

ENCLOSURE 2
U. S. NUCLEAR REGULATORY COMMISSION
REGION I
SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE
PHILADELPHIA ELECTRIC COMPANY
PEACH BOTTOM ATOMIC POWER STATION
July 12, 1982

OFFICIAL RECORD COPY

8211010343 821026
PDR ADOCK 05000277
Q PDR

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION	
1.1 Purpose & Overview	2
1.2 SALP Attendees	2
1.3 Background	2
II. SUMMARY OF RESULTS	4
III. CRITERIA	5
IV. PERFORMANCE ANALYSIS	
1. Plant Operations	6
2. Radiological Controls	8
3. Maintenance	10
4. Surveillance	11
5. Housekeeping & Fire Protection	12
6. Emergency Preparedness	16
7. Security & Safeguards	17
8. Refueling/Outage Activities	18
V. SUPPORTING DATA AND SUMMARIES	
1. Licensee Event Reports	22
2. Investigation Activities	22
3. Escalated Enforcement Actions	22
4. Management Conferences	22
TABLE 1 - TABULAR LISTING OF LERS BY FUNCTIONAL AREA	23
TABLE 2 - LER SYNOPSIS	24
TABLE 3 - INSPECTION HOURS SUMMARY	28
TABLE 4 - INSPECTION REPORT ACTIVITIES	29
TABLE 5 - VIOLATIONS (7/1/71 - 7/31/82)	32

OFFICIAL RECORD COPY

I. INTRODUCTION

1.1 Purpose and Overview

The Systematic Assessment of Licensee Performance (SALP) is an NRC staff effort to collect observations annually and evaluate licensee facilities to improve the NRC Regulatory Program and licensee performance.

The assessment period is July 1, 1981 through June 30, 1982. This assessment, however, includes NRC observations and licensee activities through July 1982.

The prior SALP period was July 1, 1980 - June 30, 1981.

Evaluation criteria used are discussed in Section III below.

1.2 SALP Board Members

R. W. Starostecki, Director, Division of Project and Resident Programs (DPRP)
T. J. Martin, Director, Division of Engineering and Technical Programs (DETP)
R. R. Keimig, Chief, Reactor Projects Branch No. 2, DPRP
E. C. McCabe, Jr., Chief, Reactor Projects Section 2B, DPRP
M. B. Fairtile, Licensing Project Manager, Operations Reactor Branch 4, NRR
Curtis J. Cowgill, III, NRC:RI Senior Resident Inspector, Peach Bottom Power Station, Units 2 & 3

1.3 Background

1.3.1 Licensee Activities

1.3.1.1 Unit 2

Unit 2 operated from the beginning of the assessment period to August 17, when it was shutdown for 7 days to repair the "2A" main feed pump, investigate recirculation pump alarms, and repair coolant leaks in the drywell. The unit then operates until October 14, when the reactor scrammed from a main turbine trip. The plant was restarted October 15. End of life coast down to refueling outage began about November 1. The reactor scrammed on January 22, 1982 on low reactor water level. The unit was returned to service on January 23, then was shutdown for refueling on February 19. Post outage startup was on June 25.

1.3.1.2 Unit 3

Unit 3 began the assessment period shutdown for refueling and modification. Major modifications completed included control rod drive hydraulic system changes, most Mark I torus modifications, core spray piping replacement, and feedwater sparger replacement.

Peach Bottom SALP

Unit 3 startup from refueling was delayed for about 2 weeks by diesel inoperability and RHR pump motor repair. Reactor startup was on October 5 followed by a failure of a main turbine bearing forcing a shutdown for 17 more days. Following a reactor scram during startup due to an isolated condenser vacuum switch, the reactor operated limited to 85% power, until mid-November awaiting a new condensate pump motor, then at full power. On February 6, the plant scrambled from a loss of an offsite transmission line. The plant was immediately restarted and operated until March 30 when it was shutdown to investigate vibration on the main electrical generator and perform other maintenance, including replacement of a recirculation pump mechanical seal assembly. The unit was then operated from April 9 until May 28, when it was shutdown because of suspected abnormal primary containment leakage. The unit was restarted May 30 and operated at full power for the remainder of the period.

1.3.2. Inspection Activities

Two NRC resident inspectors were assigned to the site during the entire appraisal period.

Total NRC Inspection Hours: 3406 (Resident and region based) Distribution of Inspection Manhours is shown on Table 3.

An emergency appraisal team inspected on December 7-17, 1981.

Inspection activities are tabulated in Table 4. Violations are tabulated in Table 5.

A special Health Physics inspection was made from June 1-11, 1982.

An Emergency Plan exercise was observed June 16, 1982.

OFFICIAL RECORD COPY

II. SUMMARY OF RESULTS

MAINE YANKEE NUCLEAR POWER STATION

<u>FUNCTIONAL AREAS</u>	<u>CATEGORY 1</u>	<u>CATEGORY 2</u>	<u>CATEGORY 3</u>
1. Plant Operations		X	
2. Radiological Controls Radiation Protection Radioactive Waste Management Transportation Effluent Control & Monitoring			X
3. Maintenance		X	
4. Surveillance (Including Inservice and Preoperational Testing)		X	
5. Fire Protection & Housekeeping			X
6. Emergency Preparedness		X	
7. Security and Safeguards		X	
8. Refueling/Outage Activities		X	
9. Licensing	X		

OFFICIAL RECORD COPY

III. CRITERIA

The following performance aspects were reviewed in each area:

1. Management involvement in assuring quality.
2. Resolving technical issues from a safety viewpoint.
3. Responsiveness to NRC initiatives.
4. Enforcement history.
5. Reporting and analysis of reportable events.
6. Staffing (including management).
7. Training effectiveness and qualification.

To provide a consistent evaluation, attributes relating each aspect to the characteristics of Category 1, 2, and 3 performance were applied as discussed in NRC Manual Chapter 0516, Part II and Table I.

The SALP Board conclusions were categorized as follows:

Category 1: Reduced NRC attention may be appropriate. Licensee management attention and involvement are aggressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that a high level of performance with respect to operational safety is being achieved.

Category 2: NRC attention should be maintained at normal levels. Licensee management attention and involvement in nuclear safety are evident; licensee resources are adequate and reasonably effective such that satisfactory performance with respect to operational safety is being achieved.

Category 3: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appear strained or not effectively used such that minimally satisfactory performance with respect to operational safety being achieved.

OFFICIAL RECORD COPY

IV. PERFORMANCE ANALYSIS

1. Plant Operations (42%)

Licensee management is involved in control of operations and assuring quality. The Station Superintendent and Assistant Station Superintendent closely monitor operations through direct observation of control room activities and close contact with station staff. On-site management frequently reviews control room logs and activities. Management oversight of activities outside the control room is less evident. Both the onsite Plant Operations Review Committee (PORC) and the offsite Operations and Safety Review (O&SR) Committee are aggressively involved in plant operations. During this assessment period, both PORC and the O&SR were actively involved in safety issues regarding fuel pool monitoring during Unit 2 core off-load, Unit 2 Loss of Power Testing. PORC also regularly reviews procedure changes, unusual activities, corrective actions, routine plant operations, and facility events.

