



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

August 31, 2006

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

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -
PEACH BOTTOM ATOMIC POWER STATION

Dear Mr. Crane:

On August 7, 2006, the NRC staff completed its performance review of Peach Bottom Atomic Power Station for the first half of the calendar year 2006 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous twelve months. 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.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked "Exempt from Public Disclosure in accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance for the most recent quarter at Peach Bottom Units 2 and 3 was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through March 31, 2008. 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 <http://www.nrc.gov/reading-rm/adams.html> (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 me at 610-337-5186 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

James M. Trapp, Chief
Reactor Projects Branch 4
Division of Reactor Projects

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

Enclosure: Peach Bottom Inspection/ Activity Plan

cc w/encl:

Site Vice President, Peach Bottom Atomic Power Station
Plant Manager, Peach Bottom Atomic Power Station
Regulatory Assurance Manager - Peach Bottom
Associate General Counsel, Exelon Generation Company
Manager, Financial Control & Co-Owner Affairs
Manager Licensing, PBAPS
Director, Training
Correspondence Control Desk
Director, Bureau of Radiation Protection (PA)
R. McLean, Power Plant and Environmental Review Division (MD)
G. Aburn, Maryland Department of Environment
T. Snyder, Director, Air and Radiation Management Administration,
Maryland Department of the Environment (SLO, MD)
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
Vice President, Licensing and Regulatory Affairs
Vice President, Operations Mid-Atlantic
Senior Vice President, Nuclear Services
Director, Licensing and Regulatory Affairs
J. Fewell, Assistant General Counsel

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Sincerely,

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James M. Trapp, Chief
Reactor Projects Branch 4
Division of Reactor Projects

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

Enclosure: Peach Bottom Inspection/ Activity Plan

Distribution w/encl: (via E-mail)

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- M. Dapas, DRA
- J. Trapp, DRP
- C. Khan, DRP
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- D. Schroeder, DRP - NRC Resident Inspector
- S. Schmitt, DRP - NRC Resident OA
- B. Sosa, RI OEDO
- R. Guzman, NRR
- J. Kim, PM, NRR (Back up)

Region I Docket Room (with concurrences)

- D. Screnci, PAO
- N. Sheenhan, PAO
- DRS Director
- DRS Deputy Director
- DRS Branch Chiefs
- RidsNrrDipb@nrc.gov
- Institute of Nuclear Power Organization (INPO)

SUNSI Review Complete: _____ **JMT** _____ (Reviewer's Initials)

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OFFICE	RI/DRP		RI/DRP		RI/DRP	E
NAME	FBower/CBK FOR	CKhan		JTrapp		
DATE	08/28/06	08/28/06		08/28/06		

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Peach Bottom
Inspection / Activity Plan
 07/01/2006 - 03/31/2008

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	37801	- SAFETY REV, DES CHNGS, MODS	1			
1	IP 37801	Safety Reviews, Design Changes, And Modifications At Permanently Shutdown Reactors		06/19/2006	07/31/2006	Other Routine
	40801	- SELF-ASSMT, AUDITS, CORRECTIVE ACTIONS	1			
1	IP 40801	Self-Assessment, Auditing, And Corrective Action At Permanently Shutdown Reactors		06/19/2006	07/31/2006	Other Routine
	83750	- OCCUPATIONAL RADIATION EXPOSURE	1			
1	IP 83750	Occupational Radiation Exposure		06/19/2006	07/31/2006	Other Routine
	84750	- RAD WST TRTMT, EFF, AND ENV MONITORING	1			
1	IP 84750	Radioactive Waste Treatment, And Effluent And Environmental Monitoring		06/19/2006	07/31/2006	Other Routine
	86750	- SOLID RADWST MGMT AND TRANS OF RAD MAT	1			
1	IP 86750	Solid Radioactive Waste Management And Transportation Of Radioactive Materials		06/19/2006	07/31/2006	Other Routine
	36801	- ORG, MGMT, COST CONTROL	1			
1	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors		06/30/2006	08/11/2006	Other Routine
	711112B	- MAINTENANCE RULE	1			
2,3	IP 711112B	Maintenance Effectiveness		07/17/2006	07/21/2006	Baseline Inspections
	7111107B	- HEAT SINK	2			
2,3	IP 7111107B	Heat Sink Performance		07/24/2006	07/28/2006	Baseline Inspections
	71121	- OCC RAD SAF	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		07/31/2006	08/04/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		07/31/2006	08/04/2006	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		07/31/2006	08/04/2006	Baseline Inspections
	7111108G	- INSERVICE INSPECTION - UNIT 2	1			
2	IP 7111108G	Inservice Inspection Activities - BWR		09/18/2006	09/29/2006	Baseline Inspections
	71121	- OCC RAD PROT	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		09/25/2006	09/29/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		09/25/2006	09/29/2006	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/25/2006	09/29/2006	Baseline Inspections
	TI-169	- MSPI TI-169	1			
2,3	IP 2515/169	Mitigating Systems Performance Index Verification		10/30/2006	11/10/2006	Safety Issues
	71121	- OCC RAD PROT	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		11/13/2006	11/17/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		11/13/2006	11/17/2006	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/13/2006	11/17/2006	Baseline Inspections
2,3	IP 71151	Performance Indicator Verification		11/13/2006	11/17/2006	Baseline Inspections
	TI-167	- TI: SHUTDOWN COOLING	3			
2,3	IP 2515/167	Assurance of Industry Implementation of Key Shutdown Voluntary Initiatives		11/27/2006	12/01/2006	Safety Issues

