January 30, 2001

Mr. Oliver D. Kingsley
Chief Nuclear Officer
Exelon Generation Company
1400 Opus Place
Downers Grove, IL 60515-5701

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION
NRC INSPECTION REPORT NO. 05000277/2000-013, 05000278/2000-013
NRC INSPECTION REPORT NO. 05000277/2000-014, 05000278/2000-014

Dear Mr. Kingsley:

On December 22, 2000, a region-based team completed a baseline inspection of your problem identification and resolution programs at the Peach Bottom Atomic Power Station, Units 2 and 3. Also, on December 20, 2000, a region-based inspector completed a supplemental inspection of your activities associated with a WHITE finding in the area of classification of radioactive waste for disposal. The enclosed reports present the results of these inspections. The results of the supplemental and problem identification and resolution inspections were discussed on December 20 and 22, 2000, respectively, with Mr. J. Doering and other members of your staff.

The inspections included an examination of activities conducted under your license as they relate to problem identification and resolution and compliance with the Commission's rules and regulations and with the conditions of your operating license. Within these areas, the inspection involved selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of these inspections, we concluded that the implementation of your various problem identification and resolution programs in the past year was acceptable. We found that your corrective actions were adequate for the White finding involving failure to properly classify a shipment of radioactive waste. Overall, problems were properly identified, evaluated and resolved. The team identified one NO COLOR finding in the area of operator training. Contrary to an initial operator license application for one individual submitted to the NRC in August 1999 which stated that all required training was completed, the team found that the emergency preparedness portion of the individual's training was not completed until May 2000. This finding was determined to be a Severity Level IV violation of NRC requirements. However, because the problem was confined to one individual and because it has been entered into your problem identification and resolution program, the NRC is treating this issue as a non-cited violation in accordance with Section VI.A.1 of the NRC Enforcement Policy. If you deny this non-cited violation, you should provide a response, with the basis for the denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory

Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Peach Bottom facility.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be 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/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Wayne D. Lanning, Director
Division of Reactor Safety

Docket Nos. 05000277, 05000278
License Nos. DPR-44, DPR-56

Enclosures:
1. Inspection Report No. 05000277/2000-013; 05000278/2000-013
2. Inspection Report No. 05000277/2000-014, 05000278/2000-014

cc w/encl:
J. J. Hagan, Senior Vice President, Nuclear Operations
J. Skolds, Chief Operating Officer
J. Doering, Vice President, Peach Bottom Atomic Power Station
G. Johnston, Plant Manager, Peach Bottom Atomic Power Station
J. A. Benjamin, Licensing - Vice President, Exelon Nuclear
J. A. Hutton, Director, Licensing, Exelon Generation Company
G. Hunger, Chairman, Nuclear Review Board
P. Chabot, Director, Nuclear Oversight
A. F. Kirby, III, External Operations - Delmarva Power & Light Co.
A. A. Winter, Manager, Experience Assessment
J. W. Durham, Sr., Senior Vice President and General Counsel
H. C. Kresge, Manager, External Operations, Connectiv
N. J. Sproul, Manager, Financial Control & Co-Owner Affairs, Connectiv
R. McLean, Power Plant Siting, Nuclear Evaluations
D. Levin, Acting Secretary of Harford County Council
R. Ochs, Maryland Safe Energy Coalition
J. H. Walter, Chief Engineer, Public Service Commission of Maryland
Mr. & Mrs. Dennis Hiebert, Peach Bottom Alliance
Mr. & Mrs. Kip Adams
Commonwealth of Pennsylvania
State of Maryland
TMI - Alert (TMIA)

Distribution w/encl:
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NAME	L Prividy		W Ruland		J White		C Cowgill		W Lanning	
DATE	01/19/01		01/24/01		01/29/01		01/24/01		01/30/01	

OFFICE	RI/DRS									
NAME	R Nimitz									
DATE	01/29/01									

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.	05000277 05000278
License Nos.	DPR-44 DPR-56
Report Nos.	05000277/2000-013 05000278/2000-013
Licensee:	Exelon Generation Company
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Location:	Delta, PA 17314
Dates:	December 11 - 22, 2000
Inspectors:	L. Prividy, Senior Reactor Inspector, Team Leader J. Caruso, Operations Engineer D. Florek, Senior Project Engineer R. Nimitz, Senior Radiation Specialist
Approved by:	William H. Ruland, Chief Electrical Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000277-00-013; 05000278-00-013; on 12/11-15&18-22/2000; PECO Energy Company; Peach Bottom Atomic Power Station; Units 2 & 3; Annual baseline inspection for the identification and resolution of problems.

The inspection was conducted by a senior reactor inspector, operations engineer, senior project engineer, and a senior radiation specialist. The inspection identified one NO COLOR finding which was a non-cited violation. The significance of most/all findings is indicated by their color (Green, White, Yellow, Red) using Manual Chapter 0609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the violation.