Although decision making is usually at a level that ensures adequate management review, shift-to-management communications have caused occasional problems in this area. For example, a High Pressure Coolant Injection (HPCI) System isolation valve was mechanically blocked open in August 1981, and management was not informed until the next morning. Also, an unplanned release on November 4, 1981 was erroneously calculated (low) by shift personnel and management was not notified until the next morning.

In resolving technical issues, the licensee usually uses a technically sound and thorough approach and exhibits conservatism. During the assessment period, the licensee improved his responsiveness to alarm conditions. For example, Unit 2 was taken off-line and its drywell entered to investigate a Recirc Pump oil level alarm. About 5 years ago a typical PECO response would have been to assume annunciator failure without investigation. The licensee also showed a conservative approach to chemistry problems and recirculation pump seal deterioration: conductivity deterioration was promptly investigated, and corrected; seal deterioration is carefully monitored and repairs are now effected before only one seal remains.

Operators typically respond to plant transients alertly, safely, and in accordance with approved procedures. Examples during this assessment period included a Unit 2 loss of feed with a scram and steam line isolation, undemanded speed increase of a Unit 3 recirc pump, and unplanned Unit 3 HPCI and reactor Core Isolation Cooling (RCIC) injections. Licensee technical reviews of plant transients and other abnormal conditions are generally thorough, appropriately reviewed, and disseminated for training.

Day-to-day onshift supervision and control of operations needs to be more thorough and aggressive. For example, two events during refueling activities, an unplanned control rod lift in the fuel pool and the dropping of a fuel bundle into the core - indicate inattention in supervision of important shift operations, and inattention by shift supervision contributed directly to Violations involving the blocking of a HPCI isolation valve and the resetting of steam tunnel temperature detectors above the 200°F limit.

Peach Bottom SALP

There were 14 Violations in the operations area. Four Severity Level III Violations involved failure to meet Technical Specifications (TS's) Limiting Conditions for Operations (LCO's). These items, along with the NRC Region I assessment of major causes, are summarized below:

- a. HPCI system containment isolation valve was blocked open and Technical Specification required action was not taken. Causes: Inadequate onshift supervision, incomplete onshift reviews of regulatory requirements, inadequate shift-to-management communications, inadequate logging and shift turnover, inadequate post-maintenance testing.
- b. Less than the required number of operable average power range monitors. Causes: Inadequate procedures and surveillance.
- c. Startup with inoperable off-gas system radiation monitors. Causes: Incomplete system prints and check-off lists, incomplete restoration from modifications.
- d. Failure to maintain Main Steam Line Leak Detection Trip Setpoints less than or equal to 200°F. Causes: inadequate onshift supervision, deficient senior operator knowledge of Technical Specifications, inadequate training and dissemination of information, inadequate on-shift communications (regarding ventilation system operations), improper operation of the ventilation system.

Of the other Violations, two involved inadequate control of locked valves, two involved mispositioned valves on control room panels, one involved inaccurate controlled drawings, and three involved inadequate procedures. One of these procedural inadequacies contributed to unplanned pressurization of the reactor vessel during September 1981. The unplanned pressurization event also showed a lack of forethought by supervisors and operators regarding the effects of nonroutine shutdown activities (e.g., CRD hydraulic system outage) on reactor parameters.

The concerns about onshift supervision and faulty shift-to-management communications contrast with good operator responses to plan transients. This may indicate a weakness in the onshift ability to perceive the full range of safety implications of situations (blocked or isolated valves, etc.) which do not themselves trigger changes in plant status.

Licensee corrective actions for violations, operational events and other safety issues have generally been acceptable and responsive to NRC concerns. For some items, corrective action is either still in progress or has not yet been re-evaluated.

Conclusion: Category 2

Board Recommendations: None

OFFICIAL RECORD COPY

2. Radiological Controls (10%)

During the current assessment period, there were three special and one routine inspections of the Radiation Protection Program by Region I Health Physics Specialists. The special inspections were conducted to investigate two instances of possible personnel radiation overexposure and to assess the effectiveness of the Radiation Protection Program in light of recent radiological incidents. Transportation inspections were conducted at a burial site by a State of South Carolina Inspector and reviewed by a Region I Specialist Inspector. Resident Inspectors also conducted monthly reviews of selected program areas.

Radiation protection violations were identified in the following areas: four Severity Level IV violations for failure to post contaminated areas, failure to follow radiation protection procedures, and failure to make prompt notification required by 10 CFR 50.72; three Severity Level V violations for failure to follow radiation protection procedures and failure to post information required by 10 CFR 19.11. Five to seven additional violations (Severity Level IV and V) have recently been identified and are under review by Region I personnel.

Transportation violations were identified in the following areas: one Severity Level III violation for failure to effectively package radioactive material for transportation and one Severity Level IV violation for exceeding the allowable radiation exposure rate limit in a truck cab.

No Violations were identified in radioactive waste management, or effluent control and monitoring.

Radiation Protection

A special inspection of the licensee radiation protection program was conducted during the assessment period in response to a series of personnel contamination and potential personnel overexposure incidents, and the residents' perception that the program had deteriorated.

The inspectors found that licensee management has not placed sufficient emphasis on overall radiation protection program or on ALARA. The licensee's commitment to ALARA and response to Health Physics Appraisal conducted in mid 1980 findings have been long standing issues requiring considerable staff effort and numerous follow-up telephone discussions and letters to resolve. Dialogue between the licensee and RI was ongoing from report issue in April 1981 through March 1982.

Departmental lines of authority and communication are fragmented, which may stem from the recent reorganization of the Health Physics Department and the selection of new contract health physics support. Data are not available to determine how many of the prior contractor employees are currently working for the new organization. Two violations of failure to follow procedures and a contamination incident involved the same Health Physics Technician. Inexperienced licensee personnel have been assigned major radiation protection respon-

Peach Bottom SALP

sibilities (i.e., ALARA). The licensee has a designated ALARA engineer, but insufficient resources have been committed to make the ALARA program effective. Total person-REM exposure for 1981 showed a 9% increase over the previous year's exposure. During 1981 there was a lengthy Unit 3 refueling outage in which several major modifications were made (core spray piping replacement, MK) torus modification, feedwater sparger replacement) that could contribute to this increase. Additionally, Unit 2 replaced a recirculation pump motor. Further, a qualified Radiation Protection Manager does not, currently, supervise the radiation protection program.

Many of the problem areas identified in the special inspection were identified in June - July 1980 during the Health Physics Appraisal, but have not yet been corrected by the licensee.

The licensee does not have formal procedures covering major areas of the radiation protection program. Multiple minor violations have been identified during the assessment period and are increasing. This trend may be indicative of a programmatic problem.

