November 30, 2001

EA-01-188

Mr. Oliver D. Kingsley
President and CNO
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way, KSA 3-E
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION - NRC INSPECTION REPORT 50-277/01-09, 50-278/01-09

Dear Mr. Kingsley:

On November 17, 2001, the NRC completed an inspection at the Peach Bottom Atomic Power Station. The enclosed report documents the inspection findings which were discussed on November 20, 2001, with Mr. Jay Doering 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.

Since September 11, 2001, Peach Bottom Nuclear Power Plant has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to Exelon Generation Company. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

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.html (the Public Electronic Reading Room).

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

Sincerely,

/RA/

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. 50-277/01-09 and 50-278/01-09

Attachments: (1) Supplemental Information

cc w/encl: J. Hagan, Senior Vice President, Mid-Atlantic Regional Operating Group
J. Cotton, Senior Vice President, Operations Support
W. Bohlke, Senior Vice President, Nuclear Services
J. Skolds, Chief Operating Officer
J. Doering, Vice President, Peach Bottom Atomic Power Station
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J. A. Benjamin, Vice President - Licensing and Regulatory Affairs
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Mr. & Mrs. Dennis Hiebert, Peach Bottom Alliance
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OFFICE	RI/DRP		RI/DRP		RI/DRP	
NAME	AmcMurtray/DF for verbal from M. Buckley		DFlorek/DF		MShanbaky/MS	
DATE	11/29/01		11/30/01		11/30/01	

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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: 50-277/01-09, 50-278/01-09

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: RD 1 Box 108
Delta, PA 17314

Dates October 1, 2001 through November 17, 2001

Inspectors: A. McMurtray, Senior Resident Inspector
M. Buckley, Resident Inspector
N. McNamara, Emergency Preparedness Inspector
G. Smith, Senior Security Inspector
J. Richmond, Resident Inspector, Susquehanna

Approved by: Mohamed M. Shanbaky, Chief
Projects Branch 4
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000277-01-09, IR 05000278-01-09, on 10/01-11/17/2001; Exelon Generation Company, Peach Bottom Atomic Power Station; Units 2&3. Refueling and Outage Activities.

The inspection was conducted by resident inspectors, a senior security inspector, and an emergency preparedness inspector. The inspection identified one Green finding which was considered a non-cited violation. 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.

A. Inspector Identified Findings

Cornerstone: Barrier Integrity

- **Green**. The inspectors identified a Non-Cited violation of Technical Specification 5.4, "Procedures" for inadequate procedural controls during the activity to flush the Unit 3 residual heat removal (RHR) system crosstie piping. The procedural control inadequacies contributed to a failure to isolate the Unit 3 'B' train of RHR from the reactor coolant system. The failure to isolate the "B" train of RHR from the reactor coolant system resulted in an unexpected decrease in reactor vessel water level from approximately + 200 inches to approximately + 158 inches over a four and a half minute period.

  This issue was determined to be of very low safety significance since the low reactor water level alarm, the automatic RHR shutdown cooling isolation, and automatic RHR and core spray reactor vessel injection functions remained operable during this event. Over 27 feet of water still remained above the top of active fuel. Additionally, regional senior reactor analysts determined that the conditional core damage probability for this event was less than 1E-7. (Section 1R20)

Report Details

SUMMARY OF PLANT STATUS

UNIT 2

Unit 2 began this inspection period at 100% power. On October 23, 2001, an automatic reactor shutdown occurred due to a generator lockout and main turbine trip. Following troubleshooting and repairs, the unit was restarted on October 27 and reached 100% power on October 30. Unit 2 operated at approximately 100% power for the remainder of the inspection period.

UNIT 3

Unit 3 began this inspection period shutdown in Mode 5 (Refueling) during the 3R13 refueling outage. On October 8, 2001, the reactor was taken critical and the unit reached 100% power on October 12. Unit 3 operated at approximately 100% power for the remainder of the inspection period except for scheduled power changes to support rod pattern adjustments.

