June 13, 2002

Mr. John L. Skolds
President and CNO
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
5th Floor
Warrenville, IL 60555

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION - NRC INSPECTION REPORT 50-277/02-03, 50-278/02-03

Dear Mr. Skolds:

On May 18, 2002, the NRC completed an inspection at the Peach Bottom Atomic Power Station. The enclosed report documents the inspection findings which were discussed on June 4, 2002, with Mr. Gordon Johnston and other members of your staff.

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

Based on the results of this inspection, the inspectors identified one issue of very low safety significance (Green). This issue was determined to involve a violation of NRC requirements. However, because of its very low safety significance and because it has been entered into your corrective action program, the NRC is treating this issue as a non-cited violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny any non-cited violation noted in this report, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Peach Bottom facility.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design basis threat (DBT). On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim

compensatory measures to address the generalized high-level threat environment. With the issuance of the Order, we will evaluate Exelon's compliance with these interim requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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/reading-rm/adams.html (the Public Electronic Reading Room).

If you have any questions, please contact me at 610-337-5209.

Sincerely,

/RA by
Acting For/

Mohamed Shanbaky, Chief
Projects Branch 4
Division of Reactor Projects

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

Enclosure: Inspection Report No. 50-277/02-03 and 50-278/02-03

Attachment: (1) Supplemental Information

cc w/encl: Senior Vice President, Mid-Atlantic Regional Operating Group
President and CNO, Exelon Nuclear
Vice President, Mid-Atlantic Operations Support
Senior Vice President, Nuclear Services
Site Vice President, Peach Bottom Atomic Power Station
Plant Manager, Peach Bottom Atomic Power Station
Vice President - Licensing and Regulatory Affairs
Director, Licensing, Mid-Atlantic Regional Operating Group
Director, Nuclear Oversight
Regulatory Assurance Manager - Exelon Generation Company, LLC
Senior Vice President and General Counsel
D. Quinlan, Manager, Financial Control, PSEG
R. McLean, Power Plant Siting, Nuclear Evaluations
D. Levin, Acting Secretary of Harford County Council
R. Ochs, Maryland Safe Energy Coalition
Mr. & Mrs. Dennis Hiebert, Peach Bottom Alliance
Mr. & Mrs. Kip Adams
Chief, Division of Nuclear Safety
Vice President, General Counsel and Secretary
Correspondence Control Desk
Commonwealth of Pennsylvania
State of Maryland
TMI - Alert (TMIA)
Peach Bottom Township Board of Supervisors
R. Fletcher, Department of Environment, Radiological Health Program
J. Johnsrud, National Energy Committee, Sierra Club
Public Service Commission of Maryland, Engineering Division
Manager, Licensing - Limerick and Peach Bottom

Distribution w/encl: H. Miller, RA/J. Wiggins, DRA (1)
M. Shanbaky, DRP
D. Florek, DRP
J. Talieri, DRP
S. Iyer, DRP
R. Junod, DRP
A. McMurtray, DRP - NRC Senior Resident Inspector
H. Nieh, RI EDO Coordinator
S. Richards, NRR
J. Boska, PM, NRR
C. Gratton, PM, NRR
Region I Docket Room (with concurrences)

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DATE	06/13/02		06/13/02	

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U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Docket Nos:	50-277, 50-278
License Nos:	DPR-44, DPR-56
Report Nos:	50-277/02-03, 50-278/02-03
Licensee:	Exelon Generation Company, LLC Correspondence Control Desk 200 Exelon Way, KSA 1-N-1 Kennett Square, PA 19348
Facility:	Peach Bottom Atomic Power Station Units 2 and 3
Location:	1848 Lay Road Delta, Pennsylvania
Inspection Period:	March 31, 2002 through May 18, 2002
Inspectors:	A. McMurtray, Senior Resident Inspector M. Buckley, Resident Inspector F. Jaxheimer, Reactor Engineer, DRS D. Florek, Regional Inspector R. Nimitz, Senior Health Physicist G. Smith, Senior Physical Security Inspector
Approved by:	Mohamed Shanbaky, Chief Projects Branch 4 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000277-02-03, IR 05000278-02-03, on 03/31-05/18/2002; Exelon Generation Company, Peach Bottom Atomic Power Station; Units 2 and 3. Operability Evaluations.

