

#### UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406-1415

March 3, 2008

Mr. Charles G. Pardee Chief Nuclear Officer and Senior Vice President Exelon Generation Company, LLC 200 Exelon Way Kennett Square, PA 19348

SUBJECT: Annual Assessment Letter – Peach Bottom Atomic Power Station (Report 05000277, 05000278/2008001)

Dear Mr. Pardee:

On February 13, 2008, the NRC staff completed its performance review of Peach Bottom Atomic Power Station (PBAPS). Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

With the exception of information already available in the public domain, including recent activities associated with inattentive security officers, this performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked "Official Use Only - Security Information" will include the security cornerstone review and resultant inspection plan.

For the six cornerstones related to reactor and radiation safety, Peach Bottom Units 2 and 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. However, there was a security-related finding of low to moderate safety significance (White) in the physical protection cornerstone that was related to security officer inattentiveness and assigned to the last quarter of 2007. The security-related finding had a documented cross-cutting aspect in the area of safety conscious work environment (SCWE) because the behaviors and interactions within the security organization did not encourage the free flow of information related to raising safety issues, S.1(a)<sup>1</sup>.

As a result of the security officer inattentiveness, the NRC performed Augmented Inspection Team (AIT) and AIT Followup inspections to evaluate the circumstances associated with the event to review your corrective actions and to determine the significance of the issue. The NRC issued a Confirmatory Action Letter on October 19, 2007, (ML072920283) to formalize Exelon's agreement to complete certain actions in response to the inattentive security officers and SCWE issues. We also determined that additional regulatory oversight of PBAPS, beyond the

<sup>&</sup>lt;sup>1</sup> A descriptor which correlates to cross-cutting aspects in Inspection Manual Chapter 0305, "Operating Reactor Assessment program."

2

routine baseline inspections provided by the Reactor Oversight Process (ROP), was warranted. On November 23, 2007, the NRC Executive Director for Operations approved a deviation memorandum (ML073320344) which provides for enhanced oversight of PBAPS. This enhanced oversight includes additional inspections in the areas of security force performance monitoring, corrective actions, safety conscious work environment, and completion of your Confirmatory Action Letter commitments. The NRC plans on conducting a supplemental inspection following notification that sufficient progress has been made in implementing corrective actions related to the White finding. Also, our review of the inattentive security officers is continuing and we will inform you of our conclusions at the completion of our investigation.

Notwithstanding the physical protection cornerstone, plant performance for the fourth quarter 2007, as well as for the first three quarters of the assessment cycle, at Peach Bottom Units 2 and 3 for the six cornerstones associated with reactor and radiation safety was within the Licensee Response column of the NRC's Action Matrix because all inspection findings had very low safety significance (Green) and all PIs indicated performance at a level requiring no additional NRC oversight (Green). Therefore, for these six cornerstones, we plan to conduct ROP baseline inspections at your facility.

The NRC determined that Exelon's response to the SCWE issue identified in September 2007 was appropriate. Exelon completed a thorough root cause evaluation in October 2007 and implemented numerous corrective actions, including security organization SCWE surveys conducted by an independent third party, SCWE training for all first-line supervisors and managers across the site, and small group discussions led by the Plant Manager for all site personnel regarding a healthy SCWE. Exelon has appropriately scheduled additional actions to address this issue including SCWE surveys of all site personnel and contractors, continuing training on SCWE for all site personnel, and corrective action effectiveness reviews. As a result, the NRC concluded that your scope of efforts and progress to date, in response to the White finding and concerns in the area of safety conscious work environment, were acceptable. Therefore, consistent with our ROP assessment process, the NRC has concluded that a substantive cross-cutting issue in the area of safety conscious work environment does not exist at this time.

The NRC is aware of the actions that you have taken or planned in response to the SCWE issues at Peach Bottom and notes that several actions, including those addressing the results of the February 2008 site-wide SCWE survey, remain to be completed. In order to understand the effectiveness of your corrective action plan implementation, the NRC will continue to monitor Exelon's progress in addressing SCWE issues through baseline, supplemental, and deviation memorandum-related inspections. In accordance with the Confirmatory Action Letter (CAL), we will schedule a meeting with you in April 2008 to discuss SCWE survey results of the security organizations at all Exelon sites. Furthermore, we request that you discuss the status of CAL commitments, including those related to the SCWE issues, during the upcoming annual assessment meeting, which is tentatively scheduled in June 2008. Based on the results of these continuing inspections and oversight activities, we will re-evaluate during the next mid-cycle assessment whether a substantive cross-cutting issue in SCWE is warranted.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through June 30, 2009. The inspection plan is provided to allow for the resolution of

any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site 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).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Paul Krohn at 610-337-5120 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

## /RA/

### Samuel J. Collins Regional Administrator

Docket Nos. 50-277, 50-278 License Nos. NPF-44, NPF-56

Enclosure: Peach Bottom Inspection/ Activity Plan

cc w/encl:

- C. Crane, Executive Vice President, Exelon, Chief Operating Officer, Exelon Generation
- J. Grimes, Site Vice President, Peach Bottom Atomic Power Station
- M. Pacilio, Chief Operating Officer, Exelon
- M. Massaro, Plant Manager, Peach Bottom Atomic Power Station
- J. Armstrong, Regulatory Assurance Manager Peach Bottom
- J. Bardurski, Manager, Financial Control & Co-Owner Affairs
- R. DeGregorio, Senior Vice President, Mid-Atlantic
- P. Cowan, Director, Licensing and Regulatory Affairs
- J. Bradley Fewell, Assistant General Counsel, Exelon Nuclear
- Manager Licensing, PBAPS

Director, Training

- Correspondence Control Desk
- D. Allard, Bureau of Radiation Protection, Department of Environmental Protection
- R. McLean, Power Plant and Environmental Review Division (MD)
- S. Pattison, Asst. Secretary, MD Department of the Environment
- A. Lauland, Director, Homeland Security
- T. Snyder, MD Department of Environment
- Public Service Commission of Maryland, Engineering Division

Board of Supervisors, Peach Bottom Township

B. O'Connor, Council Administrator of Harford County

R. Ayers, Deputy Manager, Harford County Div of Emergency Operations

E. Crist, Harford County Emergency Operations

R. Brooks, Cecil County Dept. of Emergency Services

Mr. & Mrs. Dennis Hiebert, Peach Bottom Alliance

E. Epstein, TMI - Alert

J. Johnsrud, National Energy Committee, Sierra Club

Mr. & Mrs. Kip Adams

R. Fletcher, Department of Environment, Radiological Health Program

J. Powers, Director, PA Office of Homeland Security

R. French, Dir, PA Emergency Management Agency

D. Lockbaum, Union of Concerned Scientists

Institute of Nuclear Power Operations (INPO)

The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site 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).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Paul Krohn at 610-337-5120 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Samuel J. Collins Regional Administrator

Distribution w/encl:	(via E-mail)	P. Bamford, Backup NRR
S. Collins, RA		E. Brenner, OPA
M. Dapas, DRA		F.Peduzzi, NSIR
D. Lew, DRP		D. Dorman, NSIR
J. Clifford, DRP		J. Andersen, NRR
M. Gamberoni, DRS		C. Carpenter, OE
D. Roberts, DRS		R. Schmidt, OCA
P. Krohn, DRP		D. Screnci, PAO
J. Trapp, DRS		N. Sheenhan, PAO
R. Fuhrmeister, DRP		S. Barr, DRS
T. Setzer, DRP		D. Silk, DRS
F. Bower, DRP - Sr Re	sident Inspector	P. Frechette, DRS
M. Brown, DRP - Resid	lent Inspector	R. Barkley, ORA
S. Schmitt - Resident C	)A	DRS Branch Chiefs
G. West, RI OEDO		Region I Docket Room (with concurrences)
H. Chernoff, NRR		<u>JWT1@nrc.gov</u>
J. Lubinski, NRR		ROPreports@nrc.gov
J. Hughey PM NRR		RidsNrrDirslpab@nrc.gov

SUNSI Review Complete: <u>PGK</u> (Reviewer's Initials)

Document Name:S:\ROP-8 EOC REVIEWANNUAL ASSESSMENT LETTERS\BRANCH 4\PB 2007 END-OF-CYCLE LETTER REV13.DOC After declaring this document "An Official Agency Record" it will be released to the Public. To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

### ML080630190

OFFICE	RI/DRP	RI/DRS	RI/DRP	NRR/NSIR	RI/ORA
NAME	PKrohn/PGK	MGamberoni/ *	DLew/DCL	DDorman/ **	SCollins/SJC
DATE	03/ 02 /08	03/ 01 /08	03/ 01/08	03/ 03 /08	3/ 03/08

