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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-277/81-16
50-278/81-17

Docket No. 50-277
50-278

License No. DPR-44
DPR-56 Priority - Category C
C

Licensee: Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania

Facility Name: Peach Bottom Atomic Power Station, Units 2 and 3

Inspection at: Delta, Pennsylvania

Inspection conducted: June 1-30, 1981

Inspectors: C. J. Cowgill, III, Senior Resident Inspector — 8/28/81 date signed

C. J. Cowgill III for
A. R. Blough, Resident Inspector — 8/28/81 date signed

W. F. Sanders — 8/24/81 date signed
W. F. Sanders, Reactor Inspector

J. R. White — 8/25/81 date signed
J. R. White, Radiation Specialist

Approved by: Robert M. Gallo FOR — 8/31/81 date signed
E. C. McCabe, Jr., Chief, Reactor Projects Section No. 2B, DRPI

Inspection Summary:
Inspection of June 1-30, 1981, (Combined Report Nos. 50-277/81-16 and 50-278/81-17)

Areas Inspected: Routine, onsite regular and backshift inspections by the resident inspectors (75 hours - Unit 2; 53 hours - Unit 3) and two region-based specialists (6 hours Unit 2; 16 hours Unit 3). Areas inspected included accessible portions of the Unit 2 and Unit 3 facilities, operational safety, event followup, radiation protection, physical security, control room observations, LER review, TMI Action Plan followup, outstanding item followup, IE Information Notice followup and periodic reports.

Results: Noncompliances: One (violation of allowable technical specification instantaneous release rate limit, Detail 4).

DETAILS

1. Persons Contacted

R. Castagliola, General Supervisor, Quality Assurance
B. Clark, Senior Engineer, Generation Division (Nuclear)
M. J. Cooney, Superintendent, Generation Division (Nuclear)
W. Corse, Assistant Site Q. A. Engineer
J. K. Davenport, Maintenance Engineer
G. F. Dawson, I&C Engineer
*R. S. Fleischmann, Assistant Station Superintendent
A. Fulvio, Results Engineer
N. Gazda, Health Physics, Radiation Protection Manager
A. Hilsmeier, Engineer, Health Physics and Chemistry Support
T. Hinkle, ISI Coordinator
F. W. Polaski, Reactor Engineer
S. R. Roberts, Operations Engineer
D. C. Smith, Outage Coordinator
S. A. Spitko, Site Q. A. Engineer
S. Q. Tharpe, Security Supervisor
*W. T. Ullrich, Station Superintendent
H. L. Watson, Chemistry Supervisor
J. E. Winzenried, Technical Engineer

Other licensee and contractor employees were also contacted.

*Present at exit interviews on site and for summation of preliminary inspection findings.

2. Outstanding Item Update

(Open) Unresolved Item (80-31-02 and 80-23-02), review Maintenance Request Forms (MRFs) for Modification 79-104. The licensee provided MRFs 2-60-M-0-81, -83, -84, and -85 for replacement of APRM and IRM by-pass switches with a more reliable switch. No problems with these documents were identified, but the inspector noted that the scope of this modification also included the Source Range Monitor (SRM) and Rod Block Monitor (RBM) by-pass switches. The associated MRFs were requested from the licensee. This item remains open.

3. Plant Operations Review

a. Logs and Records

(1) Documents Reviewed

A sampling review of logs and records was made to: identify significant changes and trends; assure that required entries were made; verify that operating orders and night orders conform to Technical Specification requirements; check correctness of communications concerning equipment and lock-out

status; verify jumper log conformance to procedural requirements; and verify conformance to limiting conditions for operations. Logs and records reviewed were:

(a) Shift Supervision Log, June 1-30, 1981
(b) Reactor Engineering Log - Unit 2, June, 1981
(c) Reactor Operators Log - Unit 2 - June 1-30, 1981
(d) Reactor Operators Log - Unit 3 - June 1-30, 1981
(e) CO Log Book - June 1-30, 1981
(f) Radiation Work Permits (RWP's) - Various in both Units 2 and 3, June, 1981