Identification and Resolution of Problems

The team determined that PECO was effective at identifying problems and entering them into their problem identification and resolution (PI&R) programs. Workers were not reluctant to input safety issues into the station's PI&R programs. Few deficiencies were identified by external organizations, including the NRC. PECO identified problems in a timely manner, commensurate with their significance and ease of discovery. The team identified no instances in which conditions adverse to quality were being handled outside the corrective action program. The team found that PECO identified and implemented acceptable corrective actions for individual problems or issues. The corrective actions considered the significance of the issue or problem, extent of condition, generic implications, common cause, and previous occurrences. PECO identified root and contributing causes for significant conditions adverse to quality and adequately completed or scheduled completion of corrective actions. Nonetheless, the team identified two examples in the areas of operator training and qualification records where corrective actions for prior problems were not completely effective.

A. Inspector Identified Findings

NO COLOR - The team identified a non-cited Severity Level IV violation of 10 CFR 55.31(a)(4) because an operator license application was submitted to the NRC in August 1999 with incorrect information. The application was incorrect because it indicated that the individual completed all required training even though the emergency preparedness portion of his required training was not completed until May 2000 (approximately eight months after the individual had been licensed).

When evaluating this issue according to NRC Manual Chapter 0610*, Appendix B, it did involve extenuating circumstances in that the issue potentially impacted the NRC's ability to perform its regulatory function. The team's evaluation of the apparent cause indicated a problem between the emergency preparedness and operator training organizations, and limited to one individual. The issue was documented in PECO's corrective action program as Performance Enhancement Program Issue I0012084. (Section 4OA2.a)

B. Licensee Identified Violations

A violation, which would have been categorized as a potential Severity Level IV violation, was identified by PECO and has been reviewed by the team. Corrective actions taken or planned by PECO appear reasonable. This violation is listed in Section 40A7 of this report.

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (IP 71152)

a. Effectiveness of Problem Identification

(1) Inspection Scope

The team reviewed issues from the various PECO problem identification and resolution (PI&R) programs to determine if issues were identified at the appropriate threshold and entered into the PI&R programs for resolution. Items were reviewed across the seven cornerstones of safety as well as cross-cutting issues, which could affect multiple cornerstones to determine if problems were being properly identified, characterized and entered into the PI&R programs for evaluation and resolution. The team reviewed PI&R issues in the areas of operations, emergency preparedness, maintenance, engineering, security, radiological safety, chemistry, effluent controls, and radwaste. Issues were evaluated for completeness, accuracy, prompt evaluation of operability and reportability, and extent of condition. The evaluation predominantly covered licensee performance for corrective actions taken since December 1, 1999.

The team selected documents from all levels of the PI&R programs with a focus on risk significance and evaluated the effectiveness of PECO's actions on problems discussed therein. The team evaluated all levels and classes of performance enhancement process (PEP) documents (in the overall lot of about 450 for the past year) to determine PECO's threshold for identifying problems and entering them into the PI&R programs. Also, PECO's efforts in establishing the scope of the problem were evaluated by reviewing a select sample of the following documents: corrective actions on violations, non-conformance reports (NCR), Licensee Event Reports (LERs), action requests (ARs), operating experience inputs, internal and external audit reports, self-assessments, reactor trip reports, control room deficiencies, operator workarounds, operability evaluations, system health reports, radiological occurrence reports, Nuclear Review Board minutes, Plant Operations Review Committee minutes, Independent Station Engineering Group evaluations, selected engineering evaluations, and applicable program procedures. Current items within the new Trending Organization Performance program were reviewed. The PI&R program documents reviewed by the team are listed in Attachment 1 of this report.

The team reviewed the implementation of performance monitoring in selected risk significant systems to verify evaluation of functionality, availability, and equipment condition and ensure that PECO appropriately captured issues that could affect the unavailability of equipment tracked by performance indicators and the maintenance rule. System selection was based on plant risk insights derived from review of the Peach Bottom Individual Plant Evaluation and the systems' significance under the maintenance rule. In addition, the team conducted plant walkdowns and interviewed PECO permanent and contracted staff throughout the inspection to: 1) determine their level of understanding of the PI&R programs including its effectiveness; and 2) the willingness of employees to raise safety issues for inclusion in the PI&R programs.

(2) Issues and Findings

The team determined that PECO was effective at identifying problems and entering them into the PI&R programs. Few deficiencies were identified by external organizations, including the NRC. PECO identified problems in a timely manner, commensurate with their significance and ease of discovery. The team identified no instances in which conditions adverse to quality were being handled outside the corrective action program.

The team identified a violation of 10 CFR 55.31(a)(4) in that an operator license application contained incorrect information when it was submitted to the NRC in August 1999. 10 CFR 55.31(a)(4) requires that an applicant provide evidence of successfully completing the facility licensee's requirements to be licensed and a facility licensee shall certify this evidence. During review of PEP I0011337, which was issued in June 2000 concerning emergency preparedness qualifications for three senior reactor operators, the team identified that one of the three individuals had not completed the required emergency preparedness training program prior to receiving an NRC license. The August 1999 application was incorrect because it indicated that the individual completed all required training even though the emergency preparedness portion of the required training was not completed until May 2000 (approximately eight months after the individual had been licensed).

