

August 30, 2005

Mr. Christopher M. Crane
President and CNO
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way KSA 3-E
Kennett Square, PA 19348

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

Dear Mr. Crane:

On August 4, 2005, the NRC staff completed its performance review of Peach Bottom Atomic Power Station Units 2 and 3 for the first half of the calendar year 2005 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 as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Plant performance at Peach Bottom Unit 2 for the most recent quarter was within the Regulatory Response column of the NRC's Action Matrix based on one White PI in the Initiating Events cornerstone. Peach Bottom Unit 2 had three scrams with a Loss of Normal Heat Removal within twelve calendar quarters causing this PI to change from Green to White. Inspection findings at Unit 2 were all classified as having very low safety significance (Green). We will perform reactor oversight process (ROP) baseline inspections and one supplemental inspection at Peach Bottom Unit 2 for the instance of a White PI as scheduled in the enclosed inspection plan.

Plant performance at Peach Bottom Unit 3 for the most recent quarter 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 ROP baseline inspections at Peach Bottom Unit 3.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through March 31, 2007. 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

Mr. Christopher M. Crane

2

during 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 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Dr. Mohamed Shanbaky at 610-337-5209 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Brian E. Holian, Director
Division of Reactor Projects

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

Enclosure: Peach Bottom Inspection/Activity Plan

cc w/encl

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
Associate General Counsel, Exelon Generation Company
J. Bradley Fewell, Assistant General Counsel, Exelon Nuclear
Manager, Financial Control & Co-Owner Affairs
Director, Nuclear Training
Correspondence Control Desk
Director, Bureau of Radiation Protection (PA)
R. McLean, Power Plant and Environmental Review Division (MD)
R. Fletcher, 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

Distribution w/encl: **(via E-mail)**

- S. Collins, RA
- M. Dapas, DRA
- M. Shanbaky, DRP
- A. Burritt, DRP
- F. Bower, DRP - NRC Senior Resident Inspector
- D. Schroeder, DRP - NRC Resident Inspector
- S. Schmitt, DRP - NRC Resident OA
- D. Screnci, PAO
- N. Sheehan, PAO
- DRS Director
- DRS Deputy Director
- DRS Branch Chiefs
- RidsNrrDipmlipb@nrc.gov
- Institute of Nuclear Power Operations (INPO)
- S. Lee, RI OEDO
- J. Clifford, NRR
- G. Wunder, PM, NRR
- T. Tate, PM, NRR (Backup)
- Region I Docket Room **(with concurrences)**
- ROPreports@nrc.gov (All IRs)

DOCUMENT NAME: S:\ROP-6 Mid-Cycle Review\2005 Mid-Cycle Letters\PB ROP 6 MC letterR1.wpd

SISP Review Complete: MMS (Reviewer's Initials)

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

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

OFFICE	RI/DRP		RI/DRP		/	
NAME	FBower		MShanbaky			
DATE	08/24/05		08/30/05			

OFFICIAL RECORD COPY

Peach Bottom
Inspection / Activity Plan
08/01/2005 - 03/31/2007

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		08/15/2005	08/19/2005	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		08/15/2005	08/19/2005	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/15/2005	08/19/2005	Baseline Inspections
	36801	- ORGANIZATION, MANAGMENT, COST CONTROLS	1			
1	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors		07/06/2005	08/06/2005	Other Routine
	37801	- SAFETY REVIEWS, DESIGN CHANGES, AND MODS	1			
1	IP 37801	Safety Reviews, Design Changes, And Modifications At Permanently Shutdown Reactors		07/06/2005	08/06/2005	Other Routine
	40801	- SELF ASSESSMENT,AUDIT, CORRECTIVE ACTION	1			
1	IP 40801	Self-Assessment, Auditing, And Corrective Action At Permanently Shutdown Reactors		07/06/2005	08/06/2005	Other Routine
	64704	- FIRE PROTECTION	1			
1	IP 36801	Organization, Management, And Cost Controls At Permanently Shutdown Reactors		07/06/2005	08/06/2005	Other Routine
	81700	- PHYSICAL SECURITY ASSESSMENT	1			
1	IP 81700	Physical Security Program For Power Reactors		07/06/2005	08/06/2005	Other Routine
	83750	- OCCUPATIONAL RADIATION EXPOSURE	1			
1	IP 83750	Occupational Radiation Exposure		07/06/2005	08/06/2005	Other Routine
	84750	- RADWSTE TREAT, EFFLUENT, ENVIRONMENTAL	1			
1	IP 84750	Radioactive Waste Treatment, And Effluent And Environmental Monitoring		07/06/2005	08/06/2005	Other Routine
	86750	- SOLID RADWST MANAGMENT	1			
1	IP 86750	Solid Radioactive Waste Management And Transportation Of Radioactive Materials		07/06/2005	08/06/2005	Other Routine
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		08/08/2005	08/12/2005	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		08/08/2005	08/12/2005	Baseline Inspections
2,3	IP 7112202	Radioactive Material Processing and Transportation		08/08/2005	08/12/2005	Baseline Inspections
	7111111B	- LSRO INSPECTION-PASS/FAIL RESULTS	2			
2,3	IP 7111111B	Licensed Operator Requalification Program		11/15/2005	11/19/2005	Baseline Inspections
	7111108G	- INSERVICE INSPECTION - U3	1			
3	IP 7111108G	Inservice Inspection Activities - BWR		09/26/2005	09/30/2005	Baseline Inspections
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		09/26/2005	09/30/2005	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		09/26/2005	09/30/2005	Baseline Inspections
	95001	- U2 SCRAM WITH LOSS OF HEAT SINK WHITE PI	1			
2	IP 95001	Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area		11/07/2005	11/11/2005	Supplemental Progra
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		11/14/2005	11/18/2005	Baseline Inspections