(g) Maintenance Request Forms (MRF's) - Units 2 and 3, (Sampling) June, 1981

(h) Ignition Source Control Checklists (Sampling), June, 1981

(i) Operation Work & Information Data - June, 1981

Control room logs were reviewed pursuant to requirements of Administrative Procedure A-7, "Shift Operations". Frequent initialing of entries by licensed operators, shift supervision, and licensee on site management constituted evidence of licensee review. Logs were also reviewed to assure that plant conditions including abnormalities and significant operations were accurately and completely recorded. Logs were also assessed to determine that matters requiring reports to the NRC were being processed as suspected reportable occurrences. No unacceptable conditions were identified.

(2) Facility Tours

(a) During the course of this inspection, which also included shift turnover, the inspector conducted daily tours and made observations of:

-- Control Room - (daily)

-- Turbine Building - (all levels)

-- Reactor Building - (Accessible areas)

-- Diesel Generator Building

-- Yard area and perimeter exterior to the power block, including Emergency Cooling Tower and torus dewatering tank

-- Security Building, including CAS, Aux SAS, and control point monitoring

-- Lighting

-- Vehicular Control

-- The SAS and power block control points

-- Security Fencing

-- Portal Monitoring

-- Personnel and Badging

-- Control of Radiation and High Radiation areas including locked doors checks

-- TV monitoring capabilities

-- Weapons requalification range (about 3 miles off-site)

Off-shift inspections during this inspection and the areas examined were:

DATE	AREAS EXAMINED
June 4	Control Room
June 5	Turbine Building Tour
June 9	Weapons Requalification
June 15	Weapons Requalification
June 17	Control Room, Health Physics Controls
June 18	Tour of protected area
June 19	Control Room
June 22	Event Response (Unplanned Noble Gas Release), Protected Area Lighting

-- Off-Normal Alarms. Selected annunciators were discussed with control room operators and supervision to assure they were knowledgeable of plant conditions and that corrective action, if required, was being taken.

The operators were knowledgeable of alarm status and plant conditions.

-- Control Room Manning. On frequent occasions during this inspection, the inspector confirmed that requirements of

10 CFR 50.54(k), the Technical Specifications, and commitments to the NRR letter of July 31, 1980 for minimum staffing were satisfied. The inspector frequently confirmed that a senior licensed operator was in the control room complex. No unacceptable conditions were identified.

-- Fluid leaks. On June 30, the inspector noted a small leak on a threaded connection in the air supply to torus vacuum breaker 2502A. When notified, shift supervision inspected the leak and initiated a maintenance request. No other fluid leaks were identified which had not been identified previously by the licensee or for which necessary corrective action had not been initiated. The inspector observed sump status, alarms, pump-out rates, and held discussions with licensee personnel. No unacceptable conditions were identified.

-- Piping Vibration. No significant piping vibration or unusual conditions were identified.

-- Monitoring Instrumentation. The inspector frequently confirmed that selected instruments were operating and indicated values were within Technical Specification requirements. On a daily basis when the inspector was on site, ECCS switch positioning and valve lineups, based on control room indicators and plant observations were verified. Examples of instrumentation observed included: flow setpoints, breaker positioning, PCIS status and radiation monitoring instruments. No unacceptable conditions were identified.

-- Fire Protection. On frequent occasions the inspector verified the licensee's measures for fire protection. 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 a tour of the Turbine Building on June 24, the inspector noted that the watertight door to the laundry area, clearly marked "Fire Door; Keep Closed", was open. The inspector informed station management and shift supervision, who promptly shut the door. A modification to add a self-closing fire door at that location is still outstanding (reference combined reports 50-277/81-05 and 50-278/81-05).