This inspection was conducted by resident inspectors, a regional inspector, a senior project engineer, a senior security inspector, and a senior radiation specialist. The inspection identified one finding of very low significance. The significance of most findings is indicated by the color (Green, White, Yellow, Red) using Inspection 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 applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at: http://www.nrc.gov/reactors/operating/oversight.html.

A. Inspector Identified Findings

Cornerstones: Mitigating Systems and Barrier Integrity

- **Green.** The inspectors identified a non-cited violation of very low safety significance (Green) of Technical Specification 5.4.1. Plant personnel did not perform an adequate operability determination in accordance with NOM-C-11.1 "Operability," for a degraded lube oil fitting on the E-4 emergency diesel generator (EDG) that was identified on September 20, 2001. Subsequently, during an EDG test on March 19, 2002, the degraded fitting sheared off causing lube oil to be sprayed into the EDG room and the E-4 EDG to be inoperable.

  The issue was determined to be of very low safety significance based on a phase 2 risk evaluation in accordance with our significance determination process. The other three emergency diesels were not affected by this failure and both offsite power sources remained operable while the diesel was inoperable. (Section 1R15)

Report Details

SUMMARY OF PLANT STATUS

UNIT 2

Unit 2 operated at approximately 100 percent power throughout the inspection period except for scheduled power changes to support routine maintenance activities and rod pattern adjustments.

UNIT 3

Unit 3 operated at approximately 100 percent power throughout the inspection period except for scheduled power changes to support routine maintenance activities and rod pattern adjustments.

1. REACTOR SAFETY [R]
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R04 Equipment Alignment

.1 Partial System Walkdown

a. Inspection Scope

The inspectors performed partial system walkdowns to verify system and component alignments and note any discrepancies that would impact system operability. The inspectors verified selected portions of redundant or backup systems/trains were available while a system was out-of-service. The inspectors reviewed selected valve positions, electrical power availability, and the general condition of major system components. The walkdowns involved the following systems:

- Unit 2 reactor core isolation cooling during Unit 2 high-pressure coolant injection maintenance outage
- Unit 3 standby liquid control
- Emergency diesel generator during Unit 2 startup outage

b. Findings

No findings of significance were identified.

.2 Complete System Walkdown

a. Inspection Scope

The inspectors also performed a complete system walkdown to verify that the selected system was properly aligned for operation. The inspectors reviewed valve positions, electrical power availability, and the general condition of major system components. In addition, the inspectors reviewed the Final Safety Analysis Report (FSAR), system design drawings, and issues tracked by the system health report (condition reports, work orders, action requests and maintenance rule issues). These reviews were

conducted to identify discrepancies that could impact system operability. The complete system walkdown was performed on the following:

- Emergency heat sink

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors reviewed the Fire Protection Plan, Technical Requirements Manual and the respective Pre-Fire Action Plan procedures to determine the required fire protection design features, fire area boundaries, and combustible loading requirements for the areas examined during this inspection. The inspectors then performed walkdowns of these areas to assess control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures. The fire areas included:

- Unit 2 “A” and “C” residual heat removal cubicles
- Unit 3 “B” and “D” residual heat removal cubicles
- Unit 2 135’ reactor building
- Unit 3 135’ reactor building
- Unit 2 high-pressure and emergency service water bay
- Unit 3 High-pressure and emergency service water bay
- Main Control Room, fan room (165' elevation)
- Unit 2 electro hydraulic control pump room

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the follow-up actions for issues identified on systems, structures, or components (SSCs) and the performance of these SSCs, to assess the effectiveness of Exelon’s maintenance activities. The inspectors verified that problem identification and resolution of these issues had been appropriately monitored, evaluated, and dispositioned in accordance with Exelon’s procedures and the requirements of 10 CFR 50.65, “Requirements for Monitoring the Effectiveness of Maintenance.” In addition, the inspectors reviewed selected SSC classification, performance criteria and goals, and corrective actions to verify that the actions were reasonable and appropriate. The following systems, equipment problems, and documents were reviewed:

Systems

- Units 2 and 3 control rod vent and drain system both units (scram discharge vent and drain valves)
- Unit 3 average power range monitor
- Units 2 and 3 reactor recirculation systems

Procedures and Documents

- Peach Bottom System Health Overview Reports
- Peach Bottom Maintenance Rule Bases Documentation
- Maintenance Rule Systems, Structures, and Components (SSCs) Bases Information Document
- AG-CG-028.1, Rev 8, "Maintenance Rule Implementation Program"
- AG-CG-028.1-5, Rev 1, "PECO Energy Approach to Use Maintenance Preventable Functional Failures for Maintenance Rule Performance Monitoring"
- AG-CG-028.1-9, Rev 6, "Guidance for Identifying and Evaluating Maintenance Preventable Functional Failures (MPFFS)"
- AG-CG-028.1-3, Rev 3, "Rules for Governing Expert Panel Activities"
- AG-CG-028.1-6, Rev 0, "PECO Energy Approach to Setting Acceptable Performance Levels for Monitoring Maintenance Preventable Functional Failures"

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed risk evaluations and contingency plans for selected planned and emergent work activities to verify that appropriate risk evaluations were performed and to assess Exelon's management of overall plant risk. The inspectors compared the risk assessments and risk management actions against the requirements of 10 CFR 50.65(a)(4) and the recommendations of NUMARC 93-01 Section 11, "Assessment of Risk Resulting from Performance of Maintenance Activities." The inspectors verified that risk assessments were performed when required and appropriate risk management actions were identified.

The inspectors attended planning meetings and discussed the risk management of the activities with operators, maintenance personnel, system engineers, and work coordinators to verify that risk management action thresholds were identified correctly. The inspectors also verified that appropriate implementation of risk management actions were performed. The following planned and emergent work activities were reviewed:

- Unit 2 high-pressure coolant injection maintenance outage with routine testing
- Electrical bus testing 2 startup outage
- Unit 2 reactor core isolation coolant outage unplanned

- Electrical bus alignment and impact of other plant work and testing activities during 1G/2G and 1R/2R crossties

In addition, the inspectors reviewed the assessed risk configurations against the actual plant conditions and any in-progress evolutions or external events to verify that the assessments were accurate, complete, and appropriate for the issues. The inspectors performed control room and field walkdowns to verify that compensatory measures identified by the risk assessments were appropriately performed.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance Related to Non-routine Plant Evolutions and Events

a. Inspection Scope

The inspectors reviewed plant computer and recorder data, operator logs and approved procedures and observed control room operators while evaluating the performance of operations personnel in response to non-routine evolutions. The inspectors assessed personnel performance to determine whether the operator's response was appropriate and in accordance with procedures and training. The following non-routine evolutions were observed:

- Startup of the 3C circulating water pump SO 28A.1.A-3
- Response to severe weather and an electrical storm on May 2, 2002
- T-103, "Secondary Containment Control" procedure entry due to an erratic area radiation monitor (ARM) on the Unit 3 refueling floor

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed three operability evaluations to assess the adequacy of the evaluations, the use and control of compensatory measures, compliance with the Technical Specifications, and the risk significance of the issues. The inspectors verified that the operability determinations were performed in accordance with NOM-C-11.1, Rev. 1, "Operability" and A-C-901, Rev. 10, "Control of Nonconformances." The inspectors used the Technical Specifications, Technical Requirements Manuals, the Final Safety Analysis Report, and associated Design Basis Documents as references during these reviews. The issues reviewed included:

- Unit 2 standby liquid control pump relief valve leakage
- Unit 2 high-pressure coolant injection with torus suction valve leakage
- E4 emergency diesel generator with lube oil leak

b. Findings

The inspectors identified a non-cited violation of very low safety significance (Green) of Technical Specification 5.4.1. Plant personnel did not perform an adequate operability determination in accordance with NOM-C-11.1 “Operability,” for a degraded lube oil fitting on the E-4 emergency diesel generator (EDG) that was identified on September 20, 2001. Subsequently, during an EDG test on March 19, 2002, the degraded fitting sheared off causing lube oil to be sprayed into the EDG room and the E-4 EDG to be inoperable.

