas is provided in the Executive Summary to the attached report.

The team's observations and findings were discussed with the other regional offices as well as the Office of Enforcement. As noted in the attached lessons-learned report, each of the regional offices have implemented selected allegation process enhancements within the current flexibilities of the allegation program. This has been a result of the collaborative information sharing that has occurred across the regional offices as this lessons-learned initiative proceeded. The report also includes proposed next steps for consideration by agency management in dispositioning the review team's recommendations.

Please contact me if you have any questions regarding this lessons-learned initiative.



## REVIEW TEAM FINDINGS WITH RESPECT TO INATTENTIVE SECURITY OFFICERS AT PEACH BOTTOM

#### I. Executive Summary

In March 2007, the NRC received an allegation from a former security manager for Wackenhut (the company contracted by Exelon to provide security services at the Peach Bottom Atomic Power Station) expressing concerns with aspects of the security program at the Peach Bottom Station. The concerns were that security officers have been sleeping on duty due to fatigue from working excessive overtime; security officers are fearful of retaliation if they raise concerns; and Exelon managers are aware of instances of inattentiveness, but have not taken proper actions to address it.

Consistent with agency policy, the NRC informed Exelon (the licensee for the Peach Bottom Station) of these concerns because the licensee has primary responsibility for ensuring safe and secure operation of its facilities and can promptly address issues through ready access to site personnel and documentation. The NRC also requested the licensee to investigate the allegation concerns, take appropriate actions based on the results of the licensee's investigation, and provide the NRC with a written response for the NRC's review. In its response to the NRC, Exelon concluded that it was not able to substantiate the concerns. The NRC reviewed the licensee's response and at the time considered it adequate to resolve the concerns.

In September 2007, the NRC was presented with video evidence by a WCBS-TV reporter that showed a number of security officers at the Peach Bottom Station in an inattentive state in the ready room.<sup>1</sup> None of the inattentive officers were manning specific security posts at the time; however, they were required to be attentive in order to respond if needed. After receiving

In September 2007, the NRC was presented with video evidence by a WCBS-TV reporter that showed a number of security officers at the Peach Bottom Station in an inattentive state in the ready room.<sup>1</sup> None of the inattentive officers were manning specific security posts at the time; however, they were required to be attentive in order to respond if needed. After receiving this information, the NRC conducted a range of inspection and investigative activities to determine the extent of this condition and ensure that Exelon and its security contractor, Wackenhut, had taken prompt and effective corrective actions to address this unacceptable performance.

this information, the NRC conducted a range of inspection and investigative activities to determine the extent of this condition and ensure that Exelon and its security contractor, Wackenhut, had taken prompt and effective corrective actions to address this unacceptable performance.

Given that the NRC did not identify this unacceptable licensee/contractor performance issue earlier via its allegation process or inspection program, a review team conducted a comprehensive lessons-learned review to determine if the allegation process, as currently defined, was appropriately followed; whether additional process flexibilities could have been exercised; if inspection procedures for the security func-

<sup>&</sup>lt;sup>1</sup>The ready room is a place where security officers not on patrol, or manning an observation post, are allowed to read, study, eat, or relax, but must remain ready to respond if called upon.

This lessons-learned initiative involved a review of the NRC allegation process, specific instructions for implementing the allegation process, a review of security inspection procedures, and discussions with selected staff in NRC Region I, the other three NRC regional offices, and the Office of Enforcement (the NRC program office with oversight responsibility for implementation of the agency's allegation program).

tion provide sufficient guidance for identifying conditions of inattentiveness among the security force; and if changes to the allegation and inspection program, policies, or processes should be further considered.

This lessons-learned initiative involved a review of the NRC allegation process, specific instructions for implementing the allegation process, a review of security inspection proce-

dures, and discussions with selected staff in NRC Region I, the other three NRC regional offices, and the Office of Enforcement (the NRC program office with oversight responsibility for implementation of the agency's allegation program). The effort was led by a senior technical employee with 23 years of NRC experience, who was assisted by a recently hired engineer with extensive experience in the Navy's nuclear program. Neither individual was involved in any aspect of the receipt and processing of the subject allegations or the security inspection program. In addition, a senior agency manager with 26 years experience in the field of nuclear power, including 19 years with the NRC, provided oversight of this lessons-learned initiative.

This report contains detailed information regarding how the NRC addressed the allegation concerns provided to the NRC in March, including the reasons why the NRC forwarded these concerns to Exelon for its evaluation, and the basis for the NRC's conclusion that the subject allegation could

In summary, the lessons-learned review team concluded that the NRC followed its allegation process in response to two of the three concerns communicated to the NRC in March 2007, specifically that: (1) security officers at the Peach Bottom Station have been sleeping on duty while in the bullet resistant enclosures, and in other (unspecified) areas, due to fatigue from working excessive overtime and from not being able to adjust to 12 hour shift schedules; and, (2) security officers are fearful of retaliation if they raise concerns. With respect to the third concern that licensee management was aware of instances of inattentiveness, but did not take proper actions to address them, the review team concluded that the staff should have conducted a more thorough review of the licensee's response in determining if the licensee's evaluation was adequate to resolve the concern.

not be substantiated. The report also describes the NRC's response to the WCBS-TV reporter's communication that he possessed video clips of inattentive security officers.

In summary, the lessons-learned review team concluded that the NRC followed its allegation process in response to two of the three concerns communicated to the NRC in March 2007, specifically that: (1) security officers at the Peach Bottom Station have been sleeping on duty while in the bullet resistant enclosures, and in other (unspecified) areas, due to fatigue from working excessive overtime and from not being able to adjust to 12 hour shift schedules; and, (2) security officers are fearful of retaliation if they raise concerns. With respect to the third concern that licensee management was aware of instances of inattentiveness, but did not take proper actions to address them, the review

team concluded that the staff should have conducted a more thorough review of the licensee's response in determining if the licensee's evaluation was adequate to resolve the concern. In addition, the review team identified some allegation process flexibilities which could have been exercised that may have resulted in additional information as part of the NRC's efforts to validate the concerns expressed in the March allegation. However, it is not apparent that obtaining more information from the licensee

with regard to its response to the allegation concern, or exercising these process flexibilities would have resulted in a different overall conclusion regarding the validity of the March 2007 allegation, or have resulted in the NRC identifying the unacceptable security officer behaviors

The review team also concluded that the NRC took significant and timely regulatory actions to address evidence of inattentive security officers provided to the NRC in September 2007.

before the events of September, 2007. The review team also concluded that the NRC took significant and timely regulatory actions to address evidence of inattentive security officers provided to the NRC in September 2007.

With respect to the NRC's program for inspecting security at nuclear power plants, the review team noted that none of the inspection procedures provide specific direction or guidance with respect to

identifying potential security officer inattentiveness; however, the procedures do require inspectors to monitor security officer performance in all plant areas, both during day and night shifts, and to conduct interviews with security force personnel at their duty stations. These procedures also require reviews of the behavioral observation and fitness for duty programs, as well as security force work hours, all of which are regulatory measures designed to ensure

The review team noted that no inattentiveness issues were identified during an NRC inspection of the licensee's performance in the security area that was conducted in April/May 2007. However, the scope of this inspection was not modified based on the information provided to the NRC in the March allegation.

security officer attentiveness. The review team noted that no inattentiveness issues were identified during an NRC inspection of the licensee's performance in the security area that was conducted in April/May 2007. However, the scope of this inspection was not modified based on the information provided to the NRC in the March allegation. Due to the unique layout of security facilities, such as bullet

resistant enclosures and ready rooms, it may be necessary to employ means other than typical NRC inspection techniques, to detect security officer inattentiveness.

The review team developed several recommendations with respect to the allegation program procedures, practices, and policies to be considered by the agency to maximize the information reasonably available to the NRC in its review of allegations. The team also developed recommendations specific to the inspection program to enhance the NRC's ability to identify conditions of in-

The review team developed several recommendations with respect to the allegation program procedures, practices, and policies to be considered by the agency to maximize the information reasonably available to the NRC in its review of allegations. The team also developed recommendations specific to the inspection program to enhance the NRC's ability to identify conditions of inattentiveness via its inspection process/practices.

attentiveness via its inspection process/practices. These recommendations, as well as the associated observations resulting from the lessons-learned review, are identified in Attachment 1.

A graphical depiction of the allegation process is provided as Attachment 2 in this report to supplement the various references to allegation process steps that were exercised.

#### II. Purpose and Scope

This lessons-learned review was initiated after the NRC determined, in follow-up to allegations received in September 2007, that several security officers had been inattentive at the Peach Bottom Station. The review was conducted to determine areas for agency improvement since the condition of inattentive security officers was not identified by the NRC as a result of an allegation received in March 2007, nor during NRC inspections at the Peach Bottom Station. Details of these allegations and NRC Region I's response to the allegations are described in this report. Specific NRC inspection activities and associated results are also described in this report.