While touring the pump structure on June 25, the inspector noted combustibles, including rags, cardboard, and blocks of wood (apparently not fire-treated), in the vicinity of the Unit

3 HPSW pumps in the Emergency Pump Room. There was also evidence of smoking. Shift supervision was informed and promptly removed the combustible material. The inspector reviewed licensee procedures and determined that the Emergency Pump Room was designated neither as a vital housekeeping area nor as a "no smoking" area. Also, the Diesel Generator Building is not specified "no smoking" by the procedures, even though it is so controlled. The licensee indicated that housekeeping and smoking controls over these areas would be re-evaluated. This area will be reinspected (81-16-01 and 81-17-01).

b. Followup on Events Occurring During the Inspection

(1) High Pressure Service Water (HPSW) Line Failure

A region-based inspector reviewed the repair and testing activities associated with a pipe failure in an 18" diameter X 0.296" minimum wall, carbon steel spool piece located downstream and welded to valve 32-11B on the Unit 2 HPSW system. An area of the pipe adjacent to the valve and surrounding the leak was incrementally measured for wall thickness and recorded on a layout to determine the extent of the internal corrosion. The measurements were made with ultrasonic techniques per specification SWI-15. The records of the plotted wall thickness show the thinnest wall thickness to be 0.060", with both leaks 1.5" downstream from the valve. All of the pipe area under the required minimum wall of 0.296" was contained in an area on the bottom of the pipe 13" circumferentail and 15.5" from the end of the valve. The licensee stated that the internal erosion resulted from the turbulence caused by throttling the flow with the valve. In addition to replacing the defective pipe, wall thickness inspections were planned for the "A" line as well as the lines in Peach Bottom Unit 3. The inspector identified no unacceptable conditions.

(2) Reactor Scram

At 9:29 a.m., June 22, a Unit 2 13KV auxiliary power bus was lost and the reactor scrammed from low water level. Loss of condensate pumps powered from the bus caused the reactor feed pumps to trip on low suction pressure. Main steam lines isolated. High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) systems automatically initiated. The offgas recombiner system operating mechanical compressor also lost power, and the consequent pressure increase in the suction line resulted in an unplanned, above limit, noble gas release (reference Detail 4). The inspector observed conditions in the control room and verified that: safety

systems and operators had responded properly; appropriate notifications had been made; and gaseous radioactive release rates had returned within limits. The cause of the lost 13KV bus was shorting of a breaker when workers installing a modification at a higher elevation in the Turbine Building spilled potable water onto the breaker panel.

Prior to the unit restart the inspector discussed corrective actions with licensee personnel and observed in-plant equipment to verify that corrective action for the electrical problem had been completed. Additionally, the inspector discussed Emergency Plan implementation inconsistencies noted during this event (see Detail 4) with station management and operating shift personnel. The inspector will continue to monitor plant operations and adherence to procedural requirements in future inspections.

4. Unplanned Radioactive Noble Gas Release in Excess of Allowable Limits

On June 22, 1981, the resident inspector and a radiation specialist reviewed an unplanned release of radioactive noble gas as reported in Licensee Event Report No. 2-81-35/1P, dated June 22, 1981, against the following criteria:

- Technical Specification 3.8.C.1 "Airborne Effluents":

- Philadelphia Electric Company, Emergency Plan - Peach Bottom Atomic Power Station, December, 1980:

- Philadelphia Electric Company, Emergency Plan Implementing Procedures;

  EP-101, "Classification of Emergencies", Revision 0, April 1, 1981:

  EP-102, "Unusual Event", Revision 0, April 1, 1981:

  EP-103, "Alert Condition", Revision 0, April 1, 1981:

  EP-316, "Cumulative Population Dose Calculations", Revision 0, April 1, 1981:

  EP-205, "Radiation Survey Team", Revision 0, April 1, 1981:

  EP-207, "Personnel Safety Team", Revision 0, April 1, 1981:

- NUREG-0654, Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

On June 22, 1981, the Unit 2 reactor scrammed due to a loss of a 13KV plant load bus (see detail 3). The loss of the bus caused the trip of a Hydrogen Recombiner Mechanical Compressor. As a consequence, the pressure in the compressor suction line increased, causing radioactive noble gases to leak. The gases vented through the recombiner ventilation exhaust system to the Unit 3 Reactor Building roof vent. The peak release rate was 182% of the allowable instantaneous release rate specified in Technical Specification 3.8.C.1.