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

Peach Bottom
Inspection / Activity Plan
07/01/2006 - 03/31/2008

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	2/5EXAM	- OPERATOR LICENSING INITIAL EXAMS	3			
2	U01612	PEACH BOTTOM, UNIT 2&3 INITIAL EXAM (2/07)		01/08/2007	01/12/2007	Not Applicable
2	U01612	PEACH BOTTOM, UNIT 2&3 INITIAL EXAM (2/07)		02/05/2007	02/16/2007	Not Applicable
	7111111B	- L.O.(PWR.) REQUAL. PROG. + P/F REVIEW	3			
2,3	IP 7111111B	Licensed Operator Requalification Program		02/26/2007	03/02/2007	Baseline Inspections
2,3	IP 7111111B	Licensed Operator Requalification Program		03/05/2007	03/09/2007	Baseline Inspections
	71122	- PUBLIC RAD PROT - RETS	1			
2,3	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		02/12/2007	02/16/2007	Baseline Inspections
	71111117	- MODS AND 50.59	4			
2,3	IP 7111102	Evaluation of Changes, Tests, or Experiments		03/05/2007	03/09/2007	Baseline Inspections
2,3	IP 7111117B	Permanent Plant Modifications		03/05/2007	03/09/2007	Baseline Inspections
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		04/09/2007	04/13/2007	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		04/09/2007	04/13/2007	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/09/2007	04/13/2007	Baseline Inspections
	71152B	- PI&R	4			
2,3	IP 71152B	Identification and Resolution of Problems		04/23/2007	04/27/2007	Baseline Inspections
2,3	IP 71152B	Identification and Resolution of Problems		05/14/2007	05/18/2007	Baseline Inspections
	60855.1	- OPERATION OF AN ISFSI	3			
2,3	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		05/01/2007	09/15/2007	Other Routine
	6/2 EXAM	- INITIAL LSRO OPERATOR EXAM	2			
2	U01660	FY07 - PEACH BOTTOM (UNIT 2&3) INITIAL LSRO EXAM OPERATOR		05/05/2007	05/09/2007	Not Applicable
2	U01660	FY07 - PEACH BOTTOM (UNIT 2&3) INITIAL LSRO EXAM OPERATOR		06/02/2007	06/06/2007	Not Applicable
	71114	- EP PRGM INSP	1			
2,3	IP 7111402	Alert and Notification System Testing		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 7111403	Emergency Response Organization Augmentation Testing		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 7111404	Emergency Action Level and Emergency Plan Changes		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 71151-EP01	Drill/Exercise Performance		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 71151-EP02	ERO Drill Participation		06/18/2007	06/22/2007	Baseline Inspections
2,3	IP 71151-EP03	Alert & Notification System		06/18/2007	06/22/2007	Baseline Inspections
	7112202	- PUB RAD SAFETY - RADWASTE	1			
2,3	IP 7112202	Radioactive Material Processing and Transportation		06/18/2007	06/22/2007	Baseline Inspections
	7112203	- PUB RAD SAFETY - REMP	1			
2,3	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Pr		07/30/2007	08/03/2007	Baseline Inspections

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	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		09/10/2007	09/14/2007	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		09/10/2007	09/14/2007	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		09/10/2007	09/14/2007	Baseline Inspections
	7111108G	- U3 IN-SERVICE INSPECTION	1			
3	IP 7111108G	Inservice Inspection Activities - BWR		10/01/2007	10/05/2007	Baseline Inspections
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		10/08/2007	10/12/2007	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		10/08/2007	10/12/2007	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		10/08/2007	10/12/2007	Baseline Inspections
	7111111B	- LSRO REQUAL PROG. OPTEST @PB +PF REVIEW	2			
2,3	IP 7111111B	Licensed Operator Requalification Program		11/01/2007	11/01/2007	Baseline Inspections
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		12/10/2007	12/14/2007	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		12/10/2007	12/14/2007	Baseline Inspections
2,3	IP 71151	Performance Indicator Verification		12/10/2007	12/14/2007	Baseline Inspections
	7111121	- CDBI	8			
2,3	IP 7111121	Component Design Bases Inspection		03/10/2008	03/14/2008	Baseline Inspections
2,3	IP 7111121	Component Design Bases Inspection		03/24/2008	03/28/2008	Baseline Inspections
2,3	IP 7111121	Component Design Bases Inspection		03/31/2008	04/04/2008	Baseline Inspections