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

Peach Bottom
Inspection / Activity Plan
08/01/2005 - 03/31/2007

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	71121 - OCC RAD SAFETY		1			
2,3	IP 7112102	ALARA Planning and Controls		11/14/2005	11/18/2005	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/14/2005	11/18/2005	Baseline Inspections
2,3	IP 71151	Performance Indicator Verification		11/14/2005	11/18/2005	Baseline Inspections
	TRI FIRE - TRIENNIAL FIRE PROTECTION INSPECTION		3			
2,3	IP 7111105T	Fire Protection [Triennial]		01/23/2006	01/28/2006	Baseline Inspections
2,3	IP 7111105T	Fire Protection [Triennial]		02/06/2006	02/10/2006	Baseline Inspections
	7111121 - SSD&PC		5			
2,3	IP 7111121	Safety System Design and Performance Capability		03/13/2006	03/17/2006	Baseline Inspections
2,3	IP 7111121	Safety System Design and Performance Capability		03/27/2006	03/31/2006	Baseline Inspections
2,3	IP 7111121	Safety System Design and Performance Capability		04/10/2006	04/14/2006	Baseline Inspections
2,3	IP 7111121	Safety System Design and Performance Capability		04/17/2006	04/21/2006	Baseline Inspections
	71121 - OCCUPATIONAL RAD PROT		1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		04/17/2006	04/21/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		04/17/2006	04/21/2006	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/17/2006	04/21/2006	Baseline Inspections
	7111401 - EXERCISE EVALUATION & EP PI VERIFICATION		5			
2,3	IP 7111401	Exercise Evaluation		04/24/2006	04/28/2006	Baseline Inspections
2,3	IP 71151	Performance Indicator Verification		04/24/2006	04/28/2006	Baseline Inspections
	71122 - PUBLIC RAD PROT		1			
2,3	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		06/12/2006	06/16/2006	Baseline Inspections
	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		08/07/2006	08/11/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		08/07/2006	08/11/2006	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/07/2006	08/11/2006	Baseline Inspections
	7111108G - INSERVICE INSPECTION - UNIT 2		1			
2	IP 7111108G	Inservice Inspection Activities - BWR		09/18/2006	09/22/2006	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

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

Peach Bottom
Inspection / Activity Plan
08/01/2005 - 03/31/2007

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	71121	- OCC RAD PROT	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		10/30/2006	11/03/2006	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		10/30/2006	11/03/2006	Baseline Inspections
2,3	IP 71151	Performance Indicator Verification		10/30/2006	11/03/2006	Baseline Inspections
	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	02/09/2007	Not Applicable
	7111111B	- LO REQUAL PROGRAM INSPECTION	3			
2,3	IP 7111111B	Licensed Operator Requalification Program		03/19/2007	03/30/2007	Baseline Inspections
	71121	- OCC RAD SAFETY	1			
2,3	IP 7112101	Access Control to Radiologically Significant Areas		02/12/2007	02/16/2007	Baseline Inspections
2,3	IP 7112102	ALARA Planning and Controls		02/12/2007	02/16/2007	Baseline Inspections
2,3	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		02/12/2007	02/16/2007	Baseline Inspections
	71111117	- MODS AND 50.59	3			
2,3	IP 7111102	Evaluation of Changes, Tests, or Experiments		03/05/2007	03/09/2007	Baseline Inspections
2,3	IP 711117B	Permanent Plant Modifications		03/05/2007	03/09/2007	Baseline Inspections