This lessons-learned review included an in-depth evaluation of several allegation files, agency procedures governing the handling of allegations, and procedures pertaining to the NRC baseline security inspection program, as well as discussions with NRC Region I staff who processed the allegations and conducted security inspections at the Peach Bottom Station.<sup>2</sup> The lessons-learned review also involved an evaluation of information provided by the other three NRC regional offices regarding their respective processes for handling allegations, and an assessment of the results of sampling reviews conducted by the other regional offices specific to the disposition of allegations in the security area. In addition, the lessons-learned report includes the results of an independent review by the NRC Agency Allegation Advisor of the staff's handling of the March allegation. This independent assessment was conducted at the request of NRC Region I to assist in determining any lessons to be learned from an allegation process implementation perspective.

### III. NRC Region I's Handling of the March 2007 Allegation (2007-0040) Regarding Inattentive Security Officers

In late March 2007, the NRC resident inspectors assigned to the Peach Bottom Atomic Power Station received a letter from a former security manager for Wackenhut (the company contracted by Exelon to provide security services at the Peach Bottom Station) expressing concerns regarding the security program. The letter, along with a completed allegation receipt form, was promptly forwarded to the NRC Region I Office. The alleger, hereafter referred to as the concerned individual (CI), indicated that he was providing the NRC with the information in his letter on behalf of selected security officers working at the Peach Bottom Station. The information in the subject letter pertains to three distinct concerns:

- security officers at the Peach Bottom Station have been sleeping on duty while in the bullet resistant enclosures (BREs), and in other (unspecified) areas, due to fatigue from working excessive overtime and from not being able to adjust to 12 hour shift schedules;
- security officers are fearful of retaliation if they raise concerns; and,
- Exelon management is aware that security officers are sleeping on duty, but is not taking proper actions to address it.

<sup>&</sup>lt;sup>2</sup> The procedures reviewed were: NRC Management Directive 8.8, "Management of Allegations"; Regional Instruction (RI) 1210.1, Rev. 13, "Handling of Allegations"; and RI 1230.1, Rev. 4, "Handling of Complaints of Improper Actions by NRC Staff". In addition, three (3) allegation files related to Peach Bottom were reviewed.

Although the letter from the CI did not contain any specific objection to the NRC forwarding the concerns to the licensee, the CI requested that the NRC: (1) provide complete anonymity regarding the letter; (2) not inform the licensee or the security contractor of the letter's existence; (3) not tell the licensee or the security contractor that any security employee had voiced concerns captured in the letter; and (4) not contact the CI in any manner. Consistent with NRC practice to avoid alienating CIs, which could make them reluctant to bring forward other concerns to the NRC in the future, NRC Region I honored the CI's requests. Specifically, while the NRC paraphrased the CI's concerns and provided them to Exelon, the NRC did not reveal the CI's name, the licensee was not informed of the existence of the letter, the licensee was not informed of the source of the allegation, and the CI was not contacted by the NRC.<sup>3</sup>

In response to the CI's concerns, NRC Region I conducted an adhoc Allegation Review Board (ARB) on March 29, 2007, as well as a routine ARB on April 11, 2007, to determine appropriate follow-up actions to address the subject allegation. Based on the ARB discussions, NRC Region I decided to forward all three of the CI's concerns to the licensee for appropriate follow-up and evaluation, and then review the licensee's written response to determine if the licensee adequately evaluated the concerns. Before making that decision, staff in the Division of Reactor Projects (DRP) conducted a historical review of existing allegation records/files involving security-related issues at the Peach Bottom Station. This included Allegation File 2005-0180 which pertained to a 2005 allegation involving security officers allegedly sleeping in BREs, an allegation that was investigated by the NRC Office of Investigations (OI) and was not substantiated.

NRC Region I determined that there was no immediate safety significance to the assertions in the CI's letter based on the results of the DRP staff review of previously identified security-related issues at the Peach Bottom Station. The ARB participants also questioned the validity of the first concern with respect to the BREs given their physical configuration (an observation tower elevated 40+ feet above ground level and occupied by a single security officer), which indicated that the circumstance of security officers having "witnessed security officers in BRE towers sleeping" was improbable, and given the lack of specific details such as dates/times of particular instances of inattentiveness and security officers involved. From a process standpoint, it is agency policy for an ARB to consider providing technical allegations to a licensee for evaluation since the licensee has primary responsibility for ensuring safe

<sup>&</sup>lt;sup>3</sup> The CI specifically stated in his March 2007 letter that, "I do not want the NRC or its agent to contact me in any manner. ...we feel that you [the NRC] have been provided sufficient information and suggestions necessary to look into this matter." In addition, NRC Region I was aware that the CI's attorney wrote the Region I Senior Allegation Coordinator on April 5, 2006, requesting that all future communications with the CI (about a prior allegation or any other matter) be addressed only to the attorney's office. This request further influenced NRC Region I in its decision not to contact the CI directly about allegation 2007-0040.

<sup>&</sup>lt;sup>4</sup>Generally, ARBs are held in the Region I office on a set day and time each week. Ad-hoc ARBs are conducted whenever regional staff determine that one or more concerns contained in a particular allegation warrant a more prompt discussion, such as when a concern could be an immediate safety issue. Generally, ARBs for reactor issues consist of managers from two technical divisions, the Regional Counsel, a representative of the NRC Office of Investigations, the Enforcement/Allegations Team Leader, the Senior Allegation Coordinator, and other technical and administrative staff as needed. The ARB makes decisions regarding the appropriate handling of allegations. In 2007, approximately 350 ARBs were convened by NRC Region I on a weekly and adhoc basis to review matters involving allegations at reactor and nuclear material licensees.

<sup>&</sup>lt;sup>5</sup> Documentation in the file for allegation 2007-0040 lists the files reviewed by the DRP staff.

<sup>&</sup>lt;sup>6</sup> The NRC Office of Investigations conducts investigations for the NRC staff of licensees, their contractors or vendors, including all allegations of wrongdoing by individuals other than NRC employees and contractors. Substantiated criminal cases developed by OI are forwarded to the Department of Justice for potential prosecution.

operation of its facility and, in most cases, can promptly address issues through ready access to site personnel and documentation related to the issues that are the subject of the allegation.

During the March 29 and April 11 ARBs, the third concern was discussed in the context of a potential wrongdoing issue related to management failure to address security officer inattentiveness. Statements in the CI's letter indicated that the licensee had taken some actions in the past to identify inattentive security officers, such as increased backshift inspections by licensee management, and licensee "employee concerns" staff interviewing personnel in the field regarding security officers sleeping on-duty; however, in the view of the CI, these actions were not sufficient if the licensee "wants to really find out if anyone is sleeping." The ARB noted that the CI's concern was that the licensee had not taken sufficient or proper actions to address the issue of inattentive security officers rather than a concern that the licensee took no action. For this reason, and because the third concern lacked any details or specificity to support a wrongdoing investigation, OI decided not to initiate such an investigation. The ARB concurred with this decision. If the CI had indicated that licensee management took no action in response to concerns of inattentive security officers, or if the CI had provided sufficient details for OI to initiate an investigation on its own, this specific concern would not have been provided to the licensee for review/evaluation.

Based on the ARB discussions and resulting direction, NRC Region I sent Exelon senior corporate management a letter on April 30, 2007, describing the three concerns and requesting that the licensee evaluate each concern and provide a written response to the NRC within 30 days. In its letter, NRC Region I indicated that the NRC would review the licensee's response to determine whether: (a) the individual in the licensee's organization assigned to conduct the investigation was independent of the organization affected by the concerns; (b) the evaluator was proficient in the specific functional area; (c) the evaluation was of sufficient depth and scope; (d) appropriate root causes and generic implications were considered if the concerns were substantiated; and (e) the corrective actions, if necessary, were sufficient.

On the same day that the allegation was provided to the licensee for investigation/evaluation, the NRC Region I Division of Reactor Safety (DRS) began a four-person, one week baseline security inspection at the Peach Bottom Station. However, there was no indication from review of the allegation file and discussions with regional personnel, that representatives at the March 29 and April 11 ARBs considered, during their deliberations, that there was a security baseline inspection planned for April 30 - May 4, 2007.<sup>7</sup> In hindsight, in conjunction with forwarding the allegation concerns to the licensee for its investigation, the baseline inspection could have been used to follow-up on the allegation, providing additional independence and potentially more information to the agency's review. Based on discussions with three of the four security inspectors who completed the baseline inspection (one inspector has since retired), two of the three inspectors were aware of the subject allegation because

<sup>&</sup>lt;sup>7</sup>The NRC baseline security inspection program consists of 11 separate inspection procedures conducted in specified time intervals at all NRC licensed reactor facilities. The program is comprised of three parts: inspection of security program areas, verification of performance indicators specific to the security function, and an assessment of the problem identification and resolution function in the area of security. None of the baseline security inspection procedures specifically delineate inspections for security officer inattentiveness, but do require inspectors to monitor security officer performance in all plant areas, both during day and night shifts, and to conduct interviews with security force personnel at their duty stations. The procedures also require reviews of the behavioral observation and fitness for duty programs, as well as security force work hours, all of which are regulatory measures designed to ensure security officer attentiveness.