The Significance Determination Process in NRC Manual Chapter 0609 did not apply to the issue associated with this violation. However, the issue did involve extenuating circumstances in that it potentially impacted the NRC's ability to perform its regulatory function. The team's evaluation of the apparent cause indicated a problem between the emergency preparedness and operator training organizations confined to one individual. This violation was characterized as a "No Color" finding by the assessment process as described in NRC Manual Chapter 0610* Appendix B. The issue was documented in PECO's corrective action program as PEP I0012084. Therefore, it was being treated as a non-cited violation (NCV) consistent with Section VI.A.1 of the NRC Enforcement Policy. **(NCV 050000277/2000-013-01; 050000278/2000-013-01)**

PECO's audits and assessments were generally of good depth. Self-assessment activities were actively pursued and the findings of these self assessments were entered into the appropriate PI&R programs. Lessons learned from the Exelon State of the Fleet Assessment and the PI&R inspection at the Limerick Nuclear Generating Station were being applied. Nuclear Quality Assurance (QA), Nuclear Review Board, and the plant operational review committee (PORC) performed reviews of station performance in the PI&R area. In response to observations that the radwaste oversight groups have not been fully effective in self identifying problems as they relate to use of shipping casks and conformance with cask license and vendor documents, the radwaste organization has taken actions to implement various oversight activities.

The team noted that the station had a functioning operating experience program that identified and processed information for distribution from sources both outside and inside the station. The team determined that operating experience items were properly processed by the appropriate personnel using established procedures.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The team reviewed selected issues (See Attachment 1) from the PI&R programs to determine whether PECO was adequately prioritizing and evaluating issues.

(2) Issues and Findings

The team concluded that problems and issues entered into the problem identification and resolution programs were properly classified and prioritized for resolution, evaluation and root cause analyses, operability, and reportability. The team had no major concerns in this area. Issues were thoroughly reviewed at several levels within the PECO organization including the daily plant leadership team meeting where formal classification of the significant issues was determined. PECO graded the items via a procedure- described process. The process included categorization of the items consistent with perceived significance. The items reviewed indicated that they were properly categorized and prioritized in accordance with the program procedure.

PECO's PEP process was recently improved to include some up-front risk assessment information and help in establishing the correct priority for the PEP issue. However, changes to the process had not been formalized to assure a consistent method to assess potential consequences of an issue. Process improvements made by PECO appropriately considered actual consequences of the problem. Nonetheless, PECO's assessment of potential consequences (i.e., answering the "What else can go wrong?" question in each PEP) lacked formality. PECO had not provided formal proceduralized direction to the staff on how to determine potential consequences. As a result, the team noted a variety of approaches to determine potential consequences. The team identified some PEPs that should have considered the effect on the next barrier, the robustness of the next barrier to prevent the problem, and, if there was no barrier, how significant could it have been. Examples where the identification of potential consequences could have been improved were found in PEP I0011635, which addressed minor maintenance issues during TIP detector maintenance and in PEP I0011836, which addressed the failure to perform a control rod scram time test prior to declaring the rod to be operable.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The team reviewed the effectiveness of corrective actions to verify that corrective actions, commensurate with the problem or issue, were identified and implemented. The review included an evaluation to determine: if PECO considered extent of condition, generic implications, common cause, and previous occurrences; if classification and prioritization of the resolution of the problem were commensurate with its safety significance; if PECO identified root and contributing causes for significant conditions adverse to quality; and if corrective actions were completed in a timely manner or scheduled to be completed commensurate with the safety significance of the issue. A

listing of the problems and issues selected for review are contained in Attachment 1 of this report.

(2) Issues and Findings

The team found that PECO identified and implemented acceptable corrective actions for individual problems or issues. The corrective actions considered the significance of the issue or problem, extent of condition, generic implications, common cause, and previous occurrences. PECO personnel identified root and contributing causes for significant conditions adverse to quality. PECO adequately completed or scheduled completion of corrective actions.

The PECO corrective action program required the performance of a corrective action effectiveness evaluation for significant (i.e., significance level "A") PEPs. During the review of level "A" PEP I0011721, the team identified that a software error in the computer program used for administering PECO's corrective action program caused the effectiveness evaluation to be assigned to the wrong work group. PECO issued a PEP to identify and correct this error.

Although the team noted that most of PECO's corrective actions were fundamentally sound, the team identified two examples in the areas of operator training and qualification records where corrective actions for prior problems were not completely effective. In the first example discussed in Section 4OA2.1a, the team identified a violation of 10 CFR 55.31(a)(4) where PECO submitted an operator license application with incorrect information. Specifically, the application indicated that the individual completed all required training, even though the required emergency preparedness training was not completed. A similar violation was documented in Inspection Report 05000277 and 278/1998-011 where PECO submitted an application for renewal of an operator's license with inaccurate information. The renewal application was inaccurate because the individual had not completed the required training yet the application indicated the training was completed. The team concluded that the second violation could have been avoided if PECO's actions for the first violation had been applied to correct problems between the emergency preparedness and operator training organizations.