In one case, event reporting was late, relative to the requirements of 10 CFR 50.72 and 20.403 (potential 14.1 rem exposure). This problem was attributed to poorly stated procedures and internal communications, as well as failure to adequately evaluate the cause/effect relationship between lost badge reports and procedures.

Radioactive Waste Management

Routine review of radioactive waste operations by the Resident Inspectors identified no violations. Waste storage space is at a premium, resulting in the storage of high level waste drums in areas that impact the effectiveness of ALARA performance.

Transportation

While violations have occurred, they do not appear to be indicative of programmatic breakdown. Corrective actions are prompt, and management has now implemented a program to audit all radwaste shipments.

Effluent Control and Monitoring

Events are reported in a timely manner. However, considerable NRC effort is needed to obtain acceptable resolutions.

Conclusion: Category 3

Board Recommendations

The licensee's Radiation Protection Program should receive increased emphasis, especially the following supplemental program modules; 83740 (Radiation protection - operating) and 83745 (radiation protection - refueling).

3. Maintenance (4%)

During the assessment period, there was one region-based inspection and routine inspection by the resident inspectors. Violations involved inadequate post-maintenance testing that contributed to failure of the Unit 3 containment integrated leak rate test at the end of the Unit 3 outage. Inadequate post-maintenance testing also contributed to the length of time a Primary Containment Isolation valve was inoperable (discussed in detail in the plant operations section).

The program to reduce alarm conditions has been productive and shows continuing improvement. About 5 alarms on an operating plant are normal now. This is about one-fourth the number routinely displayed 2 - 3 years ago.

In an effort to improve maintenance, the licensee has assigned a full time corrective maintenance engineer. Another engineer is responsible for preventive maintenance and outage planning. Additionally, four full time technical assistants are assigned.

The Licensee has difficulty coordinating outstanding maintenance actions. Coordination is manual and, on occasion, not all needed or due maintenance is completed on equipment when it is taken out of service for repair. Maintenance computer system installation is planned for December 1982 to solve this problem and provide a better maintenance history.

The licensee has a training program for craftsmen and availability of a large craftsmen pool remains a significant strength. There is, however, still a concern that better first line supervision and control of maintenance is needed. An example is the housekeeping and contamination control problems associated with the recent Unit 2 outage (discussed in detail in Section 5). First line supervisors do not appear to become involved in maintenance to the point where they adequately observe ongoing maintenance, nor does management appear to encourage them to do so.

Conclusion: Category 2

Board Recommendations

Encourage licensee management to upgrade first line supervision of maintenance and maintenance coordination.

4. Surveillance (4%)

A region-based specialist inspection of surveillance and calibration programs identified no Violations. One QA inspection reviewed training and qualifications programs and found no Violations. A specialist inspection of the Containment Integrated Leak Rate Test identified no Violations in this area (one maintenance procedure Violation was noted). Routine inspection by the resident inspectors identified two minor Violations - logging of temperatures was prematurely stopped during cooldown and snubber test stand calibration check procedures were not followed. One minor Violation in the Plant Operations area involved failure to properly restore from testing. Licensee identified excessive drywell leakage found in May 1982 involved failure to follow a surveillance procedure and resulted in a more serious LCO violation. After the assessment period, on two occasions, the licensee identified open sensing line equalizer valves in main steam line flow instruments. While these events have not been fully evaluated they could be evidence of a programmatic breakdown in this area.

Surveillance, Inservice, and Pre-operational testing involves several licensee work groups, each of which appears well-staffed with qualified and trained managers, supervisors, and technicians. Management and safety review committee (PORC and O&SR) attention to surveillance programs is considered appropriate and effective. Surveillance scheduling and schedule feedback prevents missed surveillances. Surveillance procedures generally provide sufficient detail and are clear, but in one case ambiguous wording contributed to the Violation for premature halting of temperature logging. In some cases, restoration from testing requires reference to several other procedures, increasing the chance of human error. (Ex: HPCI and RCIC post surveillance restoration each require four separate procedures.) The licensee's means of independently verifying proper restoration from testing (a TMI Action Plan item) has not yet been through TMI Action Plan Review (SER not yet issued).

Procedural adherence is usually strict and appears to be more painstaking than in other functional areas. Surveillance test results generally receive appropriate management review. Potential technical and equipment problems identified through testing are typically investigated thoroughly. Minor errors in recording data or making calculations are sometimes missed during routine reviews, however. No problems with availability of records have been noted.

Conclusion: Category 2

Board Recommendations: None

OFFICIAL RECORD COPY

5. Housekeeping & Fire Protection (4%)

Fire is a potential source of a serious facility accident. Housekeeping is a major factor in preventing fires. The Philadelphia Electric Company has a history of poor management attention to fire protection and housekeeping and this problem has been highlighted as one of the most significant weaknesses in both previous SALP's. The problem recurs and does not appear to receive sufficient corporate management attention. The poor plant cleanliness, inattention to day-by-day fire equipment accessibility, and fire barrier maintenance may have serious personnel and/or plant safety consequences.

This area was closely observed by the resident inspectors during routine inspections. There were 4 violations for failure to maintain a continuous fire watch, failure to maintain fire equipment access, failure to keep areas free of fire hazards, and failure to maintain fire barriers intact. Two fires occurred during the recent Unit 2 refueling outage. One was a trash fire in the Unit 2 main condensate bay area and the second was a smoldering bag of trash in the drywell. Both fires resulted from failure to keep work areas free of fire hazards. Each fire resulted in a work stoppage for about ½ day to correct deficiencies and make inspections. Also, during the Summer 1981 Unit 3 outage, two separate fires occurred in the Unit 3 drywell when rags caught fire. That occurrence did not result in a work stoppage.

Near the end of the Unit 3 outage, the licensee made some progress towards improving the cleanliness of both units. During the previous two years, housekeeping improved temporarily after outages and deteriorated significantly later.

During the Unit 2 outage from March - June 1982, housekeeping at Unit 2 became very poor. There was general craftsmen disregard for the cleanliness of work areas. In one case, a change area in the Unit 2 Reactor Building, employee sloppiness resulted in a Violation. (These conditions, as described in Combined Inspection 277/82-09, 278/82-09, follow.)

"4.1 General

On frequent occasions the inspector checked fire protection and housekeeping controls. The inspector observed control room indications of fire detection and fire suppression systems, spot-checked for proper use of fire watches and ignition source controls, checked a sampling of fire barriers for integrity, and observed fire-fighting equipment stations. During plant tours, the inspector noticed that outage activities were being allowed to seriously degrade housekeeping, as discussed below.