On September 20, 2001, plant personnel identified that lube oil was leaking from a compression fitting assembly on the suction side of the shaft driven lube oil pump of the E-4 EDG. Plant personnel performed an operability determination. The operability determination addressed the current leakage at the fitting but did not account for further degradation. Although station procedures required the determination of possible failure mechanisms, impact of the failure, likelihood of failure in the environment, and any compensatory and corrective actions, the operability determination did not evaluate these issues.

The plant engineering personnel determined that the consumption of oil from this leak would not adversely affect the ability of the EDG to perform its intended safety function. At this leak rate, there would be sufficient time available to make up to the EDG oil storage tank from supplies available at the site. The operability determination did not clarify how long the EDG could continue to perform its safety function with the current degraded condition. As a result, timely corrective action for this degraded condition was not appropriately evaluated nor taken until the fitting failed

On March 19, 2002, operators manually shutdown the E-4 EDG during testing when the compression fitting on the suction of the shaft driven lube oil pump failed and lube oil was discharging from the failed fitting. The failure occurred shortly after engineering personnel performed a hand-over-hand inspection of the lube oil tubing. Exelon’s laboratory determined that the degraded condition of the lube oil compression fitting connection was due to tubing fatigue that caused a through-wall crack around approximately 90 percent of the circumference of the tubing. Because of the extent of the through-wall crack, the additional shear stress from the hand-over-hand inspection of the lube oil tubing fatigue was probably sufficient to cause the failure. After the shutdown, the E-4 EDG was declared inoperable. The engine was evaluated for damage. The oil fitting was replaced and the emergency diesel generator was returned to service approximately seven hours after the fitting failed. The other three diesels were not affected by this leak and both offsite power sources remained operable while the EDG was inoperable.

The failure to adequately perform an operability determination of the leaking E-4 EDG lube oil fitting was more than minor because it had a credible impact on safety when the EDG became inoperable and was unable to power the E-42 and E-43 emergency buses if a loss of offsite power had occurred. The inadequate operability determination contributed to untimely corrective actions for this degraded condition that allowed the fitting to remain in place until it failed. The inadequate operability determination for the

leaking fitting on the E-4 EDG affected the Mitigating Systems and Barrier Integrity cornerstones since it ultimately resulted in the E-4 EDG being unavailable and inoperable for core and containment heat removal.

The significance determination process (SDP) as defined in the Significance Determination of Reactor Inspection Findings for At-Power Situations was applied to determine the risk associated with this finding. Since both the Mitigating Systems and Barrier Integrity cornerstones were affected, the inspector performed a phase 2 risk evaluation using the Peach Bottom specific SDP worksheets. The inspector used greater than 30 days as the exposure time period in the SDP worksheets. Although the EDG operated for six hours on the day of failure, the inspector could not conclude that there was sufficient assurance, within the 30 days prior to the failure, that the EDG would be able to operate for an extended period of time. The inspector also assumed in the SDP worksheets that Exelon would not be able to recover the EDG even though Exelon could have repaired the EDG expeditiously. This finding and risk evaluation applied to both units. Using the assumptions stated above, the results of the phase 2 risk evaluation indicated that the finding was of very low safety significance (Green).

Technical Specification 5.4.1 requires written procedure be established, implemented and maintained covering activities listed in Regulatory Guide 1.33. Regulatory Guide 1.33 includes written procedures for safety-related activities, such as operability determinations, under general plant operating procedures. Contrary to this requirement, on September 20, 2001, procedure NOM-C-11.1, Rev. 1, "Operability," was not adequately implemented for the operability determination associated with the E-4 EDG leaking lube oil fitting. This operability determination did not address possible failure mechanisms, impact of any failures, likelihood of failures in the environment, and any compensatory and corrective actions. This violation of Technical Specification 5.4.1 is being treated as a non-cited violation consistent with Section VI.A.1 of the NRC Enforcement Policy. Exelon entered this issue into the corrective action system as Condition Report (CR) # 00100050. **(NCV 50-277;278/02-03-01)**