In the second example discussed in section 4AO7, PECO identified a violation of 10 CFR 55.53 where an individual performed the functions of a license operator after the individual no longer met the requirements to maintain his license active. To maintain an active license at Peach Bottom in the current calendar quarter, an individual must have performed the functions of an operator for five 12-hour shifts in the prior calendar quarter. This specific individual stood a total of four 12-hour shifts in the third calendar quarter of 2000, thus making him inactive to perform the functions of an operator in the fourth quarter of 2000. The individual had performed the functions of an operator for fifteen 12-hour shifts in the fourth calendar quarter of year 2000 even though he had not met the requirements to maintain his license active.

The team concluded that this PECO-identified violation could have been avoided if operations management had taken effective corrective action in response to a prior NRC inspection observation. In response to observations documented in NRC

inspection report 05000277 and 278/1998-004 associated with the unavailability of documentation to demonstrate that operators met the on-shift time requirements to maintain an active license, PECO directed the shift clerk to develop a report to track the on-shift time for licensed operators. Although PECO began keeping such records, they did not formally establish how these records were to be reviewed and used. As a result, management and the individual were not aware that the individual's qualifications to stand watch had lapsed.

For the above two issues, corrective actions in the areas of operator training and qualification records have not been effective. PECO entered this issue into their corrective action program as PEP I0012084 on December 21, 2000, to determine how these problems occurred, evaluate the extent of the problems, determine generic implications, and establish the appropriate corrective actions.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The team interviewed plant personnel to determine if personnel were hesitant to identify safety issues. The team also reviewed PECO's Nuclear Policy on Employee Issues dated October 20, 2000.

(2) Issues and Findings

There were no findings identified during this inspection.

4OA6 Meetings, Including Exit

.1 Exit Meeting Summary

The team presented the inspection results to Mr. J. Doering, Site Vice President and other members of licensee management during an exit meeting on December 22, 2000. PECO acknowledged the findings presented. No information examined or reviewed during the inspection was considered to be proprietary.

4OA7 Licensee Identified Violation

The following finding, which would have been categorized as a potential Severity Level IV violation, was identified by PECO and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy for being dispositioned as a non-cited violation (NCV).

NCV Tracking Number	Requirement PECO Failed to Meet
NCV 05000277; 278/2000-13-02	10CFR55.53 requires performance of operator duties during five 12-hour shifts in a prior calendar quarter to maintain an active license in the current quarter. An operator performed the functions of a licensed operator during four-12 hour shifts in the third quarter of 2000 and thus became inactive. The individual performed the functions of a reactor operator for fifteen 12-hour shifts in the fourth quarter of 2000 without having completed the required actions to restore the individual's license to an active status. This item is PEP I0012046 in PECO's corrective action program.

ATTACHMENTS

1. Partial List of Persons Contacted
   Items Open, Closed, and Discussed
   List of Acronyms
   List of Documents Reviewed
2. NRC's Revised Reactor Oversight Process

ATTACHMENT (1) - PARTIAL LIST OF PERSONS CONTACTED

PECO

M. Alfonso	Director, Training
J. Bouck	Sr. Manager, Operations
P. Davison	Director, Engineering
J. Doering	Site Vice President
I. Seddon	Nuclear Oversight Manager
H. Trimble	Radiation Protection Manager
A. Winter	Regulatory Assurance Manager

NRC

M. Buckley	Resident Inspector
A. McMurtray	Sr. Resident Inspector
W. Ruland	Electrical Branch Chief, DRS

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Opened and Closed

05000277 & 278/2000013-01NCV	Incorrect License Application Submitted to NRC (Section 4OA2.a)
05000277 & 278/2000013-02 NCV	Inactive Licensed Operator Performed the Functions of a Licensed Operator (Section 4OA7)

Closed

None

LIST OF ACRONYMS USED

EDG	Emergency Diesel Generator
LER	Licensee Event Report
NCV	Non cited violation
NRC	Nuclear Regulatory Commission
PI	Performance Indicator
PEP	Performance Enhancement Program
QA	Quality Assurance
SDP	Significance Determination Process
SW	Service Water
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report

ATTACHMENT (1) - LIST OF DOCUMENTS REVIEWED

Procedures

A-C-901	Control of Nonconformances
A-C-010	Operator Licenses Rev. 3
A-C-26,	Administrative Controls for Processing Work Orders, Rev. 4
A-C-41	Troubleshooting, Rework, Testing (TRT) Control Process, Rev. 1
AG-CG-19,	Self-Assessment Guideline, Rev 2
AC-CG-26,	Minor Maintenance, Rev. 1
AG-CG-26.1,	Equipment Trouble/Deficiency Tag Initiation and Processing, Rev. 1
AG-CG-26.10	Minor Maintenance, Rev. 1
AG-CG-050	Equipment Investigation and Troubleshooting Guideline
LR-C-10	Performance Enhancement Program
LR-CG-10	Performance Enhancement Program and Exhibits 1-12
LR-C-4	Operating Experience Assessment Program, Rev. 6
LR-CG-03-4	General Criteria for Placing Operating Experience on Nuclear Network

Performance Enhancement Program Issues (PEPs)