4.2 Unit 2 Reactor Building Tours, May 5 and May 10

About 9 a.m., May 5, the inspector noted poor housekeeping conditions in the Unit 2 Reactor Building 135-foot elevation, including accumulations of dirt and debris, plastic bags, boots and gloves. Several temporary lights were out. In addition,

two fire equipment stations were obstructed. Fire station 135-21 was blocked by two welding machines, and station 135-22 was blocked by a large table. Technical specification 6.8 and Regulatory Guide 1.33 (November 1972) require implementation of procedures for fire protection systems and for general control of maintenance, repair, and modification work. Procedure A-30, Revision 4, May 21, 1981, Plant Housekeeping Controls, states that placement of equipment and material shall not impede accessibility of firefighting equipment. Failure to follow this procedure is a Violation (277/82-09-03).

Further, dirt and debris was accumulating in contaminated areas. In some places, dirt from inside the area appeared to be spreading to unposted areas. About 10:30 a.m., at the inspector's request, the licensee checked for loose surface contamination at nine locations in the Reactor Building 135-foot elevation. Along the west border of the North Accumulator Isle, one spot read 4,000 disintegrations per minute per 100 square centimeters by masslin smear. Technical Specification 6.11 requires adherence to radiation protection procedures. HPO/CO-100, Revision 13, January 25, 1982, Health Physics Guides Used in the Control of Exposure to Radioactive Material, requires "Contaminated Area" signs or a radiation tape barrier for areas with removable contamination above 1,000 disintegrations per minute per 100 square centimeters. This failure to post a contaminated area is a Violation (277/82-09-04). Three other smears showed surface contamination approaching the procedural limit (i.e., 600-800 disintegrations per minute per 100 square centimeters).

The licensee promptly posted the contaminated areas and began cleaning to reduce contamination in unposted areas. During a tour about 2 p.m., May 5, the inspector noted that unposted areas were somewhat cleaner and some cleanup was being done inside contaminated areas. On May 6, the inspector noted that the previously obstructed fire equipment stations were clear.

During a tour about 2 p.m., May 10, the inspector noted that housekeeping conditions in the Reactor Building 135-foot elevation had again degraded. Trash, litter, and debris were accumulating in several locations. Most notable was the clothing change area (used by personnel involved in maintenance, repair and modification work) near the southeast corner of the building. Articles of anti-contamination clothing (including plastic boots, plastic and cloth gloves, coveralls, and caps), plus numerous small plastic bags and papers littered the floor in the area. At several locations this litter had accumulated in piles, posing a fire hazard. For example, near Motor Control Center E-324-RB an estimated fifty plastic bags were in one pile. Technical Specification 6.8 and Regulatory Guide 1.33 (November 1972) require procedures for general

control of maintenance, repair and modification work. Administrative Procedure A-30 states that garbage, trash, scrap and litter shall not be allowed to accumulate and create conditions which will adversely affect quality. Failure to prevent development of fire hazards from accumulating litter on May 5 and May 10 also violates Procedure A-30.

Also, during the May 10 tour the inspector noted spread of dirt and debris from posted surface contamination areas to unposted areas. At the inspectors request, a Health Physics technician checked removable surface contamination by masslin smear of an area near the control rod drive access hatch. The smear read 15,000 disintegrations per minute per 100 square centimeters. Failure to post this area for surface contamination is another example of violation of HPO/CO-100.

Health Physics technicians promptly posted the contaminated area. The inspector pointed out the unacceptable housekeeping conditions to the Maintenance Engineer. The inspector then expressed concern to the Outage Manager and to the Assistant Station Superintendent that outage activities on the Reactor Building 135-foot elevation are not being effectively controlled and that corrective measures from the inspector's May 5 findings brought about only temporary improvements.

4.3 Fire in the Unit 2 Condenser Area

About 10:25 p.m., May 12, there was a small trash fire ignited by welding flag in the Condenser Area. Although it was quickly extinguished, using one fire extinguisher, it began smoldering again at 12:10 a.m., May 13. An Unusual Event was declared and required notifications made. The Fire and Damage Team extinguished the fire, using hoses. No equipment damage, personnel injury, or spread of contamination resulted. The licensee attributed the fire to excessive trash buildup and stopped work in the area pending cleanup. The licensee also accelerated his normal housekeeping inspection schedule throughout the plant. On May 14 the Station Superintendent stated that all areas of Unit 2 had been inspected, deficiencies were being pursued, Unit 3 inspections were in progress, and the accelerated inspection program would continue."

After the Unit 2 drywell fire, licensee corrective action included specific monitoring requirements by construction and maintenance contractor supervision. Some improvement resulted."

Drywell congestion, litter, grating and insulation removal, and hot work during outages present an industrial safety hazard as well as a radiological safety and equipment protection.

Conclusion: Category 3

OFFICIAL RECORD COPY

Peach Bottom SALP

Board Recommendations

- a. Encourage the licensee to implement his existing program to clean up the work spaces during and after work.
- b. Refer coverage of drywell work during the next outage to OSHA in accordance with regional office instruction 3000/1.
- c. Increased inspection through resident independent effort and region based inspection using supplemental program module 54701 (Housekeeping/cleanliness program).

OFFICIAL RECORD COPY

6. Emergency Preparedness (24%)

An Emergency Preparedness Implementation Appraisal (EPIA) was conducted on December 7-17, 1981. Seven significant findings and 58 improvement items were identified. A Confirmatory Action Letter was sent to the licensee on December 24, 1981 and described actions the licensee agreed to complete by April 15, 1982. On April 29, 1982, a letter to the licensee forwarded Significant Emergency Preparedness Findings, Emergency Preparedness Improvement Items, the Emergency Preparedness Evaluation Report, and NRC Region I Combined Inspection Report 50-277/81-28, 50-278/81-31.

The deficiencies identified during the EPIA indicated that the emergency organization functions would not be fulfilled by the on-shift staff at all times and that staff augmentation would not be achieved within the 30-60 minute time requirement. There was no formally assigned site emergency planning coordinator, nor was a job description for that position provided. The emergency organizational relationship between corporate headquarters and site personnel was not clearly defined and training for emergency response personnel was insufficient. Appropriate emergency procedures were not available to some response personnel and a number of procedures were in need of revision. Letters from the licensee from February 2, 1982, to June 4, 1982, described corrective actions. A follow-up inspection is scheduled for September 1982.

On February 12, 1982, a Notice of Violation for failure to demonstrate by February 1, 1982 that administrative and physical means had been established to alert and provide prompt instructions to the public within the 10 mile emergency planning zone was issued. Licensee corrective actions were completed on February 26, 1982 and the licensee was notified that, pending further inspection, no further action was proposed by the NRC on this Violation.

A full-scale emergency exercise was evaluated on June 16, 1982. This evaluation determined that the licensee demonstrated the capability to implement their Emergency Preparedness Program in a manner to adequately protect the health and safety of the public.

The licensee, as indicated above, has been generally timely with responses to NRC initiatives, and has provided generally acceptable resolution proposals. This area has been one in which strong licensee management effort has resulted in major improvement.