one of those inspectors participated in the ARB on March 29, 2007. Notwithstanding the significant challenge to identify inattentive security officers via inspection given a BRE's unique configuration, awareness of the allegation specifics by all four inspectors might have provided an opportunity to visit additional security-related areas to look for any indication of inattentiveness.<sup>8</sup>

On May 30, 2007, NRC Region I received Exelon's response to the three concerns forwarded to the licensee in the NRC's April 30 letter. The licensee's review was conducted by two members of the Exelon corporate organization who did not report to Peach Bottom Station management. In summary, Exelon indicated that it did not substantiate any of the three concerns forwarded by the NRC. The licensee's conclusion was based on the following:

- measures exist to reduce the potential for becoming inattentive and to monitor attentiveness, such as periodic communication checks with each security officer, a requirement that each officer standup and walk around 2-3 minutes approximately every 15 minutes, and supervisor visits to each stationary post a minimum of twice per shift to further ensure attentiveness;
- the results of interviews with managers and security officers regarding observations of inattentiveness which yielded no substantiating results<sup>9</sup>;
- reviews of corrective action program reports;
- a review of security officer work hour averages over the preceding three months, which showed work hours consistently lower than NRC limits; and,
- Wackenhut and Exelon employee concerns program reports which did not indicate an inability of security officers to adjust to the current shift schedule.<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> All inspectors are trained on the importance of looking for problems during their inspections, not just in planned areas of review, but any area that they may encounter, and inspectors have often found problems in areas that were not part of their planned review. For example, NRC Region I resident inspectors, during routine tours at Indian Point and Beaver Valley in 2007, identified inattentive security officers. Although the resident inspectors at Peach Bottom were aware of the March 2007 allegation since they had received the allegation letter in the mail, sensitizing the regional security inspectors to this allegation might have allowed for an additional opportunity to detect security officer inattentiveness. However, as clearly noted by the CI in his March letter, security employees were supposedly aware of measures taken by the NRC and Exelon to identify inattentiveness in the past, including back shift inspections by the NRC, suggesting that such additional inspections would have been ineffective in identifying inattentive security officers. In fact, the alleger recommended five covert tactics (e.g., installing hidden cameras in the BREs, observing the BREs using high power optics from concealed locations on the hillside behind Peach Bottom, or having NRC staff go undercover and join the Wackenhut security force at Peach Bottom) that the NRC could use to detect inattentive security officers in the BREs, measures which the NRC does not currently employ and which could place inspectors in harm's way (e.g. undertaking surreptitious actions that could startle armed security officers).

<sup>&</sup>lt;sup>9</sup> The NRC subsequently learned that all of the inattentive officers shown in a video provided to the NRC months later, were part of the same shift, and that none of the members of that shift were interviewed by Exelon because that shift was off duty at the time the interviews were conducted (refer to Section IV for a discussion of the NRC's receipt of the subject video).

<sup>&</sup>lt;sup>10</sup> Most reactor licensees and large independent contractors have internal Employee Concerns Programs (ECPs) which allow employees to confidentially report problems outside their line organization. Such programs are voluntary and not required by the NRC.

The licensee's written response was reviewed by a DRS security specialist inspector in NRC Region I who determined that he needed to contact a licensee security manager regarding one of the actions described by the licensee, namely periodic communication checks with the security officers. The information specific to this action, provided by the licensee in its response letter, was unclear and was important because such checks can help detect inattentive security officers in remote locations. The DRS reviewer contacted the licensee's security staff at the Peach Bottom Station on June 11, 2007, and learned that the communication checks were random, and also learned that the licensee performed "command calls" that require all security officers to physically stand for at least two minutes. Therefore, based on the licensee's May 30, 2007 written response, as well as the supplemental information verbally provided to NRC Region I, the DRS representative concluded that the licensee's response to the concerns was thorough and complete, and so informed DRP, which had project responsibility for bringing the allegation file to closure. Consistent with past practice in both the NRC Region I Office and the other regional offices, this closure decision was not discussed at an ARB prior to generating a closure memorandum to file.<sup>11</sup>

As a result, a closure memorandum to file was prepared by a DRP Senior Project Engineer based on the input from the DRS security specialist inspector who reviewed the licensee's response, and the allegation file was administratively closed via that memorandum on August 22, 2007, after being concurred in by a DRP Senior Project Engineer (concurring as the acting Branch Chief), the responsible DRS Branch Chief, and the Senior Allegation Coordinator.<sup>12</sup>

A graphic summary of the NRC's allegation process is provided as Attachment 2.

# IV. NRC Region I's Handling of the September 2007 Allegations (2007-0118 and 2007-0121) Regarding Inattentive Security Officers

On September 10, 2007, 19 days after the March allegation (2007-0040) was closed, the NRC Region I Public Affairs Officer received an allegation (tracked as Allegation File 2007-0118) from a WCBS-TV reporter indicating that he possessed a video which showed inattentive security officers at the Peach Bottom Station. An adhoc ARB was promptly convened on September 10, and because the reporter did not provide any specifics, one of the decisions of the ARB was to contact the reporter that same day for additional information. NRC Region I staff contacted the reporter, but he did not provide any additional details. A second adhoc ARB was convened on September 10, and given that the reporter indicated he had video evidence of multiple inattentive security officers, the ARB determined that this matter posed a potential immediate security concern. As such, the ARB directed NRC Region I staff to contact Exelon as soon as possible and inform the licensee of the allegation. The licensee was contacted later that day. As a result of the ARB discussions, the resident inspectors assigned to the Peach Bottom Station began increased monitoring of security officer activities, which included conducting

<sup>&</sup>lt;sup>11</sup>NRC Region I does not typically convene an ARB to discuss/review a licensee's response to an allegation. This is done on a case-by-case basis when substantive questions arise regarding the adequacy of the licensee's response, and hence there is the need for supplemental information from the licensee. The other three NRC regional offices were contacted as part of this review, and like the Region I Office, none of the other regional offices routinely convene an ARB to discuss/review a licensee's allegation response. However, one regional office does have a Division Director or Deputy Director (a Senior Executive Service member) review/sign all allegation closure memorandums to file or closure letters to the alleger.

<sup>&</sup>lt;sup>12</sup>As noted earlier, the CI indicated he did not desire any NRC contact; hence, a closure memorandum to file was generated vice a letter to the CI documenting the results of the NRC's evaluation of the allegation.

off-hours inspection checks of security officers for inattentiveness. No instances of inattentive security officers were identified.

During a subsequent telephone conversation on September 12, 2007, the reporter informed NRC Region I that the video in his possession was approximately 10 minutes in length and showed inattentive guards in the ready room. An adhoc ARB was convened on September 12, and NRC Region I decided to forward this information to Exelon in support of its ongoing investigation. Given the information provided by the reporter, NRC Region I was concerned that multiple security officers would have had to collaborate to conceal their inattentiveness.

On September 18, 2007, a telephone conference was conducted between Exelon and the NRC in order for the licensee to provide a status of its investigation into the allegation of inattentive security officers. During the conference call, the licensee informed the NRC staff that during its interviews with various security officers, several officers had identified a particular security officer that they each believed had taken video clips of other security officers in the spring of 2007. When this particular individual was interviewed by the licensee and confronted with this information, the security officer indicated that he was terminating the interview and stated that he would not answer any questions without the NRC present. Based on this information, NRC Region I staff promptly convened an adhoc ARB at the conclusion of the conference call with the licensee. Per direction from the ARB, NRC Region I staff contacted the subject security officer to obtain more information. Coincidentally, the security officer had contacted NRC Region I to provide a number of concerns, principally that he had observed inattentive security officers on a number of occasions (tracked as Allegation File 2007-0121). On September 19, 2007, the reporter permitted NRC Region I staff to view the video, which consisted of two separate clips, showing several security officers, on more than one occasion, in a state of inattentiveness in what appeared to be the "old" ready room at the Peach Bottom station.<sup>13</sup> After viewing the video clips, another adhoc ARB was convened to determine appropriate follow-up action.

Subsequently, on September 20, 2007, in light of the allegation concerns provided by the security officer on September 18, and NRC Region I viewing the video clips on September 19, an Augmented Inspection Team (AIT) was chartered to review the overall matter of inattentive security officers at the Peach Bottom Station.<sup>14</sup>

Since September 20, 2007, the NRC has taken a number of actions to more fully understand conditions at the Peach Bottom Station, increase regulatory oversight of security-related activities at that site, and advise other reactor licensees of the agency's expectations with respect to security officer attentiveness. Specifically, NRC Region I:

• conducted an AIT from September 21 - 28, 2007, which determined that a total of 10 security officers had been inattentive on at least one occasion; the inattentive security officers did have an adverse impact on elements of the defense-in-depth security strategy, but this situation did not significantly degrade the overall security function at the Peach Bottom Station; and prompt compensatory and corrective actions were implemented by Exelon following notification of this matter on September 10, 2007;

<sup>&</sup>lt;sup>13</sup> In July 2007, Exelon moved the ready room to a new location with lighting and temperature control more conducive to maintaining attentiveness.