I0006974 dated May 13, 1997
I0007298 dated August 26, 1997
I0007624 dated November 17, 1997
I0008554 dated June 8, 1998
I0009425 dated February, 8, 1999
I0009486 dated November 9, 2000
I0009658 dated April 6, 1999
I0009917 dated August 6, 1998
I0009961 dated June 20, 1999
I0009986 dated June 22, 1999
I0010063 dated July 20, 1999
I0010066 dated July 16, 1999
I0010067 dated March 1, 1999
I0010073 dated June 30, 1999
I0010136 dated June 27, 2000
I0010159 dated August 14, 1999
I0010189 dated August 29, 1999
I0010228 dated September 12, 1999
I0010258 dated September 16, 1999
I0010271 dated September 17, 1999
I0010451 dated November 2, 1999
I0010518 dated November 23, 1999
I0010558 dated September 28, 2000
0010563 dated December 9, 1999
I0010570 dated December 13, 1999
I0010585 dated December 15, 1999
I0010745 dated February 2, 2000
I0010779 dated December 7, 2000
I0011072 dated April 10, 2000
I0010851 dated February 25, 2000
I0010852 dated February 25, 2000
I0010858 dated February 28, 2000
I0011040 dated April 3, 2000
I0011119 dated April 18, 2000
I0011155 dated April 25, 2000
I0011182 dated May 1, 2000
I0011191 dated May 3, 2000
I0011193 dated May 3, 2000
I0011201 dated May 2, 2000
I0011284 dated May 24, 2000
I0011337 dated June 6, 2000
I0011402 dated December 7, 2000
I0011470 dated December 7, 2000
I0011480 dated July, 17, 2000
I0011514 dated July 26, 2000
I0011516 dated December 8, 2000
I0011548 dated August 5, 2000
I0011562 dated August 7, 2000
I0011575 dated December 12, 2000
I0011581 dated August 4, 2000
I0011611 dated August 22, 2000
I0011635 dated August 23, 2000
I0011653 dated August 29, 2000
I0011714 dated September 15, 2000
I0011721 dated September 16, 2000
I0011763 dated December 4, 2000
I0011768 dated September 15, 2000
I0011797 dated September 28, 2000
I0011806 dated October 2, 2000
I0011815 dated September 16, 2000
I0011821 dated December 1, 2000
I0011836 dated December 15, 2000
I0011874 dated October 18, 2000
I0011906 dated October 25, 2000
I0011926 dated November 1, 2000
I0011935 dated December 12, 2000
I0011938 dated November 9, 2000
I0012046 dated December 12, 2000
I0012084 dated December 19, 2000

ATTACHMENT (1) - LIST OF DOCUMENTS REVIEWED (Cont.)

Action Requests

A0845058 dated May 2, 1994
A0912479 dated September 5, 1995
A1036992 dated July 9, 1996
A1170640 dated September 15, 1998
A1170649 dated September 15, 1998
A1179490 dated November 2, 1998
A1226822 dated September 4, 2000
A1237031 dated November 3, 1999
A1238474 dated November 11, 1999
A1239928 dated November 23, 1999
A1242034 dated December 30, 1999
A1242219 dated December 4, 2000
A1243811 dated December 27, 1999
A1246921 dated February 2, 2000
A1248145 dated January 20, 2000
A1248154 dated January 20, 2000
A1250659 dated February 7, 2000
A1250767 dated February 29, 2000
A1255584 dated March 9, 2000
A1256444 dated March 15, 2000
A1256654 dated March 16, 2000
A1256958 dated March 19, 2000
A1257741 dated March 23, 2000
A1263374 dated April 25, 2000
A1263514 dated April 26, 2000
A1266711 dated May 17, 2000
A1268270 dated June 5, 2000
A1271480 dated June 20, 2000
A1272683 dated June 29, 2000
A1273547 dated June 7, 2000
A1275062 dated July 17, 2000
A1275784 dated July 22, 2000
A1276569 dated July 27, 2000
A1277408 dated August 2, 2000
A1278124 dated August 8, 2000
A1289314 dated October 19, 2000
A1292011 dated November 9, 2000
A1292418 dated November 13, 2000
A1292696 dated November 29, 2000
A1293044 dated July 5, 1992
A1293880 dated November 29, 2000
A1294250 dated December 6, 2000
A1295308 dated December 5, 2000
A1295315 dated December 6, 2000
A1296699 dated December 14, 2000

Violations

99-09-01	Core Spray Room Cooler Fan Failed to Start
99-09-02	Deficiencies in Testing and Calibration Procedures
99-10	EDG Coolant Expansion Tank Drain Valve Bumped Open
99-10	4 KV Emergency Bus Degraded Grid Relays Could Not Be Calibrated
99-10	Scaffolding Erected before Having Approved Fire Suppression Evaluations
00-02-01	Failure to Classify Waste Per 10CFR61.55
00-02-02	Incorrect procedure Used to Secure Shipping Cask and Test Shipping Container
00-05-01	IST of SBLC Pumps Not Per ASME Code
00-08-02	Ineffective Corrective Actions for Isolation Valve Packing Gland Follower Failure
00-010-02	Failure to Comply with Instructions Given by Radiation Protection Personnel
00-010-03	Failure to Post and Barricade Properly a High Radiation Area
00-010-04	Unit 2B Drywell Wide Range Pressure Instrument Inoperable

Licensee Event Reports (LER)

2-00-004	Reduced ESW Cooling Water Flow Available to EDGs Due to Check Valve Leakage into SW System
2-00-005	Entering Mode 2 without Performing a Required Surveillance Test
3-00-001	Instrument Rack Root Valve Failure Causes Scram

Engineering Change Requests

ATTACHMENT (1) - LIST OF DOCUMENTS REVIEWED (Cont.)