Conclusion: Category 2

Board Recommendations: None

OFFICIAL RECORD COPY

7. Security and Safeguards (6%)

Analysis

During the assessment period, two inspections were conducted by region-based physical protection inspectors and one inspection was conducted by region-based MCA inspectors. Two Severity Level V and one Severity Level VI Violations were identified under the interim enforcement policy: protected area turnstile access control, fuel location history sheets not maintained, and LPRM's not inventoried. (The latter two Violations were reassigned to the refueling area.)

The licensee uses contractor security guards and supervisors. That force is relatively stable, with many members having several years of experience. Management involvement by a Security Supervisor and the Assistant Station Superintendent appears effective. Relatively few problems occur in routine security operations.

One technical problem before the assessment period was weapons requalification - many guards had extreme difficulty passing the annual tests. The licensee has increased the test frequency to semiannual and that appears to have helped.

Frequent security computer outages occurred early in the assessment period. No problems with compensatory measures were noted. Major software changes in October-November 1981 have essentially eliminated simultaneous trips of both computers, and in 1982 no outage (unplanned or routine) has exceeded 30 minutes.

The licensee's accepted Physical Security Plan is inconsistent with current standards in several areas. These areas include SAS manning, perimeter area boundaries, personnel access monitoring, and personnel badging. Upgrading could improve overall security program effectiveness.

Conclusion: Category 2

Board Recommendation

Licensee upgrade physical security plan.

OFFICIAL RECORD COPY

8. Refueling/Outage Activities (6%)

This assessment period included part of a major refueling/modification outage at Unit 3 (July-October 1981) and a major refueling/modification outage at Unit 2 (February-June 1982). Refueling and outage activities were observed by the resident inspectors. Region-based inspections included post-refueling testing and reload analysis and special nuclear materials control and accountability.

Planning, scheduling, and sequencing of outage activities improved during the period. The outage planning and scheduling function is well-staffed and was enhanced in the past year. Frequent (often daily) outage meetings, weekly "operation, work, and information" sheets, and periodic outage newsletters effectively disseminate outage information.

Control of in-plant refueling and outage activities continues to require upgrading, however. Examples follow:

-- Two significant events, an unplanned lifting of a control rod in the fuel pool and dropping of a fuel bundle into the core, occurred (see Functional Area 1, Plant Operations). Each event had the potential for serious consequences. Better supervisory control of fuel handling, more thorough training (including refresher training) for non-licensed operators, and more strict procedural controls are needed to improve performance during fuel handling.

-- Outage activities caused a serious degradation in plant housekeeping. During the outage, access to fire-fighting equipment was sometimes blocked, accumulations of trash and litter created fire hazards in the Unit 2 Reactor Building, and fires occurred in the Unit 2 condenser area and the Unit 2 Drywell. The licensee relies heavily on contractor janitors to correct housekeeping problems, but does not aggressively prevent the problems by requiring individual work groups to keep work areas clean and safe. As a result, during the high tempo of outage activities, fire hazards are not effectively controlled. NRC Region I believes the licensee must gain support of housekeeping/fire safety at the individual worker level to correct this continuing plant problem. (See also Functional Area 5, Fire Protection).

-- A number of Health Physic problems occurred during outage work. These are discussed in Functional Area 2, Radiological Controls.

The problems with control of in-plant activities do not appear to be specific to any one group of workers (e.g., maintenance vs. modification or licensee vs. contractor). Certain contractor jobs, such as the torus modifications, progressed very safely and smoothly. In the problem areas identified above, some improvement in supervision and control was noted near the end of the Unit 2 outage.

Two Violations, failure to inventory fission detectors and failure to promptly update fuel location history sheets, involved materials accounting but did not indicate a major program breakdown. Other Violations occurring during the

Peach Bottom SALP

outage are discussed within their functional areas (fire protection, radiological controls, and plant operations).

Conclusion: Category 2

Board Recommendation

Ensure that licensee corrective actions in fire protection and housekeeping, maintenance, surveillance, and health physics are sufficient.

OFFICIAL RECORD COPY

9. Licensing Activities

9.1 Introduction

9.2 Performance Analysis Basis

The following licensing reviews which either continued throughout or were completed during the assessment period formed the bases of our evaluation:

- NUREG-0737 -- 16 Actions Completed.
- Station Blackout -- Completed.
- Scram Discharge Volume -- Required Modifications Completed.
- MK 1 Torus -- Most Modifications Complete.
- Fire Protection Program -- Good Progress.
- Degraded Grid Voltage -- Modifications Completed.
- Reloads on Units 2 and 3.
- IE Bulletin 80-06, ESF Reset -- Closed Out.
- Operator Licensing.

There is consistent evidence of prior planning, setting of priorities, furnishing sufficient resources to perform work in a high quality fashion and management verification of work status, meeting dates and quality objectives. This is particularly evident in the timely completion of major programs such as MK 1 Torus Modifications, Scram Discharge Volume Program completion and in NUREG-0737 Programs. Philadelphia Electric is a leader in completing these programs. This is indicative of a high degree of management involvement and control in assuring quality.

The licensee has repeatedly demonstrated an understanding of the underlying safety concern of technical issues. This is particularly demonstrated in the NUREG-0737 program where the licensee will exceed an Owner's Group position to attain a "safer" resolution. This speaks well of the licensee's interest in resolving technical issues from a safety standpoint.

The licensee has a large, capable technical staff and is able to respond generally to NRC programs in a timely and technically sound manner. However, in Emergency Planning, Fire Protection, Equipment Environmental Qualification and NUREG-0737, the licensee has experienced delays in procuring qualified components. This is indicative of a commitment to be responsive to NRC initiatives.

Conclusion: Category 1

Board Recommendations

That the licensee reassess his procurement function for materials/equipment to better support completing modifications on NRC due dates.

V. SUPPORTING DATA AND SUMMARIES

1. Licensee Event Report

Tabular Listing

Type of Events:

A. Personnel Error	10
B. Design/Man./Constr./Install	3
C. External Cause	0
D. Defective Procedure	2
E. Component Failure	25
X. Other	<u>4</u>
	Total 44

Licensee Event Reports Reviewed:

Report Nos. 2-81-35/1T through 2-82-12/03L and 3-81-13-1P through 3-82-09/03L.

Causal Analysis

Three chains were identified:

- a. LERs 277/2-81-39/1T, 2-81-46/, 2-81-37, and 2-82-08/1T involved exceeding limiting conditions for operation through operator error or operators not being fully aware of the wide range of safety implications associated with their actions.
- b. LERs 278/3-81-22/, 3-81-17, 3-82-01/ involved set point drift. Licensee currently is installing Rosemont transmitters to replace earlier models.
- c. LERs 278/3-81-22/, 3-82-08/1T, and 3-81-15/1T involve mispositioned valves or switches, two of which resulted in violating technical specification limiting condition for operation.

2. Investigation Activities

None

OFFICIAL RECORD COPY

3. Escalated Enforcement Actions

3.1 Civil Penalties - none

3.2 Orders

Order modifying license dated October 24, 1980, requiring upgrade of environmental qualification of electrical equipment and retention of data pursuant to IEB 79-01B (generic).