<sup>&</sup>lt;sup>14</sup>An Augmented Inspection Team (AIT) is an infrequent, reactive inspection conducted for the purpose of event assessment and follow-up. In this case, special agents of the NRC Office of Investigations participated in the AIT for the purposes of assisting the inspectors in conducting interviews.

- sent a letter to Exelon senior management on October 4, 2007, requesting that the licensee submit in writing those actions taken or planned to assure that security officers remain attentive at all times while on duty, that officers are willing and able to recognize instances of inattentiveness and promptly take all appropriate actions, and that supervisors and personnel take the necessary actions to encourage officers and all plant staff to bring forward any concerns;
- issued a Confirmatory Action Letter (CAL) on October 19, 2007, confirming various licensee corrective actions going forward<sup>15</sup>;
- conducted weekly conference calls with Exelon to discuss the transition to a proprietary security force and CAL activities<sup>16</sup>;
- conducted an AIT follow-up inspection on November 5-9, 2007, resulting in the identification of one potentially greater-than-green finding regarding inattentive security officers and an ineffective behavioral observation program;
- held public meetings with Exelon in the vicinity of the Peach Bottom Station on October 9 and December 3, 2007; and,
- exercised, via a Deviation Memorandum signed by the NRC's Executive Director for Operations on December 13, 2007, existing flexibility in the NRC's reactor oversight process (ROP) to further increase security oversight at the Peach Bottom Station in addition to those resources and inspections already scheduled for 2008.

In addition, the NRC issued a Security Advisory to licensees nationwide on September 27, 2007, reemphasizing NRC requirements regarding security officer attentiveness to duty, as well as issued NRC Bulletin 2007-01, "Security Officer Attentiveness," on December 12, 2007, to all holders of reactor licenses for the purpose of obtaining information on licensee administrative and managerial controls to deter and address inattentiveness and complicity among licensee security personnel.

Furthermore, with respect to the specific allegation that was received in March (2007-0040), although the associated allegation file had been closed in August 2007, NRC Region I conducted another ARB on September 26, 2007. This ARB was convened since the initial information gathered during the AIT indicated that some security officers had been inattentive in the March 2007 timeframe, which conflicted with the conclusion in the licensee's response to the March allegation (2007-0040) that the allegation could not be substantiated. The matter of inattentive security officers at the Peach Bottom Station and related licensee deficiencies in not identifying inattentiveness, are still under NRC review.

On October 2, 2007, NRC Region I requested that the NRC Office of Enforcement (OE) Agency Allegation Advisor (AAA) conduct an independent review of the staff's handling of Allegation File

<sup>&</sup>lt;sup>15</sup>A Confirmatory Action Letter (CAL) is a letter issued by the NRC to document or "confirm" actions that a licensee has committed to take in addressing a specific matter. Failure to comply with the terms of a CAL can result in the NRC issuing an Order to the licensee to require specific actions or impose various license conditions.

<sup>&</sup>lt;sup>16</sup> At the end of September 2007, Exelon decided to terminate its contract with Wackenhut and create a proprietary security force.

2007-0040 to assist in determining any lessons to be learned from a regional allegation process implementation perspective.<sup>17</sup> This independent review was not conducted until November 2007 after the AAA coordinated with the NRC Office of the Inspector General (OIG) who had also initiated a review of this matter. In her report, which is provided as Attachment 3, the AAA concluded that with respect to two of the three concerns forwarded to the licensee for its review/evaluation, NRC Region I evaluated and responded to the concerns in accordance with the requirements and guidance in Management Directive 8.8, "Management of Allegations." However, with respect to the concern involving licensee management being aware of instances of inattentiveness, but not taking proper actions to address them, the AAA was unable to determine the basis for the staff's conclusion that the scope and depth of the licensee's evaluation was adequate to resolve the concern.

# V. Evaluation of the Adequacy of the NRC Inspection Program for Detecting Security Officer Inattentiveness

The NRC baseline security inspection program consists of 11 separate inspection procedures conducted at specified time intervals at all NRC licensed reactor facilities. The program is comprised of three parts:

- the inspection of security program areas;
- verification of performance indicators specific to the security function; and,
- an assessment of the problem identification and resolution function in the area of security.

None of the baseline security inspection procedures provide specific direction or guidance with respect to identifying potential security officer inattentiveness; however, the procedures do require inspectors to monitor security officer performance in all plant areas, both during day and night shifts, and to conduct interviews with security force personnel at their duty stations. These inspections also include a review of the quarterly security logs, which list, among other information, any instances of security officer inattentiveness identified by the licensee. These procedures also require reviews of the behavioral observation and fitness for duty programs as well as security force work hours, all of which are regulatory measures designed to ensure security officer attentiveness.<sup>18</sup>

An inspection conducted by DRS security inspectors from April 30 - May 4, 2007, consisted of reviewing records, observing activities, and interviewing the security officer workforce in the areas

<sup>&</sup>lt;sup>17</sup> During this lessons-learned review, NRC Region I also engaged the other three regional offices to discuss their respective actions in determining if any allegation process implementation gaps exist given the events at Peach Bottom. NRC Region II is conducting a historical review of security-related allegation concerns; Region III conducted a review on a site-by-site basis in order to determine if similarities exist between its licensees and the situation at Peach Bottom; and, Region IV conducted a review of allegations received over the last two years aimed at identifying any programmatic issues in the allegation process, and to identify any security or inattentive staff findings that merited additional scrutiny. The results and recommendations of those reviews are provided as Attachment 4 to this report.

<sup>&</sup>lt;sup>18</sup> The procedures examined were: Inspection Manual Chapter (IMC) 2201, "Security and Safeguards Inspection Program for Commercial Power Reactors"; Inspection Procedures (IP) 71130.01 - Access Authorization, .02 - Access Control, .03 - Contingency Response, .04 - Equipment Performance, .05 - Protective Strategy Evaluation, .07 - Security Training, .08 - Fitness For Duty Program, .09 - Owner Controlled Area Controls, .10 - Information Technology Security, .11 - Materials Control and Accountability, and .12 - Physical Protection of Shipments of Irradiated Fuel.

of access control; security equipment performance, testing, and maintenance; security training; and owner-controlled area controls. The inspectors toured a number of security-related areas at the site, including three BREs, as part of this baseline inspection. No inspection findings related to security officer inattentiveness were identified during these inspections. Based on discussions with three of the four security inspectors who completed this baseline inspection (one inspector has since retired), two of the three inspectors were aware that NRC Region I had received the March allegation, but only because one of the two inspectors participated in the ARB on March 29, 2007. As mentioned earlier, the scope of this inspection was not modified based on the March allegations.

The NRC resident inspectors also conduct a variety of inspections at each licensed site. The resident inspectors are stationed at their assigned site full-time, and conduct inspections on occasions during weekends and backshifts. The resident inspectors observe and inspect licensee activities in all functional areas, including security. Under Inspection Manual Chapter (IMC) 71152, "Identification and Resolution of Problems," resident inspectors are instructed to review licensee corrective action system reports, including a sampling of reports related to the security program. The inspectors also note the performance of security officers in the course of entering and touring the site.<sup>19</sup> The NRC is currently in the process of evaluating whether the role of the resident inspectors in verifying attributes of security program performance should be expanded.<sup>20</sup>

However, as clearly denoted by the CI in his March letter, security officers were supposedly aware of measures taken by the NRC and the licensee to identify inattentiveness in the past, including back shift inspections by the NRC, suggesting that such additional NRC inspections would not have been effective in identifying inattentive security officers.<sup>21</sup> The resident staff at the Peach Bottom Station confirmed that they had not observed any indication of inattentive security officers in the March - September 2007 timeframe in the course of their inspection activities, which involved tours of a number of plant areas on several occasions.

Observations and recommendations resulting from this lessons-learned review are provided as Attachment 1.

<sup>&</sup>lt;sup>19</sup>As indicated in footnote No. 7, all inspectors are trained on the importance of looking for problems during their inspections, not just in planned areas of review, but any area that they may encounter, and inspectors have often found problems in areas not part of their planned review. For example, Region I resident inspectors, during routine tours at Indian Point and Beaver Valley in 2007, identified inattentive security officers. Although the resident inspectors at Peach Bottom were aware of the March 2007 allegation since they had received the allegation letter in the mail, they were not directed via the ARB to focus additional efforts to identify inattentive security officers in the BREs or other areas.

<sup>&</sup>lt;sup>20</sup> An "Adhoc Working Group on Security Inspections by Resident Inspectors", led by the Office of Nuclear Security and Incident Response (NSIR), prepared a report identifying ways for resident inspectors to become more involved in security inspections at their sites. The options proposed remain under agency review.

<sup>&</sup>lt;sup>21</sup> As noted earlier, in his March 2007 letter, the CI recommended five covert tactics (e.g., installing hidden cameras in the BREs, observing the BREs using high power optics from concealed locations on the hillside behind Peach Bottom, or having NRC staff go undercover and join the Wackenhut security force at Peach Bottom) that the NRC could use to detect inattentive security officers in the BREs, measures which the NRC does not currently employ and which could place inspectors in harm's way (e.g. undertaking surreptitious actions that could startle armed security officers.