PB 99-00265 dated October 6, 2000
PB 00-00878 dated August 24, 2000

Non Conformance Reports

A1193350 dated December 12, 2000
A1268270 dated November 29, 2000
98-01104, dated May 4, 1998

Other Items

Simulator Exercise Guides - PSEG-0610L and 0620L
Emergency Preparedness Course Plan, NEPP-0000, Rev. 0
Emergency Preparedness Program Plan, EPP-0000, Rev. 7
Emergency Director Qualification Manual, PEPP-6110, Rev. 2
Emergency Preparedness Lesson Plan, PEPP-0610, Rev. 3
Response to Notice of Violation, dated June 17, 1998
PORC Minutes, 00-045, dated November 21, 2000
Peach Bottom Atomic Power Station June 1999 to June 2000 Self-Assessment Report
Various I &C Individual Process Self-Assessment Records
Various I &C TOPs Program Reports
PORC Meeting Minutes - October 24, 2000
PORC Meeting Minutes - June 12, 2000
Nuclear Quality Assurance Checklist - Emergency Preparedness - January 13, 2000
Peach Bottom Self-Assessment Report - June 1999- June 2000
Nuclear Oversight Continuous Assessment Reports:
- PAR-00-05, June 1 - September 30, 2000
- PAR-00-04, March 1, 2000 - May 31, 2000

Peach Bottom Nuclear Oversight Agenda -NOA-PB-01-1Q, December 2000 (partial)
Nuclear Quality Assurance Assessment Checklists:
Health Physics, Chemistry, Radwaste and Training, (March 1 - May 31, 2000) (June 1 - September 30, 2000)
PBAPS Nuclear Safety Review Board (NSRB) Agenda and Minutes, dated October 31, 2000
Chemistry Event Free Data Base (January 2000- present)
Process Self-Assessments
Radwaste Shipping and Liquid Radwaste, dated August 23, 2000
Hazardous Materials, Hazardous Waste and Chemical Controls, dated August 23, 2000
Chemistry/Radwaste 2000 Organizational Self-Assessment, dated May 3, 2000
Year 2000 Emergency Preparedness Self-Assessment
Excelon State of the Fleet Self-Assessment
Review of Emergency Preparedness Action Requests and PEPs for Adverse Trends (November 1, 1999 through April 30, 2000)
Emergency Preparedness Post -Indian Point 2 Event Assessment for Peach Bottom Atomic Power Station, Rev. 1
Waste Minimization - DAW, dated January 31, 2000
Waste Minimization - Resin, January 31, 2000
Radwaste Shipping, dated March 24, 2000
Chemistry/Radwaste Human Performance Self-Assessment, dated December 7, 2000

ATTACHMENT 2
NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues with low to moderate safety significance, which may require additional NRC inspections. YELLOW findings are more serious issues with substantial safety significance and would require the NRC to take additional actions. RED findings represent issues of high safety significance with an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant shut down.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE), performance that results in definitive, required action by the NRC (YELLOW), and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner, which regulatory actions should be taken based on a licensee's performance. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, as described in the matrix. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.

U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.	05000277 05000278
License Nos.	DPR-44 DPR-56
Report Nos.	05000277/2000-014 05000278/2000-014
Licensee:	Exelon Generation Company
Facility:	Peach Bottom Atomic Power Station, Units 2 and 3
Inspection Period:	December 18-20, 2000
Inspector:	Ronald Nimitz, CHP, Senior Radiation Specialist
Approved by:	John White, Chief Radiation Safety and Safeguards Branch Division of Reactor safety

SUMMARY OF FINDINGS

IR 05000277-00-14, 05000278-00-14; on 12/18-20/2000; PECO Energy Company, Peach Bottom Atomic Power Station, Units 2 & 3. Actions on WHITE finding in area of radioactive waste classification. Public Radiation Safety.

Cornerstone: Public Radiation Safety

This supplemental inspection was performed by the NRC to assess PECO's evaluations and corrective actions associated with a WHITE finding involving failure to properly classify a shipment of radioactive waste sent on June 28, 1999, to the Chem-Nuclear Systems (CNS) waste disposal site, Barnwell, South Carolina. The inspection was conducted in accordance with NRC Inspection Procedure 95001, "Inspection for One or two White Inputs in a Strategic Performance Area". This issue was preliminarily determined to be WHITE, an issue with low to moderate safety significance, in NRC Inspection Report 05000277-00-02, 05000278-00-02, dated June 19, 2000. Subsequently, a final significance determination was made for this issue which characterized it as WHITE as discussed in an August 3, 2000, NRC letter to PECO. The inspector determined that PECO performed an evaluation of the issue, identified root and contributing causes, and identified and implemented corrective actions to address these causes and prevent recurrence. Consistent with the guidance contained in NRC Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," this issue will only be considered in assessing plant performance for a total of four quarters from the date when the issue was identified by PECO (July 22, 1999).