Order modifying license dates July 10, 1981 confirming licensee commitments for TMI related requirements contained in NUREG-0737 (generic).

Orders modifying license dated January 9, 1981 requiring automatic system to initiate control rod insertion on low pressure in the Scram air header IAW IEB 80-17 (generic).

Order modifying license dated January 13, 1981 requiring assessment of suppression pool hydrodynamic loads and modifications to assure conformance with criteria in NUREG 0661 Appendix A (generic to all licensees with Mark I Containments).

Order modifying licensee dated January 19, 1982 extending deadline date of the January 13, 1981 order (generic).

3.3 Confirmatory Action Letters

Confirmatory letter dated December 24, 1981 regarding planned corrective actions on significant findings identified in the Emergency Preparedness Team (NRC) inspection on December 7 through 17, 1981.

4. Management Conferences

Salp Management Meeting at PECO Corporate Office September 4, 1981.

March 18, 1982 Enforcement Conference (telephone) on Radioactive Material Transportation (truck cab above 2 millirem/hour).

OFFICIAL RECORD COPY

TABLE 1
TABULAR LISTING OF LERs BY FUNCTIONAL AREA
PEACH BOTTOM ATOMIC POWER STATION UNITS 2 AND 3

<u>Area</u>	<u>Number/Cause Code</u>			<u>Total</u>
1. Plant Operations	A/8	D/1		9
2. Radiological Controls	A/2	X/2	D/1	5
3. Maintenance	E/23			23
4. Surveillance	X/1			1
5. Fire Protection	E/1			1
6. Emergency Preparedness	none			none
7. Security and Safeguards	none			none
8. Refueling	none			none
9. Licensing Activities	none			none
10. Other (Original Design Errors and Equipment Failures Not Classifiable Into Areas 1-9.	B/3	R/1	X/1	5

TOTAL 44

Cause Codes:

- A. Personnel Error
- B. Design/Man./Const./Install.
- C. External Cause
- D. Defective Procedure
- E. Component Failure
- X. Other

OFFICIAL RECORD COPY

TABLE 2

PEACH BOTTOM ATOMIC POWER STATION

LER SYNOPSIS

July 1, 1981 - June 31, 1982

UNIT 2

<u>LER Number</u> <u>Type</u>	<u>Summary Description</u>
2-81-35/1T-0 (24 hour)	Exceeded Tech. Spec. 3.8.C.1 allowable gross activity (gaseous) release rate for a short period of time
2-81-36/03L (30 day)	During ST, Containment Isolation Valve in sample line to oxygen analyzer did not close
2-81-37/1P&T (24 hour)	Failure to initiate shutdown when PCIS Limiting conditions for operation were not satisfied
2-81-38/1P&1T (24 hour)	Fire Protection safe shutdown analysis indicated that with 3KV emergency bus breaker control cables were not adequately separated
2-81-391P&1T (24 hour)	Operations with less than two LPRM inputs per level in the 'C' APRM
2-81-40/1P&1T (24 hour)	Safety/relief valve acoustic monitoring cables may not be able to withstand the post-accident environment
2-81-41/3L (30 day)	During ST, HPCI gland seal condenser's bottom head gasket leaked
2-81-42/3L (30 day)	HPCI gland seal condenser bottom head gasket leak. System was blocked and leak repaired
2-81-43/04T (10 day)	Limit for usage of soda ash was exceeded by 1,000 lbs.
2-81-44/03L (30 day)	Failure of the E-1 diesel to start
2-81-45/03L (30 day)	CAD tank level was decreased below TS limit; system inventory restored within 24 hours

OFFICIAL RECORD COPY

UNIT 2 (Continued)

<u>LER Number</u> <u>Type</u>	<u>Summary Description</u>
2-81-46/1P&1T (24 hour)	Shutdown of reactor building ventilation caused slow increase in main steam line tunnel exhaust duct temperature. Funnel temperature detectors were set above the 200°F limit and returned below limit when Reactor Building ventilation had been recovered and temperatures had returned to normal
2-81-47/03L (30 day)	Torus water cleanup pump suction valve failed. Second isolation valve was closed and system was declared inoperable
2-82-01/03L (30 day)	During startup, a local leak rate test of the drywell air-lock revealed excess leakage
2-82-02/03L (30 day)	Failure of a solenoid isolation valve to seat properly during a local leak rate test
2-82-03/03L (30 day)	Diesel Generator Cardox tank level dropped below limit in Tech. Spec.
2-82-04/03L (30 day)	During ST of the primary containment isolation system, the 'A' SBT filter inlet damper failed to automatically open
2-82-05/03L (30 day)	Failure to Control Room Emergency Ventilation to meet requirements
2-82-06/03L (30 day)	During testing the diesel fire pump tripped
2-82-07/03L (30 day)	While lining up valves for a leak rate test, refueling floor outboard isolation valve could not be closed due to a stuck solenoid valve
2-82-08/1P hour)	Diesel fuel oil storage tank inventory below 104,000 (24 gallons
2-82-09/1P (24 hour)	Crack in 'B' Core Spray Sparger
2-82-10/1P (24 hour)	Indicated overexposure on Eberline TLD
2-82-11/1P (24 hour)	Significant Shoulder Contamination During Eddy Current Testing
2-82-12/03L (30 day)	Control Room Emergency Ventilation System failed to meet Tech. Spec. 4.11.A.1

PEACH BOTTOM ATOMIC POWER STATION

LER SYNOPSIS

July 1, 1981 - June 31, 1982

UNIT 3

<u>LER Number</u> <u>Type</u>	<u>Summary Description</u>
3-81-13/1P (24 hour)	Unplanned release of radioactive water to storm drain system
3-81-14/1P (24 hour)	Pressurization of the reactor vessel by non-nuclear means with suppression pool water volume slightly above maximum permissible
3-81-15/1P&1T&1X (24 hour)	Off-gas monitoring system was not receiving sufficient flow due to closed sample line root valve
3-81-16/03L (30 day)	RCIC turbine speed control problems corrected by governor adjustments
3-81-17/03L (30 day)	While at power, ST revealed RCIC High Steam flow isolation switch exceeded high limit. Redundant channels were immediately verified operable
3-81-18/3L (30 day)	During ST, the HPCI turbine steam supply valve failed to open
3-81-19/3L (30 day)	Drywell range pressure recorder: pressure transmitters were blowing fuses
3-81-20/3L (30 day)	During power operations, ST of RCIC determined that torus suction valve failed to stroke
3-81-21/3L (30 day)	'D' core spray pump failed to start due to failure of pump breaker to close
3-81-22/3L (30 day)	Torus high level switches were out of calibration
3-82-01/03L (30 day)	Below limit main steam line low pressure switch was recalibrated and returned to service within 1 hour
3-82-02/3L (30 day)	Three hydraulic snubbers had empty fluid reservoirs
3-82-03/03L (30 day)	One lpci pump failed to start due to misaligned pump breaker cell switch

LER SYNOPSIS

UNIT 3 (Continued)

<u>LER Number</u> <u>Type</u>	<u>Summary Description</u>
3-82-04/03L (30 day)	Room coolers did not start during test of Core Spray and RHR systems
3-82-05/03L (30 day)	Relay in the PCIS energized, indicating a faulty trip unit
3-82-06/1P (24 hour)	Calculational error in ODDYN analysis of MCPT for pressurization events for Reload 4
3-82-07/03L (30 day)	HPCI problems discovered during operability test
3-82-08/1P&1T (24 hour)	Primary containment leak in excess of 0.5% per day
3-82-09/3L	Valve Position Indication Lost on HPCI. Declared inoperable for 30 minutes while replacing fuses. Cause was started solenoid coil in turbine exhaust drain.