## **Attachment 1**

### OBSERVATIONS AND RECOMMENDATIONS

- A. Process for Forwarding Allegations to a Licensee, Evaluating Licensee Responses, and Documenting the NRC Evaluation of the Licensee Response:
- 1. OBSERVATION The third of the three concerns in Allegation File 2007-0040, as summarized from the alleger's (hereafter referred to as the concerned individual, or CI) letter, was that licensee management was aware of security officer inattentiveness, but was not taking proper action. NRC Management Directive 8.8, "Management of Allegations," which provides guidance on the handling of allegations, states that allegations made against a licensee's management or those parties who would normally receive and address the allegation, should not be referred to licensees. Wrongdoing issues normally result in an investigation by the NRC Office of Investigations (OI) when sufficient details are provided to reach OI's threshold for opening an investigation. However, the alleged concern was a general statement without any specifics to allow for OI to open an investigation. Since the Allegation Review Board (ARB) decided to honor the CI's request that he not be contacted in any manner, NRC Region I did not attempt to obtain any specifics from the CI that may have formed the basis to initiate an OI investigation. Given the general nature of the statement, NRC Region I decided to provide this concern to Exelon for investigation along with the other two concerns.

**RECOMMENDATION** - The NRC Office of Enforcement (OE) should evaluate the NRC practice of honoring concerned individual's (CI's) requests not to be contacted unless there is a clear and immediate nuclear safety issue, to determine if additional guidance is needed. The NRC views CIs as an important element in helping to ensure nuclear safety. Therefore, it is important to maintain a good relationship with CIs and be sensitive to their requests. However, in hindsight, additional contact with the CI (via telephone or, if necessary, mail) would not have compromised the CI's identity and may have resulted in the NRC obtaining more specific information to support additional NRC action in this matter, such as the location of other areas besides the Bullet Resistant Enclosures where security officers were inattentive (i.e., the ready room), as well as other information provided to the CI by the security officers he stated that he represented.

2. OBSERVATION - One of the factors to consider in the ARB's decision to provide an allegation to the licensee is the licensee's past performance in dealing with allegations, including the likelihood that the licensee would thoroughly investigate, document, and resolve the allegation. Allegation File 2007-0040 indicates that the history of previously dispositioned security allegations was reviewed, but it does not document how that history was considered in the decision to forward the allegation concerns to the licensee.

**RECOMMENDATION** - NRC Region I, the other regional offices, and OE should evaluate whether the ARB disposition form, drafted by the responsible division prior to an ARB, should be revised to provide an additional section that describes: (1) the history/trends of related allega-

<sup>&</sup>lt;sup>1</sup>OI's threshold for opening an investigation is "specific indication of wrongdoing beyond mere suspicion." Also, refer to Section III regarding the ARB discussion with respect to whether the CI claimed the licensee was "ignoring" inattentive security officers (clearly a wrongdoing matter), or not taking sufficient or proper action.

tions at the facility (i.e., number of allegations at the facility in the last two years, substantiated OI cases, and whether a large percentage of concerns are focused in the area that is the subject of the allegation) as well as related inspection findings; and, (2) how those inspection findings and the allegation history were considered in the decision to forward the concern(s) to the licensee. Such information could be periodically retrieved from the NRC Allegation Management System (AMS) and Reactor Planning System (RPS) and provided to the responsible division.<sup>2</sup>

- **3. OBSERVATION** The April 30, 2007, letter forwarding the allegation concerns to Exelon requested that the licensee ensure that:
  - the individual in the licensee's organization assigned to conduct the follow-up investigation was independent of the organization affected by the concerns;
  - the evaluator was proficient in the specific functional area;
  - the evaluation was of sufficient depth and scope;
  - appropriate root causes and generic implications were considered if the concerns were substantiated; and,
  - the corrective actions, if necessary, were sufficient.

However, the NRC letter to the licensee did not request that the licensee describe in its response specifically how each of these attributes was satisfied. The letter also did not request that if individuals were interviewed as part of the licensee's review, the licensee's response include a description of how the sample of employees interviewed was sufficiently large and varied to ensure the sample was a representative cross section of the organization or individuals involved. Finally, the letter did not ask the licensee to discuss why the interviews were sufficiently rigorous to likely identify any issues. In this case, the licensee interviewed nine security officers and five Exelon managers, who the licensee considered likely to encounter security officers during routine supervisory observations. However, the NRC learned during the AIT that no members of the crew in which security officers were captured on video as inattentive were interviewed as part of the licensee's investigation into the March allegations due to scheduling issues. Also, as noted by the AAA in her independent review of this matter (refer to Attachment 3), it was not clear whether the interviews referred to by the licensee in its response were of sufficient rigor to identify whether all incidents of inattentiveness were reported.

**RECOMMENDATION** - NRC Region I has revised its standard letter to forward concerns to licensees to include the following statement: "Your response should describe how each of these attributes were satisfied, and if interviews of individuals were conducted as part of your review, include the basis for determining that the number and cross section of individuals interviewed, as well as the scope of the interviews, is appropriate to obtain the information necessary to fully evaluate the subject concern(s). The NRC will consider these factors in reviewing the adequacy of your evaluation of this concern(s)." This change should be evaluated by OE for incorporation into agency guidance.

<sup>&</sup>lt;sup>2</sup> NRC Region IV recommended from its allegation process review that "management expectations for Branch Chief responsibilities associated with tracking and trending allegations should be clarified and captured in appropriate agency procedures. Additional tools and training should be made available as necessary."

**4. OBSERVATION -** NRC Region I provided limited information to Exelon regarding the range of measures security officers allegedly took to avoid being detected when they were inattentive, presumably in an effort to protect the identity of the CI, as well as those individuals that the CI indicated had provided information to him. These measures included: (1) reclining in a chair or lying on the floor of the Bullet Resistant Enclosures (BREs), out-of-sight while being protected from discovery by sitting or lying on the BRE hatch door; and, (2) taking 10 to 15 minute power naps, depending on radio transmissions, then waking momentarily for radio checks. Providing this information may have prompted the licensee to consider other approaches to validating the CI's concerns.

**RECOMMENDATION** - NRC Region I, the other regional offices, and OE should evaluate whether sufficient descriptive information is provided to a licensee when available, particularly in matters involving inattentiveness (which are typically very difficult to prove), to maximize the effectiveness of the licensee's investigation without revealing the identity of the CI.

**5. OBSERVATION** - The licensee's response to the third concern regarding licensee management being aware of instances of inattentiveness but not taking proper action, indicated that the licensee had identified instances of inattentiveness in the past and had taken appropriate action. However, the response provided to the NRC did not provide any specifics regarding the referenced past incidents of inattentive behavior, or the actions taken by the licensee in response to these incidents.<sup>3</sup> NRC Region I does not routinely discuss licensee responses to allegations at an ARB. Management Directive 8.8, "Management of Allegations," does not require such ARBs. NRC Region I only exercises this process flexibility when the responsible division determines there is a need for such an ARB based upon concerns with the licensee's response that calls into question the overall adequacy of that response. Such ARBs have been conducted when licensee responses were initially considered to be inadequate based upon divisional review.<sup>4</sup>

NRC Region I contacted the other three NRC regional offices and determined that they also do not routinely discuss licensee responses to allegations at an ARB. As a result, in most cases, the NRC assessment of the adequacy of the licensee evaluation is based on the results of the review by the responsible division and any review conducted by another division and/or the Senior Allegation Coordinator.<sup>5</sup> A follow-up ARB would provide all ARB participants, including the ARB Chairman, a formal opportunity to critique the licensee's response as well as the basis for closure, before actual closure of the file, in order to determine whether the licensee's response was sufficiently comprehensive. It would also identify what, if any, further NRC/licensee engagement and/or independent NRC follow-up action is warranted.

<sup>&</sup>lt;sup>3</sup> The DRS security specialist inspector who reviewed the licensee's written response did not probe the licensee for that information given his knowledge, based on five years experience inspecting and/or reviewing security-related issues in NRC Region I, that instances of security officer inattentiveness at Exelon facilities had occurred infrequently and had been properly addressed.

<sup>&</sup>lt;sup>4</sup> In 2007, NRC Region I licensees were formally requested to supplement their response on five occasions when follow-up ARBs questioned their adequacy.

<sup>&</sup>lt;sup>5</sup> As indicated in footnote No.11 in Section III of this report, one regional office does have a Division Director or Deputy Director review/sign all allegation closure memorandums to file or closure letters to the alleger, providing senior agency manager level review of the licensee's response.

**RECOMMENDATION** - NRC Region I, and from a more programmatic perspective, OE, should evaluate its allegation program, procedures, and practices to determine whether they should be changed to require a more structured review process, with additional senior management review, of licensee responses to allegations provided by the NRC. Such a process might include a formalized checklist to verify the adequacy of a licensee response, coupled with either a review by an NRC senior manager, or a follow-up ARB. This would provide for an additional critique of the licensee's investigation results, as described in its written response to the NRC, to better determine whether the licensee's evaluation was sufficiently comprehensive and whether any additional NRC follow-up action is warranted.