Report Details

01 Inspection Scope

This supplemental inspection was performed by the NRC to assess the licensee's evaluations and corrective actions associated with a WHITE finding in the Public Radiation Safety cornerstone of the Radiation Safety Strategic performance area. Specifically, PECO failed to properly classify a shipment of radioactive waste, in accordance with 10 CFR 20.2006 and 10 CFR 61.55, that it shipped on June 28, 1999, to the Chem-Nuclear Systems (CNS) waste disposal site, Barnwell, South Carolina. This performance issue was preliminarily characterized WHITE (low to moderate risk significance) in NRC Inspection Report 05000277-00-02; 05000278-00-02, dated June 19, 2000. A licensee requested Regulatory Conference was held on July 24, 2000, to discuss this issue. The issue received final characterization as a WHITE finding in an August 3, 2000, letter from the NRC to PECO.

02 Evaluation of Inspection Requirements

02.01 Problem Identification

a. Determine that the evaluation identifies who (i.e., licensee, self-revealing, or NRC) and under what conditions the issue was identified.

The failure to properly classify the shipment of radioactive waste for disposal was identified by PECO in July 1999, following its evaluation of minor documentation discrepancies involving the Uniform Low Level Radioactive Waste Manifest (NRC Form 540), brought to its attention on June 30, 1999, by representatives of the Chem-Nuclear Systems (CNS) disposal facility in Barnwell, South Carolina.

b. Determine that the evaluation documents how long the issue existed, and prior opportunities for identification.

The mis-classification (under classification) existed for the period between June 28, 1999, when the material was shipped to CNS until about July 22, 1999, when PECO Nuclear provided an updated Uniform Low-Level Waste Manifest to CNS to reflect the proper classification of the waste shipment. PECO determined that this was the only example it could identify involving failure to properly classify a waste shipment destined for near-surface land disposal. PECO concluded there were no prior opportunities to identify the circumstances surrounding this issue. Specifically, PECO had not previously identified any problems involving waste classification errors.

c. Determine that the evaluation documents the plant-specific risk consequences (as applicable) and compliance concerns associated with the issue.

PECO's July 8, 2000, letter in response to NRC Inspection Report No. 05000277-00-02; 050000278-00-02, indicated the onsite occupational exposure, associated with this radwaste shipment was appropriately managed to be as low as is reasonably achievable (ALARA). Consequently, there was no significant radiological risk to workers. The evaluation further indicated that there was no actual or potential increased risk to the health and safety of the public in that the waste material was properly packaged, labeled, and transported for disposal.

Further, the waste, upon arrival at the disposal facility, was placed in the proper disposal location.

02.02 Root Cause and Extent of Condition Evaluation

a. Determine that the problem was evaluated using a systematic method(s) to identify root cause(s) and contributing cause(s).

PECO used its performance enhancement program (PEP) to identify root and contributing causes. PECO's procedure (Exhibit LR-CG-10-1, Rev. 2, PECO Energy Root Cause Flow Chart and Users Information Manual) provided guidance for this analysis. The inspector determined that PECO followed its procedural guidance for performing its analysis of this issue.

b. Determine that the root cause evaluation was conducted to a level of detail commensurate with the significance of the problem.

The root cause evaluation and corrective actions were documented via PEP I0010073 dated June 30, 1999. The evaluation included both root and contributing causes. No additional classification issues were identified prior to or following licensee implementation of corrective actions. PECO subsequently issued an adverse trend PEP (No. I0011191) in May 3, 2000, to review all aspects of the radwaste shipping program, following NRC identification, on April 25, 2000, of several shipping paper discrepancies (not associated with waste classification). The inspector determined that PECO identified and implemented corrective actions for the root and contributing causes commensurate with the significance of the problem.

c. Determine that the root cause evaluation included consideration of prior occurrences of the problem and knowledge of prior operating experience.

PECO's evaluation included a review to determine if similar waste classification problems had previously been identified in the area of radioactive waste shipping and handling. PECO concluded that there were no previous waste classification issues identified based on a review of five years of shipping records for similar types of shipments. As discussed above, other issues were identified in other aspects of the radioactive waste program indicating an apparent adverse trend in radwaste shipping performance for which PECO initiated a trend PEP (No. I0011191). PECO did not identify prior operating experience directly applicable to this event.

d. Determine that the root cause evaluation included consideration of potential common cause(s) and extent of condition of the problem.