OFFICIAL RECORD COPY

TABLE 3

INSPECTION HOURS SUMMARY (7/1/81 - 6/30/82)

PEACH BOTTOM ATOMIC POWER STATION

UNITTS 2 AND 3

	<u>HOURS</u>	<u>% OF TIME</u>
1. Plant Operations	1420	42
2. Radiological Controls	350	10
3. Maintenance	150	4
4. Surveillance	130	4
5. Fire Protection/Housekeeping	150	4
6. Emergency Preparedness	814	24
7. Security and Safeguards	205	6
8. Refueling	187	6
	<u>**Total</u>	<u>3406</u>
		<u>100</u>

** Hours total is estimated.

OFFICIAL RECORD COPY

TABLE 4
INSPECTION REPORT ACTIVITIES
PEACH BOTTOM ATOMIC POWER STATION

<u>REPORT NUMBER</u> <u>INSPECTOR(S)</u>	<u>AREAS INSPECTED</u>
277/81-18, 278/81-19 (Resident)	Routine, on-site inspection of accessible parts of both units, operational safety, events, radiation protection, physical security, control room conditions LER's, IE Circulars, outstanding item followup, committee activities and periodic reports
277/81-19, 278/81-20 (Resident)	Routine & TMI action plan items & surveillance testing
278/81-21 (Specialist)	Routine, unannounced inspection of containment activities, outage maintenance, plant shutdown, and actions on previous inspection findings
277/81-20, 278/81-22 (Resident)	Routine & TMI action plan, requalification training & emergency preparedness
277/81-21, 278/81-23 RI Management	SALP
277/81-22, 278/81-24 (Specialist)	Fuel Pin Puncturing Tests
277/81-23, 278/81-25 (Specialist)	Quality Assurance Program Implementation
277/81-24, 278/81-26 (Resident)	Routine, surveillance, TMI Action Plan, emergency preparedness, radwaste processing
277/81-25, 278/81-27 (Specialist)	Nuclear material control & accounting
* 278/81-28 (Specialist)	Radiation Protection
277/81-26, 278/81-29 (Specialist)	Security
277/81-27, 278/81-30 (Resident)	Routine & fire protection

TABLE 4 (Continued)

<u>REPORT NUMBER INSPECTOR(S)</u>	<u>AREAS INSPECTED</u>
277/81-28, 278/81-31 (Specialist Team)	Emergency Preparedness
278/81-32 (Specialist)	Action on previous findings, followup of IEB 80-17, Cycle 5 post refueling startup testing
277/81-29, 278/81-33 (Specialist)	Administrative controls of surveillance and calibration, and surveillance test & calibration program implementation
277/82-01, 278/82-01 (Resident)	Maintenance, fire protection/housekeeping; chemistry, reactor physics
*277/82-02, 278/82-02 (Specialist)	Pre-refuel, transportation, maintenance of shipping containers, nonradioactive systems, SALP concerns
277/82-03, 278/82-03 (Resident)	Maintenance, fire protection/housekeeping; chemistry; emergency planning
277/82-04, 278/82-04 (Specialist)	Security Program: Testing & Maintenance; Physical Barriers (Protected Areas & Vital Areas) Security System Power Supply; Lighting; Assessment Aids; Access Control (personnel & Packages & Vehicles); Detection Aids (Protected & vital area); alarm stations; communications & independent inspection effort
277/82-05, 278/82-05 (Specialist)	Transportation
277/82-06, 278/82-06 (Resident)	Routine, Respiratory protection, maintenance, & training
277/82-07, 278/82-07 (Specialist)	QA Program, QA/QC organization and administration, personnel qualifications, design changes/modifications
*277/82-08, 278/82-08 (Specialist)	Radiation Protection
277/82-09, 278/82-09 (Resident)	Routine, Surveillance, housekeeping, and fire protection
*277/82-10, 278/82-10 (Resident)	Routine

OFFICIAL RECORD COPY

Peach Bottom SALP

TABLE 4 (Continued)

REPORT NUMBER
INSPECTOR(S)

AREAS INSPECTED

*277/82-11, 278/82-11
(Specialist)

Special Health Physics

*277/82-12, 278/82-12
(Specialist)

Emergency Preparedness

*reports not yet issued.

TABLE 5
VIOLATIONS (7/1/81 - 6/30/82)
PEACH BOTTOM ATOMIC POWER STATION

A. Number and Severity Level of Violations

a. Interim NRC Policy Severity Level (July 1 - March 9)

Severity Level I	0
Severity Level II	0
Severity Level III	6
Severity Level IV	3
Severity Level V	8
Severity Level VI	8

b. NRC Policy Severity Levels (March 10 - June 30)

Severity Level I	0
Severity Level II	0
Severity Level III	0*
Severity Level IV	13
Severity Level V	3*

B. Violations Vs. Functional Area

(1) July 1 - March 9

FUNCTIONAL AREAS	Severity Levels					
	I	II	III	IV	V	VI
1. Plant Operations	0	0	4	0	3	2
2. Radiological Controls	0	0	1	2	1	4
3. Maintenance	0	0	0	1	0	0
4. Surveillance	0	0	0	0	0	1
5. Fire Protection	0	0	0	0	2*	0
6. Emergency Preparedness	0	0	1	0	0	0
7. Security and Safeguards	0	0	0	0	1	0
8. Refueling	0	0	0	0	1	1
9. Licensing Activities	0	0	0	0	0	0
Totals	0	0	6	3	8	8

* Corrected values

OFFICIAL RECORD COPY

TABLE 5 (Continued)

B. Violations Vs. Functional Area

(2) March 10 - June 30

FUNCTIONAL AREAS	I	Severity Levels			V
		II	III	IV	
1. Plant Operations	0	0	0	3	2
2. Radiological Controls	0	0	0**	7**	0
3. Maintenance	0	0	0	0	0
4. Surveillance	0	0	0	0**	1**
5. Fire Protection	0	0	0	3	0
6. Emergency Preparedness	0	0	0	0	0
7. Security and Safeguards	0	0	0	0	0
8. Refueling	0	0	0	0	0
9. Licensing Activities	0	0	0	0	0
Totals	0	0	0**	13	3**