1. REACTOR SAFETY

Initiating Events / Mitigating Systems / Barrier Integrity [Reactor-R]

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors reviewed Exelon's preparations for cold weather conditions and walked down selected systems that could be affected by low temperatures to verify that these systems would remain functional during cold weather conditions. The inspectors used RT-O-040-620-2, Rev 8, "Outbuilding Heating, Ventilation, and Air Conditioning and Outer Screen Inspection for Winter Operation" during this inspection.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

.1 Partial System Walkdowns

a. Inspection Scope

The inspectors performed a partial system walkdown 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 walkdown involved the following system:

- Unit 3 “B” and “D” Loops of residual heat removal

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Routine Plant Area Tours

a. Inspection Scope

The inspectors reviewed the Fire Protection Plan, Technical Requirements Manuals 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 area 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 3 Refueling Floor
- Unit 3 Reactor Building 135 Foot Elevation
- Unit 3 North Isolation Valve Room
- Unit 3 Drywell

b. Findings

No findings of significance were identified.

.2 Annual Fire Drill Observation

a. Inspection Scope

The inspectors observed plant personnel performance during an unannounced fire brigade drill on November 6, 2001, to evaluate the readiness of station personnel to prevent and fight fires. The inspectors reviewed the drill scenario prior to the drill and Exelon Nuclear fire protection procedures, RT-F-101-922-2, Rev 2, “Fire Drill” and FF-01, Rev 7, “Fire Brigade.” The inspectors also reviewed the strategies and information in the pre-fire plan PF-12B, “Pre-Fire Strategy Plan, Unit 3 Reactor Building Closed Cooling Water Room, Radwaste Building 116 Foot Elevation, Fire Zone 12B.” This review was performed to verify that the pre-fire strategy plan was consistent with the fire protection design features, fire area boundaries and combustible loading assumptions listed in the Fire Protection Plan for Peach Bottom. The inspectors observed the fire brigade members don protective clothing, turnout gear, and self-contained breathing apparatus, enter the fire area, and utilize the pre-fire plan strategies. The inspectors observed the fire fighting equipment brought to the fire area scene to evaluate whether sufficient equipment was available to effectively control a simulated fire. The inspectors evaluated whether the fire hose lines identified in the pre-fire plan were capable of reaching the fire area and whether hose usage was adequately simulated (e.g., laid out

without flow constrictions). The inspectors observed fire fighting directions and radio communications between the brigade leader and brigade members. The inspectors observed the post drill critique to evaluate if the drill objectives acceptance criteria were satisfied.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

On November 6, 2001, the inspectors observed licensed operator performance of two different crews during Licensed Operator Requalification Training Cycle 00-11 and the evaluators' training critiques of the operators' performance. This training included crew performance of Special Event Procedure (SE-3) on the simulator to address a "Loss of the Conowingo Pond" scenario. Critiques were observed to ensure that any operator performance errors were detected and corrected. The inspectors focused on the operating crews' satisfactory completion of crew critical tasks. Critical tasks are limits placed on key reactor plant parameters that will ensure safety margins are maintained during the simulated malfunctions. Also, the evaluation included the operators' adherence to Technical Specifications, emergency plan implementation, and the use of emergency operating procedures.

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 system and documents were reviewed:

System

- Substations, Startup Sources, Station Black Out

Procedures and Documents

- Peach Bottom Maintenance Rule Bases Documentation
- System Health Overview reports
- Maintenance Rule Systems, Structures, or 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”

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:

- Abnormal Auxiliary Electrical Power Distribution Alignment to Support No. 1 Transformer Maintenance and ‘A’ Emergency Service Water Unavailable
- Loss of the 343 Start-up (SU)/3 SU Offsite Power Source and Emergency Cooling Water Pump Unavailable
- Unit 3 ‘A’ Residual Heat Removal (RHR) Unavailability Due to the Failure of RHR AO-3-10-163A to Close and Testing of the E-13 Bus With the 343 Offsite Power Source Unavailable