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors observed portions of post-maintenance testing activities in the field and reviewed selected test data at the job site. The inspectors observed whether the tests were performed in accordance with the approved procedures and assessed the adequacy of the test methodology based on the scope of maintenance work performed. In addition, the inspectors assessed the test acceptance criteria to verify whether the test demonstrated that the tested components satisfied the applicable design and licensing bases and the Technical Specification requirements. The inspectors reviewed the recorded test data to evaluate whether the acceptance criteria were satisfied. The specific activities reviewed included:

- Unit 2 high-pressure coolant injection system following a maintenance outage
- Unit 2 'C' residual heat removal heat exchanger leak repair

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed and observed portions of following surveillance tests, and compared test data with established acceptance criteria to verify the systems demonstrated the capability of performing the intended safety functions. The inspectors also verified that the systems and components maintained operational readiness, met applicable Technical Specification requirements, and were capable of performing the design basis functions. The observed or reviewed surveillance tests included:

- SI3N-60A, Average Power Range Monitor-31C2 Unit 3 Calibration/Functional Check Average Power Range Monitor 3
- ST-O-003-450-3, Unit 3 Scram Discharge Vent/Drain Valve Functional Test
- ST-O-013-301-3, Unit 3 Reactor Core Isolation Coolant Pump, Valve, Flow and Unit Cooler Functional and In-Service Test

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

The inspectors reviewed the temporary plant modification that supported installation of strainers upstream of the Unit 2 recirculation pumps motor/generator sets and main generator stator water cooling heat exchangers to prevent frequent clogging of these heat exchangers.

This review was performed to determine whether the temporary changes adversely affected system or support system availability, or adversely affected a function important to plant safety. The inspectors reviewed the associated system design bases, including the Updated Final Safety Analysis Report (UFSAR) and Technical Specifications, and assessed the adequacy of the 10 CFR 50.59 safety evaluations screening for this issue. The inspectors also assessed configuration control of the temporary changes by reviewing selected drawings and procedures to verify that appropriate updates had been made, and in compliance with Exelon Nuclear's procedure, "Temporary Plant Alternations (TPA)," MOD-C-7, Rev. 6. The inspectors reviewed the temporary modification documents to verify that the implemented changes were consistent with the approved documents. The inspectors reviewed selected post-installation test results to confirm that the actual impact of the temporary changes had been adequately verified by test. The following temporary modification and documents were included in the review:

Temporary Modifications

- Temporary Plant Alteration to Install Filters for Prevention Clogging of Heat Exchangers

Procedures and Documents

- MOD-C-7, Rev 6, “Temporary Plant Alterations”
- Engineering Change Request (ECR) PB 01-00849-001
- PBAPS UFSAR Section 10.6, “Service Water System”
- PBAPS UFSAR Section 4.3, “Reactor Recirculation System”

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY
Cornerstones: Occupational Radiation Safety [OS] and Public Radiation Safety [PS]

OS1 Access Control to Radiologically Significant Areas

a. Inspection Scope

The inspector toured areas controlled as High Radiation Areas and reviewed the effectiveness of access controls to these areas. The inspector physically inspected and challenged six locked High Radiation Area access points to determine if access controls were sufficient to preclude unauthorized entry. Also, on April 9, 2002, the inspector observed portions of the change out of a floor drain filter (135' elevation radwaste). The inspector reviewed external and internal exposure controls for the activity including conformance with radiation work permits, monitoring of radiation dose rate gradients, as appropriate, and airborne radioactivity sampling.

b. Findings

No findings of significance were identified.