#### B. Communications/Interactions with Concerned Individual(s):

**1. OBSERVATION** - Since the ARB decided to honor the CI's request that he not be contacted in any manner, the NRC did not attempt to obtain any specifics from the CI to support additional NRC action, such as an OI investigation, nor did the NRC provide the CI with the results of its allegation follow-up.

**RECOMMENDATION** - NRC Region I, and from a more generic programmatic perspective, OE, should evaluate its allegation program, procedures, and practices to determine whether there needs to be more flexibility in honoring requests from a CI that they not be contacted. As noted in Observation A.1, notwithstanding the CI's request not to be contacted, in hindsight, additional contact with the alleger (via telephone or mail) would not have compromised the CI's identity and may have resulted in the NRC obtaining more specific information to support additional NRC action in this matter. In addition, contact with the CI to provide the results of the allegation review, including the NRC conclusion that it was unable to substantiate the CI's concerns, may have resulted in additional information being provided by the CI.

**2. OBSERVATION** - The structure of NRC Region I closure memorandums to file and closure letters to CIs is such that each concern is described, followed by the results of the NRC's evaluation of the concern. This structure is used for those concerns forwarded to the licensee for review and evaluation, as well. The structure does not include a section describing the licensee evaluation of, and response to the concern, and a separate section addressing the adequacy of the licensee's response to the concerns. This approach would provide an additional tool to ensure a more thorough review of the licensee's evaluation.

**RECOMMENDATION** - The NRC regional offices, in coordination with OE, should evaluate their respective procedures and practices to determine whether the closure memorandum and closure letter, for concerns forwarded to the licensee, should be structured to address the following four categories of information: (1) Concern; (2) Licensee Evaluation of, and Response to the Concern; (3) Adequacy of the Licensee Response to the Concern; and, (4) NRC Assessment of the Concern.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>At least one other regional office currently structures their closure letters/memorandums in this manner. NRC Region IV also recommended from its allegation process review that "a heightened sensitivity should be encouraged and exercised by the individuals that are responsible for closing the concerns to fully document how each issue was resolved. Include offline discussions and verifications to clearly document how the concerns were resolved."

## C. Inspection Process for Detecting Inattentiveness and Inspector Awareness of Allegations

1. OBSERVATION - In his March 2007 allegation (2007-0040), the CI recommended that the NRC undertake a range of "covert" measures to detect security officer inattentiveness, measures which the NRC has not implemented in the past and which would have a variety of legal and personal safety implications. There is a high degree of difficulty in verifying certain licensee employee behaviors or activities, such as inattentiveness on back shifts in remote locations. Given the configuration of the BREs, as well as the layout of the old ready room at the Peach Bottom Station, observations by inspectors using typical inspection techniques to detect inattentiveness in these security facilities would most likely have been unsuccessful.

**RECOMMENDATION** - Given that licensees may elect to implement additional surveillance methods for inattentiveness in response to Bulletin 2007-01, "Security Officer Attentiveness," (e.g., closed circuit cameras in BREs and ready rooms), the NRC's program Office of Nuclear Security and Incident Response (NSIR) should consider evaluating the information provided by these surveillance methods in the future, when appropriate.

**2. OBSERVATION** - On the same day that the concerns provided to the NRC in March were forwarded to Exelon for review, investigation, and response, NRC Region I initiated a baseline inspection of the security program at the Peach Bottom Station. However, security specialists on that inspection were only knowledgeable of this allegation because one of the specialists happened to participate in the first ARB for this allegation. Thus, the security specialist inspectors did not specifically focus on looking for indications of inattentiveness during their inspection.

**RECOMMENDATION** - The NRC regional offices should evaluate their respective procedures and practices to determine whether region-based inspectors should be apprised of pertinent open allegations pertaining to the licensee of a facility they are scheduled to inspect. Currently, in the course of preparing for such inspections, region-based inspectors are only informed of allegations they were assigned to review by an ARB.

**3. OBSERVATION** - The resident inspectors assigned to the Peach Bottom Station were cognizant of the CI's concerns since the March letter was sent to them and they completed the Allegation Receipt Report, forwarding the concerns to the allegation staff in the NRC Region I office. Although a resident inspector's primary role is to look for problems with equipment, procedures, or people, no specific direction was provided to the resident staff by the ARB to give greater scrutiny to security officers being attentive during their routine inspector tours of the site.

**RECOMMENDATION** - The NRC regional offices should evaluate their respective procedures and practices to determine whether resident inspectors are informed of all allegation concerns specific to their assigned site, and the actions resulting from an ARB, so they are sensitive to the concerns in the course of their routine inspections, maximizing the opportunity to validate those concerns.

### D. Conclusions and Next Steps

The lessons-learned review team concluded that the NRC followed its allegation process in response to two of the three concerns communicated to the NRC in March 2007. With respect to the third concern that licensee management was aware of instances of inattentiveness, but did not take proper actions to address them, the review team concluded that the staff should have conducted a more thorough review of the licensee's response in determining if the licensee's evaluation was adequate to resolve the concern. In addition, the review team identified some allegation process flexibilities which could have been exercised that may have resulted in additional information as part of the NRC's efforts to validate the concerns expressed in the March allegation. However, it is not apparent that obtaining more information from the licensee with regard to its response to the allegation concern, or exercising these process flexibilities, would have resulted in a different overall conclusion regarding the validity of the March 2007 allegation, or have resulted in the NRC identifying the unacceptable security officer behaviors before the events of September 2007.

With respect to the NRC's program for inspecting security at nuclear power plants, the review team noted that none of the inspection procedures provide specific direction or guidance with respect to identifying potential security officer inattentiveness; however, the procedures do require inspectors to monitor security officer performance in all plant areas, both during day and night shifts, and to conduct interviews with security force personnel at their duty stations. These procedures also require reviews of the behavioral observation and fitness for duty programs, as well as security force work hours, all of which are regulatory measures designed to ensure security officer attentiveness. The review team noted that no inattentiveness issues were identified during an NRC inspection of the licensee's performance in the security area that was conducted in April/May 2007. However, the scope of this inspection was not modified based on the information provided to the NRC in the March allegation. Due to the unique layout of security facilities, such as bullet resistant enclosures and ready rooms, it may be necessary to employ means other than typical NRC inspection techniques, to detect security officer inattentiveness.

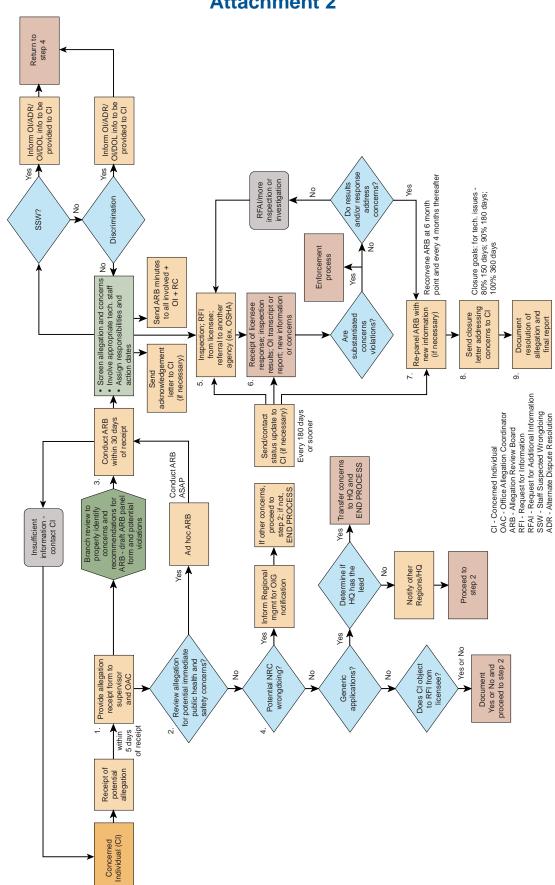
Finally, the review team concluded that the NRC took significant and timely regulatory actions to address evidence of inattentive security officers provided to the NRC in September 2007.

Regarding NRC follow-up actions deriving from the results of this lessons-learned review, the following next steps are proposed:

- 1. The lessons-learned report be forwarded to the agency Lessons Learned Oversight Board (LLOB) for the board's evaluation of whether the report recommendations contained therein meet the criteria of Management Directive 6.8, "Lessons Learned Program", for designation as an agency lessons-learned item.
- 2. NRC Region I evaluate the recommendations set forth in this lessons-learned report, and make allegation program procedure and process changes as necessary. To date, NRC Region I has sensitized the staff on the need to carefully document the basis for forwarding allegation concerns to licensees; maximize opportunities to inspect concerns in conjunction with the baseline inspection program in order to ensure independent NRC review; and thoroughly evaluate licensee responses to concerns forwarded to the licensee for evaluation/review.