The licensee identified the isotopes involved in the release as:

Xe-138 ~ 72%
Xe-133 ~ 7.2%
Xe-135 ~ 6.8%
Kr-87 ~ 6.1%
Kr-88 ~ 5.4%
Kr-85m ~ 3.1%

The peak release (in excess of Technical Specifications) was for a duration of 7 minutes at an average release rate of 6600 uCi/sec, resulting in about 2.77 curies released. The remainder of the release lasted for about 3 hours, at an average release rate of 760 uCi/sec, resulting in about 8.5 curies released. The total activity released during this event was about 11.4 curies

The inspector reviewed the licensee's calculation of possible dose to the population using EP-316. The calculation verified a 0.08 millirem accumulated dose at the station's perimeter in the worst case condition.

Upon completion of the incident analysis, the licensee initiated action to replace the snubber drain valves on both Mechanical Compressors associated with the operation of the recombiner to preclude further release via this pathway. Release of radioactive materials in excess of Technical Specification limits is an item of noncompliance (81-16-02; 81-17-02).

In further review, the inspector noted that the station's Emergency Plan states the following in Section 4.0. Emergency Conditions:

> "The Interim Emergency Director or the Emergency Director determines the emergency classification. The classification nomenclature is used to provide an indication of the scope or character of the situation. The following classifications are discussed in this section:

1. Unusual Event
2. Alert Conditions
3. Site Emergency
4. General Emergency

The following sections present discussions of each emergency class and accident scenario which are typical of each emergency class. The accident scenarios can be classified many ways: type of event (i.e., LOCA, LOCA + ECCS failure, LOCA + containment failure), by type of release (gaseous liquid), by release point (ground level, roof vent, mainstack), etc. Table 4.2 lists the types of events and releases and their respective emergency action levels for the Alert, Site, and General Emergencies."

While Section 4.1.1. UNUSUAL EVENT, and Section 4.1.2. ALERT CLASS, provide general discussion of the conditions which determine the category of such a release, Table 4.2 of the Emergency Plan provides the following specific information:

Description	Class	Symptoms or EALs	Response
5. Radioactive Material Release			
a1) Instantaneous release exceeding Technical Specification limits	Unsual Event	1) A spike on gaseous effluent monitors: a) main stack > ____ cps b) roof vent > ____ cpm	Investigate source of release. Operate to reduce the release within limits
		2) analysis of particulate filters or or charcoal cartridge main stack > ____ uCi/sec b) roof vent > ____ uCi/sec	Investigate source of release. Operate to reduce the release within limits
a2) Release exceeding the Technical Specification quarterly average	Unusual Event	A report of the summation of individual release data within the quarterly period.	Investigate source of release. Operate to reduce the release within limits
b) Releases exceeding 10 times the Technical Specification for greater than 2 hours	Alert Condition	1) Main Stack > ____ cps 2) Roof vent > ____ cpm 3) analysis of particulate filter or charcoal cartridge: a) main stack > ____ uCi/sec b) Roof Vent > ____ uCi/sec 4) containment rad monitor > ____R/hr	Investigate source of release. Activate Radiation Survey Team to monitor in-plant and plume path

The numerical values missing here, are provided in the station's Emergency Plan Implementing Procedures. The Emergency Action Levels specified in EP-101 indicate an ALERT condition exists when the roof vent monitor indicates greater than 5.5 E+4 counts per minute. No time duration is specified, nor is a time duration specified in EP-103.