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 During Non-Routine Plant Evolutions

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 response was appropriate and in accordance with procedures and training. The following non-routine evolution was observed:

- 3 'A' recirculation pump motor high oil level and subsequent shutdown of the 3 'A' pump resulting in single recirculation loop operation on October 10, 2001
- Unit 2 reactor scram due to a loose isophase damper in the main generator that made contact with the 'A' phase bus bar, causing a ground and a subsequent generator lockout and main turbine trip

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed two 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 3 RHR snubber 10-GB-S-48 discovered during the 3R13 outage bound up at the pipe end
- Unit 2 Main Steam Safety Relief Valve (SRV) 2 SRV 71A lifting before the Technical Specification setpoint was reached during the October 23rd scram

b. Findings

No findings of significance were identified.

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 3 Reactor Core Isolation Cooling (RCIC) System Steam Supply Line Drain Pot Level Switch, LS-3-13-074, Calibration and Functional Testing, after Switch and Cable Replacement (C0196820 & C0119026)
- Unit 2 RCIC System Steam Supply Line, Drain Line Steam Trap Operation, Drain Line Local Visual Inspection, and Main Condenser Air In-Leakage Indication, Following Replacement of a Drain Line Pipe Section due to a Through Wall Leak (C0198933)
- Unit 2 'A' Reactor Building Closed Cooling Water System Pump Testing, Following Pump Replacement (C0193985)
- Unit 3 'A' RHR Loop Testing after Various System Planned Maintenance (ST-O-010-301-3, Rev 19, "A" RHR Loop Pump, Valve, Flow, and Unit Cooler Functional and Inservice Test)

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

.1 Control of Outage Activities

a. Inspection Scope

The inspectors observed selected maintenance, testing, and equipment restoration activities to verify whether component configuration management, test control, and post maintenance checks were performed per NRC requirements and Exelon procedures. The inspectors reviewed unexpected plant conditions, emergent work, and system configuration control during testing and maintenance activities to evaluate whether the activities were performed in accordance with NRC requirements and Exelon procedures.

The inspectors observed operation of the residual heat removal (RHR) system in alternate decay heat removal (i.e. RHR system aligned to the spent fuel pool to provide pool cooling) to verify that the system was operable and properly aligned. The inspectors verified that the station maintained a defense-in depth commensurate with the outage risk management goals and in accordance with the Technical Specification requirements.

Prior to the commencement of the reactor startup, the inspectors also performed a walkdown of selected Unit 3 structures, systems and components (SSCs) to assess the readiness of the SSCs to support plant restart following the refueling outage.

The following activities were reviewed and/or observed:

- Clearance and tagging
- Availability and restoration of emergency core cooling systems
- Drywell close-out
- Indications identified in meridional welds on the reactor pressure vessel closure head
- Inadvertent vessel inventory reduction during flushing of Unit 3 RHR crosstie piping
- Outage configuration controls including:
    1) availability and accuracy of reactor coolant system instrumentation
    2) electrical power alignments
    3) decay heat removal and alternate decay heat removal system operation
    4) availability of reactor inventory makeup water systems
    5) primary and secondary containment controls and integrity

b. Findings

Unit 3 Inadvertent Vessel Inventory Reduction

The inspectors identified a Non-Cited violation of very low safety significance (Green) of Technical Specification 5.4, “Procedures” for inadequate procedural controls during the activity to flush the Unit 3 RHR crosstie piping. The procedural control inadequacies contributed to a failure to isolate the Unit 3 ‘B’ train of RHR from the reactor coolant system. The failure to isolate the “B” train of RHR from the reactor coolant system resulted in an unexpected decrease in reactor vessel water level of approximately 42 inches (from +200 inches to +158 inches) over a four and a half minute period.