- 3. The NRC Office of Enforcement, as the program office responsible for allegation policies,
  - a. consider the recommendations in this lessons-learned report and the results of the independent review conducted by the AAA (see Attachment 3), to determine if any changes to the allegation program and/or implementing guidance should be made;
  - b. coordinate with NRC Region I and share the results of this lesson-learned report with all regional and headquarters offices involved in handling allegations; and,
  - c. for any recommended changes, determine whether additional resources are needed to implement the changes and quantify these resource needs.

# **Attachment 2**



**ALLEGATION PROCESS FLOWCHART** 

## **Attachment 3**

January 28, 2008

MEMORANDUM TO: Samuel J. Collins, Regional Administrator

Region I

FROM: Lisamarie L. Jarriel, Agency Allegation Advisor /RA/

Office of Enforcement

THRU: Cynthia A. Carpenter, Director /RA/

Office of Enforcement

SUBJECT: RESULTS OF ASSESSMENT OF ALLEGATION RI-2007-A-0040

On November 7-8, 2007, I performed an independent assessment, at the Regional Administrator's request of Region I's implementation of the NRC's Allegation Program as it relates to allegation number RI-2007-A-0040, received March 27, 2007. The assessment, consisting of the review of the allegation file and discussions with members of the Region I staff, was conducted against the requirements and guidance of Management Directive (MD)8.8, "Management of Allegations," including a review against referral and evaluation criteria.

On November 8, 2007, I met with the Regional Administrator and members of his staff to present the preliminary results of the assessment. In general, I found the allegation was handled in accordance with allegation process guidance, with the exception of one issue related to the sufficiency of the staff's evaluation of one of the three concerns. This issue is discussed below.

#### Request for Information to the Licensee Regarding Allegation Concerns

The concerns raised by the alleger included:

- 1) Security officers regularly sleeping on duty in the bullet resistant enclosures (BREs) and other areas due to fatigue from excessive overtime;
- 2) Security officers fearful of retaliation for reporting concerns internally or to the NRC, and;
- 3) Security officers believing that the NRC and licensee already know they are sleeping but don't want to address the issue.

In addition, the alleger commented that, "The officers have to wake the sleeping officers up and feel they are becoming part of a cover-up by not reporting these incidents." On April 30, 2007, regional management sent the licensee a request for information regarding concern 1 and the aspects of concerns 2 and 3 related to licensee management.

MD 8.8 addresses such requests for information or evaluation. Evaluations are not requested if doing so, among other things, could compromise an investigation or inspection because of knowledge gained from the request, or an independent review could not be assured because the party to which the request is being made is alleged to have been directly involved in the issue. The guidance also says that if an allegation raises an overriding safety issue the NRC will request an evaluation by the licensee regardless of any factor mentioned above.

Both concern 1 and 3 include vague assertions of wrongdoing. According to interviews with the Regional Field Office Director, the Office of Investigation (OI) will not initiate an investigation without specific indications of wrongdoing, such as dates of the infractions and the names of individuals involved in the alleged wrongdoing. Typically, in the absence of such specifics, additional information is sought from the alleger or by inspection. MD 8.8 also indicates that in the absence of such information the concern can be closed without further evaluation. Given that concerns 1 and 3 did not include the necessary level of specificity, additional information was needed for an investigation of wrongdoing to proceed. The alleger in this case explicitly requested that the NRC not contact him with regard to his concerns. Therefore, honoring the alleger's request, the staff did not ask him for further information to support his assertions of wrongdoing. Rather, the region requested information from the licensee, after first removing inferences to wrongdoing.

With regard to the alleger's first concern, the region requested information from the licensee regarding the assertion that officers were routinely sleeping due to fatigue. The assertion that such incidents were being "covered up" was not included in the request for information. Similarly, the region requested information from the licensee concerning the third concern regarding the appropriateness of actions taken to address known incidents of inattentiveness. As with concern 1, the region did not share with the licensee the vague assertion that the licensee knowingly did nothing to address such incidents.

My assessment found that the region's request for information to the licensee was in accordance with MD 8.8 in that, a) the concerns involved an overriding safety issue that needed prompt attention by the licensee, b) specific wrongdoing assertions were not shared with the licensee, c) no OI investigation was planned due to the vagueness of the wrongdoing assertions, therefore, compromise of such was not an issue, d) concern 1 focused on wrongdoing by the security officers who were contractors, not licensee personnel, and, although concern 3 concerned licensee personnel, the request for information was made to senior licensee management, far removed from direct oversight of the security organization, and e) the area of concern was focused on the BREs and the logistics required to successfully evaluate and substantiate sleeping in these areas necessitated the licensee's involvement.

Although not associated with assertions of wrongdoing, it should be noted that information was also requested about the licensee's safety conscious work environment (SCWE) to help evaluate concern 2 regarding security officers' fear of retaliation. The NRC regularly monitors the licensee's SCWE using insights from allegation trends, and inspections involving interviews, observations, and document reviews. In the absence of corroborating information indicating challenges to the work environment, it is appropriate to request information about such concerns from the licensee. Each request for information from the licensee includes direction to the licensee that the evaluator be independent of the organization involving the alleged concern. For each of the concerns, personnel independent of security contractor and licensee line management reportedly conducted the evaluation.

### Assessment of the Licensee's Response and Staff Evaluation of Concern

Management Directive 8.8, Section I.D.7 articulates expectations for the NRC staff review of the licensee's response to requests for information. This section states:

"NRC should ensure that a licensee's response is adequate. If a thorough review by the licensee is not conducted, it may be necessary for NRC to inspect or investigate the licensee's conclusions and assertions. The scope and depth of the NRC's verification should be predicated on many factors, such as, but not limited to, the licensee's past performance, the safety significance of the matter, and the level of licensee management possibly involved in the matter."

With regard to the regional staff's review of the licensee's response to the concerns discussed above, documents reviewed in the allegation file and interviews with key reviewers indicated that the regional staff applied their knowledge of the licensee's past performance to appropriately inform their review and that follow up was conducted on at least one specific aspect of the licensee's response. The staff's evaluation and response to concerns 1 and 2 were in accordance with the requirements and guidance in MD 8.8. With respect to concern 3, however, I was unable to determine the basis for the staff's conclusion that the scope and depth of the licensee's evaluation was adequate to resolve the concern.

In response to concern 3, the region's memo to file closing the allegation stated that the licensee's response to this concern was "reasonable with supported conclusions." The licensee stated that they conducted interviews of personnel likely to encounter inattentive security officers, should they exist, and further that all reported incidents of security officers sleeping on duty were taken seriously, aggressively investigated, and corrected. However, with regard to the latter statement, the licensee's documented response did not provide corroborating evidence to support its claim. It is not clear, based on my review of the allegation file and interviews with regional staff, that additional supporting information was provided or sought concerning the specific inattentive instances identified by the licensee, the nature of the investigations conducted, the corrective actions taken, or the effectiveness of those corrective actions. It also was not clear whether the interviews referred to by the licensee were of sufficient rigor to identify whether all incidents of inattentiveness were reported. Therefore, I was not able to determine the basis for the conclusion that incidents of inattentiveness were reported and proper actions were taken by the licensee in response to those incidents. It should be noted that it is not clear whether obtaining additional information with regard to this specific concern would have impacted the staff's overall conclusions regarding this allegation.

In summary, the assessment found that allegation RI-2007-A-0040 was handled in accordance with MD 8.8 related to requests for information, but I was unable to determine the basis for the staff's conclusion that the scope and depth of the licensee's evaluation was sufficient to resolve one of the concerns raised. If you have any questions, please do not hesitate to contact me.

# **Attachment 4**

# SUMMARY OF RESPONSES BY NRC REGIONS II, III, AND IV TO CONCERNS WITH THE HANDLING OF INATTENTIVE SECURITY OFFICER ALLEGATIONS

	Region II (Atlanta)	Region III (Chicago)	Region IV (Dallas-Fort Worth)
Programmatic Reviews and Assessments	Region II is in the process of reviewing their history of providing security allegations to licensees. This information will be used to evaluate any areas for enhancement to the allegation process, and corrective actions developed to disposition responsibilities for any necessary changes.	Region III has audited all security- related allegations received since 2004, including those dealing with inattentive security officers, to identify best practices and op- portunities for improvement.  Region III has asked resident inspectors to evaluate current con- ditions at each reactor site using the following questions:  1. Does the site have a ready room like that at Peach Bottom?  2. If so, has the resident toured the area on backshifts?  3. Has the licensee communicat- ed with site security personnel regarding the importance of remaining attentive?	Region IV completed a review of allegations received over the last two years. This review aimed at identifying programmatic issues in the allegation program, and to specifically identify any security or inattentive findings that potentially could have been handled more rigorously. During this review, allegations were selected that included security issues, inattentiveness concerns, and cases involving allegers that were not satisfied with the manner in which the agency handled the allegation.
Recommendations/ Improvements/ Enhancements	Awaiting completion of Region II audit of security related allegations.	Region III has expanded the dialogue during ARBs dealing with allegations of inattentiveness:  The ARB discusses in greater depth whether an allegation of inattentiveness should be sent to the licensee for evaluation or reviewed through inspection/investigation  The ARB considers whether resident inspectors should be asked to perform immediate walk-downs of security posts where officers are allegedly inattentive.  The ARB also considers whether the Region should immediately notify the licensee of alleged inattentiveness to avoid any potential safety or security issues that might be caused by alleged inattentiveness.	Region IV is currently evaluating the recommendations / enhancements stemming from this review which include:  • encourage increased sensitivity in providing complete documentation of closure bases;  • clarify and document responsibilities for tracking and trending allegations;  • ensure identified issues involving inattentive operators/officers have been addressed;  • provide a phone call in addition to a closure letter in an effort to provide greater satisfaction of CI's; and,  • establish a working group to determine and standardize agency 'best practices' for handling allegations.