* Does not include the following reports, not yet issued:

- 277/82-02 and 278/82-02 - Health Physics (Outage Preparations)
- 277/82-10 and 278/82-10 - Resident Inspection
- 277/82-11 and 278/82-11 - Special Health Physics

** Corrected values

TABLE 5 (Continued)

<u>Inspection No.</u>	<u>Inspection Date</u>	<u>Subject</u>	<u>Req.</u>	<u>Sev.</u>	<u>Area</u>
81-24 & 26	Oct 7 - Nov 16	Off-gas system radiation monitors were inoperable, temporary monitors were not used, and the MSIV's remained open	T.S.	III	1(8)
81-24 & 26	Oct 7 - Nov 16	Failure to notify NRC Operations Center within one hour of an unplanned radioactive release	10CFR50	V	1
81-24 & 26	Oct 7 - Nov 16	Failure to sign in on RWP as required by HPO/CO-4	T.S.	V	2
81-24 & 26	Oct 7 - Nov 16	Failure to follow locked valve logging procedures	T.S.	VI	1
81-25 & 27	Oct 14 - 16	Failure to keep records of location of fission detectors and to perform inventories	10CFR70(1)	V	8
81-25 & 27	Oct 14 - 16	Failure to maintain current fuel location history sheets	10CFR70(c)	VI	8
81-28	Oct 13 - 15	Failure to make proper notification regarding potential over exposure	10CFR20	IV	2
81-28	Oct 13 - 15	Failure to follow Radiation Protection/Procedures	T.S.	IV	2
81-27 & 30	Nov 17 - Dec 31	Failure to maintain Main Steam Line Leak Detection High Temperature trip setpoints at 200°F or under	T.S.	III	1
82-01 & 01	Jan 1 - Feb 2	Damaged Radioactive Waste Package	10CFR71	III	2

* Revised listing

OFFICIAL RECORD COPY

TABLE 5 (Continued)

<u>Inspection No.</u>	<u>Inspection Date</u>	<u>Subject</u>	<u>Req.</u>	<u>Sev.</u>	<u>Area</u>
82-01 & 01*	Jan 1 - Feb 2	Failure to promptly post a violation involving radiological working conditions	10CFR29	VI	2
82-01 & 01*	Jan 1 - Feb 2	Failure of 2 workers to sign RWP	T.S.	VI	2
82-01A	February 1	Failure to meet deadline to demonstrate sirens	10CFR50	III	6
82-03 & 03	Feb 3 - Mar 9	Fire barrier penetration was inoperable & firewatch was not posted	T.S.	V	5(1)
82-03 & 03	Feb 3 - Mar 9	Individual in controlled area without provided dosimetry	T.S.	VI	2
82-04 & 04	Mar 8 - 12	Turnstiles to protected area were not under the control of the individual responsible for the last access control function	Physical Security Plan	V	7
82-05 & 05	February 18	Exceeded 2 mR/hr in occupied position of vehicle	10CFR71	IV	2
82-06 & 06*	Mar 10 - Apr 20	Two hydraulic snubbers were tested without specified prior check of velocity meter calibration	T.S.	V	4
82-06 & 06*	Mar 10 - Apr 20	Continuous firewatch not maintained in Cable Spreading Room when CARDOX was inoperable	T.S.	IV	5(1)
82-06 & 06*	Mar 10 - Apr 20	Procedural controls did not adequately safeguard against worker radiation exposure	T.S.	V	1

* Revised listing

OFFICIAL RECORD COPY

TABLE 5 (Continued)

Inspection No.	Inspection Date	Subject	Req.	Sev.	Area
82-06 & 06*	Mar 10 - Apr 20	Three ESW valves were not locked as required	T.S.	IV	1
82-06 & 06	Mar 10 - Apr 20	RCIC Valves were found SHUT when reactor was about 100 psi and no testing was in progress	T.S.	IV	1
82-06 & 06	Mar 10 - Apr 20	Failure to follow Respiratory equipment Maintenance & Quality Assurance procedures	T.S.	IV	2
*82-08 * 08	Apr 26 - 29 and May 13 - 14	Failure to follow Radiation Protection Procedure	T.S.	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Perform Surveys	10CFR20	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Instruct Workers	10CFR19	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Post a Radiation Area	T.S.	IV	2
*82-08 & 08	Apr 26 - 29 and	Failure to establish a retraining program meeting ANSI 18.1 section 5.5	T.S.	IV	2
277/82-09 & 09	Apr 21 - May 19	Procedures for inspection of seismically qualified air supplies to Primary Containment Isolation Valves in the Containment Atmosphere Control System were not appropriate	10CFR50	V	1
82-09 & 09	Apr 21 - May 19	SLO assigned to fuel floor was not supervising properly & resulted in exposure to four persons	T.S.	IV	1(8)

* Revised listing

TABLE 5 (Continued)

Inspection No.	Inspection Date	Subject	Req.	Sev.	Area
82-06 & 06*	Mar 10 - Apr 20	Three ESW valves were not locked as required	T.S.	IV	1
82-06 & 06	Mar 10 - Apr 20	RCIC Valves were found SHUT when reactor was about 100 psi and no testing was in progress	T.S.	IV	1
82-06 & 06	Mar 10 - Apr 20	Failure to follow Respiratory equipment Maintenance & Quality Assurance procedures	T.S.	IV	2
*82-08 * 08	Apr 26 - 29 and May 13 - 14	Failure to follow Radiation Protection Procedure	T.S.	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Perform Surveys	10CFR20	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Instruct Workers	10CFR19	IV	2
*82-08 & 08	Apr 26 - 29 and May 13 - 14	Failure to Post a Radiation Area	T.S.	IV	2
*82-08 & 08	Apr 26 - 29 and	Failure to establish a retraining program meeting ANSI 18.1 section 5.5	T.S.	IV	2
277/82-09 & 09	Apr 21 - May 19	Procedures for inspection of seismically qualified air supplies to Primary Containment Isolation Valves in the Containment Atmosphere Control System were not appropriate	10CFR50	V	1
82-09 & 09	Apr 21 - May 19	SLO assigned to fuel floor was not supervising properly & resulted in exposure to four persons	T.S.	IV	1(8)

* Revised listing

OFFICIAL RECORD COPY

TABLE 5 (Continued)

Inspection No.	Inspection Date	Subject	Req.	Sev.	Area
82-09 & 09	Apr 21 - May 19	Placement of equipment blocked access to fire-fighting equipment station & a fire hazard was created by litter	T.S.	IV	5(8)
82-09 & 09	Apr 21 - May 19	Failure to post "Contaminated Area" signs in two places	T.S.	IV	5(2)

Violations identified in combined inspection reports 50-277/82-10, 50-278/82-10 and 50-277/82-11 and 50-278/82-11 are under review by NRC management and will be issued later.

* Violations in reports not yet issued.

OFFICIAL RECORD COPY
38