As discussed above, PECO's evaluation considered the potential for common causes and extent of condition. The evaluation, documented in PEP No. I0010073, identified six root and contributing causes for which corrective actions were taken. Regarding extent of condition, PECO issued a trend PEP (No. I0011191) on May 3, 2000, to provide for evaluation of the main themes identified in its review of radwaste problems. The trend PEP (No. I0011191) also provided for review of problem consequences and generic implications. PECO took action to review the entire radwaste shipping program to identify negative trends.

02.03 Corrective Actions

a. Determine that appropriate corrective action(s) are specified for each root/contributing cause or that there is an evaluation that no actions are necessary.

PECO issued two principal corrective action program documents (PEP Nos. I0010073 and I0011191) for this issue, and implemented various corrective actions including: placement of the issue in the corrective action program, immediate action to correct paperwork errors, development and issuance of a waste sampling guideline to provide for representative sampling, review and evaluation of all appropriate shipping program procedures relative to requirements contained in shipping cask safety analysis reports, review of computerized radwaste shipping paper generation methodology, enhancement of training provided to radwaste handlers and shippers, and initiation of a review of the entire radwaste shipping program to identify negative trends. PECO issued several additional corrective action documents (PEPs I0011119, I0011155) to provide for development of additional corrective actions for areas for improvement. The inspector determined that appropriate corrective action(s) were specified for each root/contributing cause.

b. Determine that the corrective actions have been prioritized with consideration of the risk significance and regulatory compliance.

PECO took immediate and interim actions to address the improper classification of the radioactive waste shipment and update its Uniform Low-Level Waste Manifest (NRC Form 540). A corrected manifest was provided to CNS on July 22, 1999. PECO prioritized its corrective actions, based on establishment of action items (termed PEP evaluations) with due dates, which considered risk significance and regulatory compliance.

c. Determine that a schedule has been established for implementing and completing the corrective actions.

PECO's corrective action documents included action items and a schedule for implementing and completing the corrective actions, based on establishment of due dates for action items. PECO’s plans for accomplishing this activity appropriately considered risk.

d. Determine that quantitative or qualitative measures of success have been developed for determining the effectiveness of the corrective actions to prevent recurrence.

PECO arranged for conduct of an outside peer evaluation of its radwaste shipping program to assist in identification of additional areas for improvement. PECO’s quality assurance group also identified the radwaste program as an area for enhanced oversight. In addition, PECO established and implemented a monthly radwaste performance indicator (PI) to provide for identification of adverse trends in radwaste program areas.

03. Management Meetings

The inspector met with licensee representatives on December 20, 2000. The inspector summarized the purpose, scope, and findings of the inspection. PECO acknowledged the findings.

ATTACHMENT 1

PERSONS CONTACTED

PECO Energy
J. Doering, Vice - President
G. Johnston, Plant Manager
M. Alfonso, Training Director
C. Baker, Manager, Chemistry and Radwaste
F. Crosse, Manager - Radwaste/Environmental
P. Davison, Director, Engineering
R. Lubaszewski, Rad Material Shipping Coordinator
D. Oltmans, Chemist
H. Trimble, Radiation Protection Manager

NRC
C. Cowgill, Chief Reactor Projects Branch 4, NRC Region I
A. McMurtray, Senior Resident Inspector, Peach Bottom
M. Buckley, Resident Inspector, Peach Bottom

DOCUMENTS REVIEWED

LR-C-10, Rev. 11, Performance Enhancement Program (PEP)
LR-CG-10, Rev. 4, Performance Enhancement Program (PEP)
AG-CG-19, Rev. 1 and Rev. 2, Self-Assessment Guideline
Peach Bottom Self-Assessment Report - June 1999 - June 2000
Nuclear Quality Assurance Assessment Checklists:
Health Physics, Chemistry, Radwaste and Training,
(March 1 - May 31, 2000 and June 1 - September 30, 2000
PEP No. I0010073, dated June 30, 1999
PEP No. I0011119, dated April 18, 2000
PEP No. I0011155, dated April 25, 2000
PEP No. I0011191, dated May 3, 2000
Process Self-Assessments
Radwaste Shipping and Liquid Radwaste, dated August 23, 2000
Hazardous Materials, Hazardous Waste and Chemical Controls, dated August 23, 2000
Chemistry/Radwaste 2000 Organizational Self-Assessment, dated May 3, 2000
Radwaste Shipping, dated March 24, 2000
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ACRONYMS USED

CFR	Code of Federal Regulations
CNS	Chem-Nuclear Systems
HP	Health Physics
QA	Quality Assurance
NCV	Non-Cited Violation
PBAPS	Peach Bottom Atomic Power Station
PEP	Performance Enhancement Process

INSPECTION PROCEDURES USED

IP 95001 Inspection for One or Two White Inputs in a Strategic Performance Area

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

05000277; 278/-00-02-01	AV	Failure to properly classify waste in accordance with 10 CFR 61.55 (EA 00-125)

Discussed

05000277; 278/2000-002-02	NCV	use of an incorrect procedure to close cask
05000277; 278/2000-002-03	NCV	failure to ensure proper leak test of a cask
05000277; 278/2000-002-04	NCV	use of incorrect waste manifest for shipping waste

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Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix. More information can be found at:
http://www.nrc.gov/NRR/OVERSIGHT/index.html.