On October 8, 2001, operators were using Troubleshooting, Rework, and Testing (TRT) No. 01-228 for the procedure controls in place for performing a flush of the Unit 3 RHR crosstie piping. The TRT did not contain instructions to assure that the “B” train of RHR, which had been previously in shutdown cooling mode of operation, was isolated from the reactor coolant system. In addition the TRT did not require that shift management conduct a pre-job briefing with all personnel involved in the flushing activity. Absent clear procedural guidance to ensure that the RHR system was isolated from the reactor coolant system, when operators commenced the flushing of the Unit 3 RHR crosstie piping, they observed reactor vessel water level decreasing and took action to stop the water level decrease. The alignment created by the procedure controls in place in the

TRT permitted an open flow path from the reactor vessel to the suppression pool. Operations personnel terminated the reactor vessel water level decrease after reactor level had decreased approximately 42 inches. Over 27 feet of water still remained above the top of active fuel.

The inspectors determined that the inadequate procedural controls were largely caused by human performance issues. Numerous operations personnel did not recognize the significance of the Unit 3 "B" RHR train alignment prior to the flushing of the Unit 3 RHR crosstie piping and the potential impact of this alignment on reactor vessel water level.

The inspector also noted that, since shift management had not conducted a pre-job brief with all personnel involved in this flush, shift management did not effectively carry out Exelon's corrective actions in response to prior industry events. Exelon conducted a 3R13 Human Performance Stand-down briefing for operations personnel approximately two days prior to the event. This briefing reviewed the causes of automatic shutdowns at Clinton and Braidwood that occurred earlier in 2001. One of the causes of both of these shutdowns was the failure to include all personnel in the pre-job brief for the work evolutions that caused the scram.

The issue of inadequate procedural controls was more than minor since the failure to isolate the Unit 3 'B' train of RHR from the reactor coolant system during the flush resulted in an actual impact on safety in that it caused an unplanned reactor vessel water level decrease of approximately 42 inches. The inadequate procedural controls affected the Barrier Integrity cornerstone because they resulted in a breech of reactor coolant system integrity due to the open flow path from the reactor vessel to the suppression pool.

This issue was determined to be of very low significance (Green) using the Shutdown Operations Significance Determination Process (SDP). In accordance with the Shutdown Operations SDP, the issue was quantitatively assessed by the regional Senior Reactor Analysts (SRAs) because the actual unexpected reactor vessel water level decrease of 42 inches exceeded the SDP Table 1 criteria of "inadvertent loss of 2 feet of Reactor Coolant System inventory." The regional SRAs determined that the conditional core damage probability for this event was less than 1E-7. Therefore, the risk significance of this issue was very low. This was due to the continued availabilities of the low reactor water level alarm function at + 17 inches, the RHR isolation function at the low level setpoint (+1 inches), and the RHR and core spray reactor vessel injection initiation function at the low-low-low setpoint (-160 inches).

Technical Specification 5.4.1 requires, in part, that written procedures shall be implemented covering the applicable procedures recommended in Regulatory Guide 1.33, Appendix A, November 1972. Regulatory Guide 1.33, Appendix A, November 1972 requires, in part, that instructions be prepared for shutdown and changing modes of operation for shutdown cooling. AG-CG-41, Rev. 1, "Trouble shooting, Rework, and Testing (TRT) Control Process," required that shift management be satisfied that the task can be adequately controlled by the TRT form alone after reviewing the step-by-step description of activities to be performed by a TRT.