NUREG-1904 February 2008



# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406-1415

November 23, 2007

MEMORANDUM TO:

Luis A. Reves

**Executive Director for Operations** 

THRU:

James E. Dyer, Director Sayev
Office of Nuclear Reactor Regulation

Samuel J. Collins

FROM:

Regional Administrator

Region I

SUBJECT:

REQUEST FOR DEVIATION TO THE ACTION MATRIX TO PROVIDE HEIGHTENED NRC OVERSIGHT OF SECURITY ISSUES AT PEACH BOTTOM ATOMIC POWER STATION

The purpose of this memorandum is to request your approval to deviate from the Reactor Oversight Process (ROP) Action Matrix in order to provide increased NRC oversight of the Peach Bottom Atomic Power Station (Peach Bottom) and activities of the licensee, Exelon Generation Company, LLC (Exelon). This action is requested to enable: (1) enhanced NRC oversight of Exelon's performance relative to the transition from a contracted security force to a proprietary security organization; (2) review of Peach Bottom's root cause analysis for the 2007 inattentive security officer events, follow-up of the associated corrective actions, and completion of the associated significance determinations; (3) monitoring of Exelon's safety conscious work environment (SCWE) efforts as committed to in their letter of October 4, 2007; and (4) verification of the completion of confirmatory action letter (CAL) commitments and associated corrective actions.

#### Background

On September 10, 2007, WCBS-TV made the NRC aware of the existence of videotapes showing security officers potentially inattentive to duty while in Peach Bottom's "ready rooms." While the validity and nature of the 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 view these videos on September 19, 2007. In response to the viewing of these videos and NRC knowledge of Exelon's investigation details, it was determined on September 20, 2007, that an Augmented Inspection Team (AIT) was warranted.

NRC dispatched an AIT on September 21, 2007, to review issues associated with inattentive security officers at Peach Bottom as well as providing increased regulatory oversight to ensure the effectiveness of physical security at the facility. The AIT's conclusions, presented at a public exit meeting on October 9, 2007, included that security officers had been inattentive on multiple occasions, and that supervisors failed to correct the inattentive behavior. The AIT further concluded that prompt corrective actions implemented by Peach Bottom management in September 2007 were appropriate.

NRC issued a CAL to Exelon on October 19, 2007, to confirm Exelon's agreement to take certain actions in response to the Peach Bottom inattentive security officers. These actions include:

detailed briefings to security force personnel;

· observations of various aspects of the security program;

- corporate security management providing 24-hour supervisory oversight of security activities;
- site security management providing 10-hour oversight of security activities, above normal staffing limits, to both day and night shifts;
- providing continuous observation and oversight of security personnel in designated security staging areas, and
- keeping the NRC informed of the status of the Peach Bottom transition plan from a contractor to a proprietary security force.

The commitments of the CAL will remain in effect until the NRC has reviewed Exelon's completed root cause analysis, reviewed corrective actions associated with that analysis, and concluded that Exelon's actions, taken or proposed, are adequate.

NRC provided enhanced inspection and management oversight of the Peach Bottom security program during the transition to an Exelon proprietary security force, and will review the effectiveness of that transition.

#### **Deviation Basis**

The ROP Action Matrix includes a range of licensee and NRC actions for each column of the Matrix. However, as discussed in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," there may be instances when the actions prescribed by the Action Matrix may not be appropriate. In the case of Peach Bottom, the actions provided for by the ROP for Column 1 plants do not provide the level of oversight needed to appropriately monitor licensee efforts to address the issues identified by the AIT and in the CAL.

The AIT follow-up inspection team will characterize any AIT-identified issues and any new issues as performance deficiencies. NRC reviews to determine if willful acts contributed to the problems are ongoing. The NRC reviews may: (1) find that all, some, or none of the performance deficiencies are willful; or, (2) find additional problems, of which all, some, or none are willful.

Handbook 8.3, "NRC Incident Investigation Program," Section III.G, "Followup," states that followup activities after an AIT will be conducted through normal organizational structure and procedures. Inspection Manual Chapter (IMC) 0320, "Operating Reactor Security Assessment Program," Section 06.05, "NRC Responses to Licensee Performance," and Section 0320-03, "Applicability," reference IMC 0305, "Operating Reactor Assessment Program." Inspection Manual Chapter 0305, Section 06.05.a, "Description of the Action Matrix," states "Agency actions beyond the baseline inspection program will normally occur only if assessment input thresholds are exceeded." Section 06.05.b, "Expected Responses for Performance in Each Action Matrix Column," in Subsection 1, "Licensee Response Column," states in part, "The licensee will receive only the baseline inspection program."

Region I believes that Exelon's planned actions to address the inattentive security officer events, and the transition to a proprietary security force for the Peach Bottom site warrant additional inspection oversight and additional engagement by NRC management beyond that specified in the Reactor Oversight Program baseline inspection program.

The purpose of this Deviation Memo is to allow for increased regulatory oversight of the security program at Peach Bottom without exceedence of the assessment input thresholds.

#### Planned Actions

#### Requested Deviation

The region requests your approval to deviate from the ROP Action Matrix to provide the following inspection oversight for Peach Bottom for the remainder of calendar year 2007 and throughout calendar year 2008 (ROP 9).

The NRC intends to perform the following actions at Peach Bottom to monitor Exelon's progress in transitioning to a proprietary Exelon security organization:

- Conduct an inspection to verify that Exelon is monitoring the performance of security force personnel, and that security personnel are trained in all aspects of supporting the safe operation of the facility.
- Conduct an inspection of the fitness-for-duty (FFD) program to the extent it applies to the
  continuous behavioral observation program and security force work hours, to verify that
  security force personnel have been appropriately trained on FFD awareness, and to
  verify that FFD procedure changes have appropriately captured lessons learned.

The NRC intends to perform the following actions at Peach Bottom to monitor Exelon's progress on the commitments listed in the CAL:

- Perform specialist inspections of CAL items and associated corrective actions to verify completion.
- Perform specialist reviews of corrective action effectiveness, above the baseline minimum samples. For example, a special review of the effectiveness of the corrective actions developed by Exelon's root cause assessment for the inattentive security officer issues will be conducted to ensure the issues are fully resolved.
- Conduct inspections of Exelon's efforts to address safety conscious work environment (SCWE) issues, including a review of the results of Exelon's SCWE surveys.
- Increase the level of effort for the security portion of the resident inspector plant status inspections from 2 hours to 10 hours per month, to include observation of activities at fixed security posts and staging areas.

This proposed additional inspection oversight (including preparation and documentation) totals approximately 0.6 to 0.85 full time equivalent personnel. Region I intends to accomplish this additional effort at Peach Bottom through the use of budgeted resources.

In addition to the inspection activities detailed above, Region I proposes the following management activities which are also outside those specified in the ROP:

Conduct periodic management meetings and branch chief site visits focused on Exelon's
continuing improvement initiatives in the areas of security, behavioral observation
program, and SCWE. In addition, this would include Regional Administrator (RA) and/or
Deputy RA involvement in the annual assessment (public) meeting and, potentially,
other periodic or special meetings and site visits to address issues of heightened public
interest.

- Senior Management review and approval of assessment letters and special correspondence with Exelon and external stakeholders. An example would include subsequent CAL correspondence.
- Routine telephone calls (approximately weekly) between regional management and Peach Bottom site management to discuss Exelon's progress in implementing a proprietary security organization, results of SCWE surveys, and progress of corrective actions resulting from the root cause assessment of inattentive security officers.
- DRP and DRS branch chiefs and inspection personnel will attend selected security shift turnovers to introduce himself/herself to each crew, and provide a summary of the AIT findings.

### Return to Normal NRC Monitoring

The staff plans to return to normal NRC monitoring efforts consistent with the Action Matrix following NRC verification of the satisfactory completion of Exelon's corrective actions from their root cause assessment. It is anticipated that a return to normal monitoring would occur in the latter half of 2008. The region would request an extension beyond 2008 if on-going NRC reviews (including, but not limited to, those associated with any potential willful actions) provide information indicating the need for additional oversight.

Consistent with the Staff Requirements Memorandum (SRM) dated May 27, 2004 (ML 041480131), a copy of this Deviation Memorandum will be provided to the Commission and the deviation will be discussed at the next Agency Action Review Meeting. Pending your approval, the NRC staff will develop a communication approach to ensure that the licensee and stakeholders are appropriately informed.

Approval

Luis A. Reyes

Executive Director operations

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