PS2 Radioactive Material Processing and Transportation

PS2.1 System Walkdown

a. Inspection Scope

The inspector walked down accessible portions of the station's radioactive liquid and solid waste collection, processing, and storage systems and locations to determine if: systems and facilities were consistent with descriptions provided in the Updated Final Safety Analysis Report (UFSAR); to evaluate their general material conditions; and to identify changes made to systems. Areas visually inspected were the Unit 2 and 3 condensate phase separator pump and tank rooms, Unit 2 and 3 condensate backwash receiving tank rooms, the waste surge and chemical tank rooms, waste sludge tank and pump room, and floor drain and waste collector pump and tank rooms. Visual inspection records for the A and B reactor water clean-up phase separator tank rooms were reviewed. Also, reviewed were the low level waste storage facility; the de-watering

facility; the external storage areas; the moats for the condensate storage tanks, the refueling water storage tank, and the torus de-watering tank. The independent spent fuel facility was also reviewed. The inspector reviewed the following matters:

- status of any non-operational or abandoned radioactive waste process equipment and the adequacy of administrative and physical controls for those systems;
- changes made to radioactive waste processing systems and potential radiological impact including conduct of safety evaluations of the changes, as necessary;
- current processes for transferring radioactive waste resin and sludge to shipping containers and mixing and sampling of the waste, as appropriate;
- radioactive waste and material storage and handling practices;
- sources of radioactive waste at the station, processing (as appropriate) and handling of the waste; and
- general condition of facilities and equipment.

The review was against criteria contained in the station's UFSAR, 10 CFR Part 20, 10 CFR 61, the Process Control Program (PCP), and applicable station procedures.

b. Findings

No findings of significance were identified.

PS2.2 Waste Characterization and Classification

a. Inspection Scope

The inspector reviewed the following matters:

- radio-chemical sample analysis results for radioactive waste streams;
- development of scaling factors for difficult to detect and measure radionuclides;
- methods and practices to detect changes in waste streams;
- classification and characterization of waste relative to 10 CFR 61.55 and 10 CFR61.56;
- implementation of applicable NRC Branch Technical Positions (BTPs) on waste classification, concentration averaging, waste stream determination, and sampling frequency;
- current waste streams and their processing relative to descriptions contained in the UFSAR and the station's approved Process Control Program(PCP);
- current processes for transferring radioactive waste resin and sludge discharges into shipping/disposal containers to determine adequacy of sampling
- revisions of the PCP and the UFSAR to reflect changes (as appropriate);

The review was against criteria contained in 10 CFR 20, 10 CFR 61, 10 CFR 71, the UFSAR, the PCP, applicable NRC Branch Technical Positions, and licensee procedures.

b. Findings

No findings of significance were identified.

PS2.3 Shipment Records and Documentation

a. Inspection Scope

The inspector selected and reviewed the records associated with six non-excepted shipments of radioactive material made since the previous inspection in this area. The shipments were Nos. 00-0014, 01-0003, 01-0007, 01-0015, 01-0028, and RMS-125-01. The following aspects of the radioactive waste, radioactive material packaging, and radioactive material shipping activities were reviewed.

- implementation of applicable shipping requirements including completion of waste manifests;
- implementation of the specifications in applicable Certificates of Compliance (C of C), as appropriate, for the approved shipping casks including limits on package contents;
- classification and characterization of waste relative to 10 CFR 61.55 and 61.56
- implementation of recent NRC and DOT shipping requirements rule changes;
- implementation of 10 CFR 20 Appendix G;
- implementation of specific radioactive material shipping requirements;
- packaging of shipments;
- labeling of shipping containers;
- placarding of transport vehicles;
- conduct of vehicle checks;
- provision of driver emergency instructions;
- training of personnel performing waste processing, handling, packaging, and shipping;
- completion of shipping paper/disposal manifest;
- evaluation of package against package performance standard;
- conformance with procedures for cask loading, closure and use requirements including consistency with cask vendor approved procedures;
- use of latest revision documents.

The review was against criteria contained in 10 CFR 20; 10 CFR 61; 10 CFR71; applicable Department of Transportation requirements, as contained in 49 CFR 170-189 for the above areas; station procedures; applicable disposal facility licenses; and applicable Certificates of Compliance or vendor procedures for various shipping casks.

The inspector also reviewed the year 2000 final and draft 2001 Peach Bottom Combined Annual Radioactive Effluent Release Report, relative to types and quantities of radioactive waste shipped offsite and relative to changes to the PCP.

b. Findings

No findings of significance were identified.