Contrary to the above, during the writing, review and authorization of TRT No. 01-228 for flushing the Unit 3 RHR crosstie piping, shift management's review of the TRT did not ensure that the instructions in the TRT would adequately control Unit 3 reactor vessel water level. The instructions did not assure that the Unit 3 "B" train of RHR was isolated from the reactor coolant system to prevent an unexpected decrease in reactor vessel water level during the flushing activities. 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) # 00078062. **(NCV 50-278/01-09-01)**

.2 Refueling Activities

a. Inspection Scope

The inspectors observed portions of fuel handling and refueling operations to assess the impact on the fuel barrier during handling and from related activities that could impact the integrity of the fuel barrier during subsequent reactor operation. In addition, the inspectors reviewed related reactor vessel maintenance, inspection and testing activities to verify whether the activities were performed in accordance with the Technical Specification requirements and Exelon approved procedures. The following activities were reviewed or observed:

Refueling Activities

- Fuel handling operations including fuel movement and fuel assembly tracking
- Foreign material exclusion control around the fuel pool and reactor vessel cavity
- Underwater repairs, using divers, to reactor steam dryer

b. Findings

No findings of significance were identified.

.3 Monitoring of Heatup and Startup Activities

a. Inspection Scope

The inspectors observed selected portions of the reactor startup from the control room to verify that Technical Specifications, license conditions, and administrative requirements were satisfied. Portions of the following activities and documents were reviewed or observed:

Plant Startup Activities

- Primary and secondary containment integrity established as required
- Startup preparations for mode change
- Reactor coolant system heat up
- Core flow calibrations
- Reactivity manipulations with the reactor recirculation system

Procedures and Documents

- GP-2, Rev 98, “Normal Plant Startup”
- SO 1B.1.A-3, Rev 26, “Main Turbine Startup and Normal Operations”
- SO 2A.1.B-3, Rev 35, “Starting the Second Recirculation Pump”

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:

- Unit 3 Emergency Shutdown Control Panel Test (ST-O-013-750-3, Rev 6)
- Unit 3 Calibration Check of High Pressure Coolant Injection Turbine Governor (SI3M-23-GOV-XXC2, Rev 1)
- Unit 2 Recording and Monitoring Reactor Vessel Temperatures and Pressure (ST-O-080-500-2, Rev 9)

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES [OA]

4OA1 Performance Indicator Verification

.1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed the station's records to assess the accuracy and completeness of selected NRC performance indicator (PI) data. The records reviewed included selected Technical Specification limiting condition for operation logs, system surveillance tests, licensee event reports, security logs, action requests and condition reports. The specific indicators included:

- Unit 2 Safety System Functional Failures
- Unit 3 Safety System Functional Failures
- Emergency Preparedness Drill/Exercise Performance
- Protected Area Security Equipment Performance Index
- Personnel Screening Program Performance
- Fitness-For-Duty/Personnel Reliability Program Performance

b. Findings

No findings of significance were identified.

.2 (Closed) URI 50-277/01-012-04 Peach Bottom Performance Indicator for Drill and Exercise Performance Could Not Be Verified Due To A Lack Of Information

a. Inspection Scope

The inspectors reviewed Exelon's actions in response to the unresolved item identified during the Emergency Preparedness (EP) program inspection conducted in July 2001 (NRC Inspection Report 50-277(278)/01-12). At that time the inspector was not able to evaluate the Peach Bottom Drill and Exercise Performance (DEP) data because the documentation used for determining the PI data calculations for several licensed operator requalification training sessions was missing or not complete.

b. Findings

The inspector noted that Exelon was unable to locate the supporting documentation. However, Exelon personnel interviewed operation training instructors and determined that the reported data was correct. Additionally Exelon has revised their PI procedures to specifically describe what paperwork is to be retained to support the reported data, retrained operations training instructors on their responsibilities for evaluating the drills related to DEP, and will assign an EP staff person to observe future drills to ensure PI procedure adherence. The inspectors reviewed the PI procedure changes and determined that they addressed previously raised concerns. This Unresolved Item (URI 50-277/01-012-04) is closed.