#### OFFICIAL RECORD COPY

\* Darrell Roberts concurred based on a verbal discussion with David Lew

\*\* Telecon concurrence from R. Correia c1058, 3/3/08, PGKrohn

Page 1 of 2

02/28/2008 10:24:20 Report 22

# Peach Bottom Inspection / Activity Plan 01/01/2008 - 06/30/2009

Unit	1			No. of Staff	Planne	d Dates	Inspection		
Number	Inspection A	Activity	Title	on Site	Start	End	Туре		
	71122 - RADWASTE 1								
2,3	IP 7112202		Radioactive Material Processing and Transportation		02/20/2008	02/22/2008	Baseline Inspections		
	7111121	- CDBI		7					
2,3	IP 7111121		Component Design Bases Inspection		03/17/2008	03/21/2008	Baseline Inspections		
2,3	IP 7111121		Component Design Bases Inspection		03/31/2008	04/04/2008	Baseline Inspections		
2,3	IP 7111121		Component Design Bases Inspection		04/07/2008	04/11/2008	Baseline Inspections		
	7111111B	- LSRO	REQUAL INSPECTION	4					
2,3	IP 7111111E	3	Licensed Operator Requalification Program		06/02/2008	06/05/2008	Baseline Inspections		
	EP	- EP EX	ERCISE EVALUATION	4					
2, 3	IP 7111401		Exercise Evaluation		04/21/2008	04/25/2008	EP Baseline Inspection		
2, 3	IP 7111404		Emergency Action Level and Emergency Plan Changes		04/21/2008	04/25/2008	EP Baseline Inspection		
2,3	IP 71151-EF	P01	Drill/Exercise Performance		04/21/2008	04/25/2008	Baseline Inspections		
2, 3	IP 71151-EF	P02	ERO Drill Participation		04/21/2008	04/25/2008	Baseline Inspections		
2,3	IP 71151-EF	203	Alert & Notification System		04/21/2008	04/25/2008	Baseline Inspections		
	TI 171	- TI 171		3					
2,3	IP 2515/171		Verification of Site Specific Implementation Of B.5.b Phase 2 & 3 Mitigating Strategies		04/28/2008	05/02/2008	Generic Safety Inspection		
	ISFSI	- MAY 2	008 UNIT 2&3 ISFSI LOADING CAMPAIGN	1					
2,3	IP 60855.1		Operation of an Independent Spent Fuel Storage Installation at Operating Plants		05/01/2008	05/31/2008	Other Routine		
	7112201	- PUB R	AD SAFETY - RETS	1					
2, 3	IP 60855.1		Operation of an Independent Spent Fuel Storage Installation at Operating Plants		05/12/2008	05/16/2008	Other Routine		
2,3	IP 7112201		Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		05/12/2008	05/16/2008	Baseline Inspections		
	CAL INSP	- CAL S	TATUS INSPECTION	2					
2,3	IP 93800		Augmented Inspection Team		06/02/2008	06/06/2008	Event Response Inspec		
	71122	- RADW	ASTE	1					
2,3	IP 7112101		Access Control to Radiologically Significant Areas		07/28/2008	08/01/2008	Baseline Inspections		
2,3	IP 7112103		Radiation Monitoring Instrumentation and Protective Equipment		07/28/2008	08/01/2008	Baseline Inspections		
2, 3	IP 7112202		Radioactive Material Processing and Transportation		07/28/2008	08/01/2008	Baseline Inspections		
	12/08EXM	- U2&3 (	OPERATOR LICENSING INITIAL EXAMS	5					
2	U01692		FY09 - PEACH BOTTOM UNIT 2 & 3 INITIAL OPERATOR EXAM		11/10/2008	11/14/2008	Not Applicable		
2	U01692		FY09 - PEACH BOTTOM UNIT 2 & 3 INITIAL OPERATOR EXAM		12/08/2008	12/19/2008	Not Applicable		
	71121	- OCC R	RAD SAFETY	1					
2,3	IP 7112101		Access Control to Radiologically Significant Areas		08/18/2008	08/22/2008	Baseline Inspections		
2, 3	IP 7112102		ALARA Planning and Controls		08/18/2008	08/22/2008	Baseline Inspections		
2, 3	IP 7112103		Radiation Monitoring Instrumentation and Protective Equipment		08/18/2008	08/22/2008	Baseline Inspections		

This report does not include INPO and OUTAGE activities. This report shows only on-site and announced inspection procedures. Page 2 of 2

02/28/2008 10:24:20 Report 22

# Peach Bottom Inspection / Activity Plan 01/01/2008 - 06/30/2009

Unit			No. of Staff	Planned Dates		Inspection
Number	Inspection Activity	Title	on Site	Start	End	Туре
	71121 - OCC F	RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		09/22/2008	09/26/2008	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		09/22/2008	09/26/2008	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/22/2008	09/26/2008	Baseline Inspections
	7111108G - U2 INSERVICE INSPECTION		1			
2	IP 7111108G	Inservice Inspection Activities - BWR		09/29/2008	10/03/2008	Baseline Inspections
	71121 - OCC F	RAD SAFETY	1			
2, 3	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		11/10/2008	11/14/2008	Other Routine
2, 3	IP 7112101	Access Control to Radiologically Significant Areas		11/10/2008	11/14/2008	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		11/10/2008	11/14/2008	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/10/2008	11/14/2008	Baseline Inspections
2,3	IP 71151-OR01	Occupational Exposure Control Effectiveness		11/10/2008	11/14/2008	Baseline Inspections
2,3	IP 71151-PR01	RETS/ODCM Radiological Effluent		11/10/2008	11/14/2008	Baseline Inspections
	711111B - BIENN	IAL REQUAL INSP WITH P/F RESULTS	3			
2, 3	IP 7111111B	Licensed Operator Requalification Program		03/02/2009	03/13/2009	Baseline Inspections
	TRI FIRE - TRIEN	INIAL FIRE PROTECTION INSPECTION	3			
2, 3	IP 7111105T	Fire Protection [Triennial]		03/16/2009	03/20/2009	Baseline Inspections
2, 3	IP 7111105T	Fire Protection [Triennial]		03/30/2009	04/03/2009	Baseline Inspections
	71121 - OCC F	RAD	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		04/20/2009	04/24/2009	Baseline Inspections
2, 3	IP 7112102	ALARA Planning and Controls		04/20/2009	04/24/2009	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/20/2009	04/24/2009	Baseline Inspections