PS2.4 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed assessments of the radioactive waste handling, processing, storage, and shipping programs, including the PCP. The inspectors also reviewed selected corrective action documents written since the previous inspection. The following documents were reviewed:

- Nuclear Oversight Assessments: March - December 2000
- Continuous Assessments: First/Second Quarter 2001
- Process Control Program Assessment March 2000
- Action Requests - 60308, 6117, 61094, 85148, 86047, 86583, A1276961
- Radioactive Waste Program Independent Verifications

The review was against criteria contained in 10 CFR 20 Appendix G, 10 CFR 71.101, and applicable station audit and surveillance procedures.

b. Findings

No findings of significance were identified.

3. SAFEGUARDS
Cornerstone: Physical Protection [PP]

3PP1 Access Authorization Program

a. Inspection Scope

The following activities were conducted to determine the effectiveness of Exelon's behavior observation portion of the personnel screening and fitness-for-duty programs as measured against the requirements of 10 CFR 26.22 and the Licensees Fitness for Duty Program documents.

Five supervisors representing the Operations, Maintenance, Radiation Protection, Security, and Emergency Planning departments were interviewed on May 7, 2002, regarding their understanding of behavior observation responsibilities and the ability to recognize aberrant behavior traits. Two (2) Access Authorization/Fitness-for-Duty self-assessments, two semi-annual Fitness for Duty performance data reports, an audit, and event reports and loggable events for the four previous quarters were reviewed during May 6-8, 2002. On May 7, 2002, five (5) individuals who perform escort duties were interviewed to establish their knowledge level of those duties. Behavior observation training procedures and records were reviewed on May 6, 2002.

b. Findings

No findings of significance were identified.

3PP2 Access Control

a. Inspection Scope

The following activities were conducted during the inspection period to verify that Exelon has effective site access controls, and equipment in place designed to detect and prevent the introduction of contraband (firearms, explosives, incendiary devices) into the protected area as measured against 10 CFR 73.55(d) and the Physical Security Plan and Procedures.

Site access control activities were observed, including personnel and package processing through the search equipment during peak ingress periods on May 7 and 8, 2002. On May 7, 2002, testing of all access control equipment; including metal detectors, explosive material detectors, and X-ray examination equipment, was observed. The Access Control event log, an audit, and three (3) self-assessment were also reviewed.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed selected station's records to assess the accuracy and completeness of the selected NRC Performance Indicator (PI) data. The records reviewed included selected Technical Specification limiting condition for operation logs, system surveillance tests, licensee event reports, action requests and condition reports. The information reviewed was compared against the criteria contained in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 2, to verify that conditions met the NEI criteria, were recognized, identified, and accurately reported as a Performance Indicator. The following specific indicator was reviewed:

- Unit 2 and Unit 3 reactor core isolation coolant unavailability

b. Findings

No findings of significance were identified.

4OA6 Meetings

.1 Exit Meeting Summary

The inspectors presented the results of the inspection to Mr. G. Johnston and members of Exelon's management on June 4, 2002. Exelon management acknowledged the findings presented. No proprietary information was identified.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. Key Points of Contact

Exelon Generation Company

J. Doering, Site Vice President
G. Johnston, Plant Manager
B. Hanson, Operations Director
J.T. Anthony, Maintenance Director
P. Davison, Site Engineering Director
D. Henry, Regulatory Assurance Manager
H. Trimble, Radiation Protection Manager
G. McCarty, Manager, Support Health Physics
W. Trump, Manager, Nuclear Security
J. Armstrong, Site Nuclear Oversight Manager

b. List of Items Opened, Closed, and Discussed

Opened/Closed

50-277;278/02-03-01	NCV	Inadequate E-4 Emergency Diesel Generator Operability Determination

c. List of Acronyms

CFR	Code of Federal Regulations
CR	condition report
DBT	design basis threat
EDG	emergency diesel generator
HP	health physics
HRA	high radiation area
MPFFS	maintenance preventable functional failures
NCV	non-cited violation
NRC	Nuclear Regulatory Commission
PCP	process control program
PI	performance indicator
RWP	radiation work permit
SDP	significance determination process
SSCs	systems, structures, or components
TS	technical specification
UFSAR	Updated Final Safety Analysis Report