4OA3 Event Follow-up

.1 Unit 2 Automatic Reactor Shutdown

a. Inspection Scope

On October 23, 2001, Unit 2 automatically shutdown from 100% power when a loose isophase damper in the main generator made contact with the 'A' phase bus bar, causing a ground and a subsequent generator lockout and main turbine trip. Five main steam safety relief valves momentarily opened as expected immediately following the automatic shutdown. Additionally, Unit 2 experienced Groups II and III primary containment isolation valve closures due to decreased reactor water level as a result of the reactor scram.

The inspectors observed plant parameters and status following the automatic reactor shutdown and reviewed strip charts for key reactor parameters. The inspectors also reviewed Check-Off List GP-18, Revision 32, "Scram Review Procedure Check List" and discussed the automatic reactor shutdown with several operation and engineering managers and staff. The inspectors verified that no significant anomalies of plant parameters occurred during or following the shutdown.

b. Findings

No findings of significance were identified.

.2 (Closed) LER 2-01-003: Condition Prohibited by Technical Specification - Required Actions Not Completed When Limiting Condition for Operation Not Met

On September 14, 2001, the drywell radiation gas sampler had isolated due to a failed relay to the solenoid on the isolation valve. The crew entered Technical Specifications and initiated the required actions for a loss of the drywell radiation monitor. This event was discussed in Section 4OA7 of NRC Inspection Report 50-277(278)/01-08 and has been entered into the licensees corrective action program as CR00075295. The failed relay that caused this event was replaced and tested satisfactorily on September 15, 2001. The inspectors on-site review of this LER identified no findings of significance.

4OA5 Other

In NRC letter dated October 23, 2001, we issued a Severity Level III - Notice of Violation, (EA-01-188). **(VIO 50-277;278/01-09-02)** This violation is considered closed because the NRC has sufficient information on the docket concerning this issue and has documented inspection results directly related to the violation in combined inspection report 50-277/01-012 and 50-278/01-012.

4OA6 Meetings

.1 Exit Meeting Summary

The inspectors presented the results of the inspection to Mr. J. Doering and members of Exelon's management on November 20, 2001. Exelon management acknowledged the findings presented. No proprietary information was identified.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

a. Key Points of Contact

Exelon Generation Company

M. Alfonso, Training Director
J.T. Anthony, Maintenance Director
J. Bouck, Operations Director
P. Davison, Site Engineering Director
M. Delowery, Senior Manger-Outages
J. Doering, Site Vice President
E. Eilola, Shift Operations Superintendent
C. Hardee, Supervisor Emergency Preparedness
G. Johnston, Plant Manager
I. Seddon, Chemistry/Radwaste Manager
C. Swenson, Work Management Director
H. Trimble, Radiation Protection Manager
W. Trump, Nuclear Security Manager
D. Warfel, Senior Manger, Design Engineering
A. Winter, Manager, Regulatory Assurance

b. List of Items Opened, Closed, and Discussed

Closed

50-277/01-012-04	URI	Peach Bottom DEP PI Could Not Be Verified Due to a Lack of Information
2-01-003	LER	Condition Prohibited by Technical Specification - Required Actions Not Completed When Limiting Condition for Operation Not Met

Opened/Closed

50-278/01-09-01	NCV	Unit 3 Inadvertent Unplanned Vessel Inventory Reduction during the 3R13 Outage
50-277;278/01-09-02	VIO	Inoperable Off-site Sirens Not Identified due to Falsified Maintenance and Testing Records and Installation of Jumpers that Bypassed Siren Failure Detection Circuitry

c. List of Documents Reviewed

Drawings

M-1-S-42 sheet 33, revision 77, General Electric Elementary drawing for LS-3-13-074
M-1-P38 Item 124, Instrument Specification Data Sheet for LS-3-13-074
E-334, revision 32, schematic drawing for LS-3-13-074
M-365 sheet 1, revision 59, RCIC Piping and Instrument Drawing
M-1-S-36 sheet 27, revision 79, Alternate Shutdown Panel schematic for HPCI governor
M-1-S-36 sheet 28, revision 83, Alternate Shutdown Panel schematic for HPCI governor