The inspector determined that in this event the roof vent monitor indicated as high as 7 E+4 counts per minute for less than 5 minutes. According to EP-101, this Emergency Action Level (EAL) would be sufficient to classify the event as an Alert Class Emergency and consequently implement procedure EP-103, "Alert Condition". Rather, only portions of EP-102 were implemented. For example, EP-102 states, in part:

> "The Interim Emergency Director shall: ...
>
> e. In the event of high radiation, excessive radioactive contamination, or excessive gaseous radioactive release:
>
> (1) Activate the Interim Radiation Survey Team in accordance with EP-205. Direct the Team to report to the hazard area and conduct surveys in accordance with HPO/CO procedures to determine the magnitude of the radiological hazards.
>
> (2) Activate the Interim Personnel Safety Team in accordance with EP-207.
>
> (3) If the event results in a radiation release, direct the Radiation Monitoring Team Leader to calculate the activity released and estimate dose rates in accordance with EP-316, Part I.1.A or III.1.A. Refined determination of off-site dose rates (EP-316, Part I.1.B and C. or III.1.B and C.) shall normally be directed by the Emergency Director, in accordance with EP-201".

During review of this event, the inspector noted that items e.(1) and e.(2) were not performed. According to the Assistant Station Superintendent, it was the Interim Emergency Director's perogative to determine what portions of the procedure should be implemented; the basis for this allowance being the note which appears in this EP as well as EP-103, "Alert Conditions"; EP-104, "Site Area Emergency"; and, EP-105, "General Emergency", which states:

> "THE JUDGEMENT OF THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR IS VITAL IN PROPER CONTROL OF AN EMERGENCY AND MAY TAKE PRECEDENCE OVER GUIDANCE IN THE EMERGENCY PROCEDURES AND EMERGENCY IMPLEMENTING PROCEDURES".

Evaluation

From this review the following inconsistencies were identified:

1. While the licensee's decision to classify this occurence as an Unusual Event is consistent with the Station's Emergency Plan and the guidance presented in NUREG-0654, the licensee's procedure EP-101, "Classification of Emergencies", is not consistent with the licensee's Emergency Plan in terms of classifying an event.

2. The licensee's failure to fully implement EP-102 based on the procedural note which allows the (Interim) Emergency Director's judgment to take precedence over the procedure arbitrarily, and without qualification is not consistent with the Emergency Plan or NUREG-0654. While the decision not to activate the Personnel Safety Team was reasonable under the circumstances, it was appropriate to activate the Radiation Survey Team to verify site and perimeter radiation levels.

3. EP-205 does not provide direction on gaseous releases.

These items are unresolved pending further licensee and NRC review. (81-16-03; 81-17-03)

5. IE Information Notice Followup -- IE Information Notice No. 81-06: "Failure of ITE Model K-600 Circuit Breaker"

During preventive maintenance at the Rancho Seco facility, an ITE Model K-600 breaker was observed not to trip. Investigation revealed that the tripping coil wire was too small for the mating lug used and had slipped loose. The information notice indicated that Models K-1600 and K-3000 may have the same deficiency and recommended licensee reviews for applicability to their facilities.

The inspector reviewed licensee internal correspondence and discussed the matter with a licensee representative. Licensee review indicated that ITE Model K-600 and K-1600 breakers, purchased in 1966, are used in 480-volt load centers at Peach Bottom. Loss of tripping coil continuity would prevent remote-manual tripping; automatic and local-manual trips would still be effective. Failures of the remote-manual tripping feature of these breakers on-site had not been identified. Licensee examination of one of these breakers revealed that the tripping coil wire was matched to the lug size. The licensee concluded that major disassembly (required for coil and lug examination) of additional breakers was not warranted. The inspector verified PORC review of this notice. No unacceptable conditions were identified.

6. Review of Licensee Event Reports (LER's)

The inspector reviewed LER's submitted to the NRC:RI office to verify that the details of the event were clearly reported, including the accuracy of the description of cause and adequacy of corrective action. The inspector determined whether further information was required from the licensee, whether generic implications were indicated, and whether continued operation of the facility was conducted in accordance with Technical Specifications. Report accuracy, compliance with current reporting requirements, and applicability to other site systems and components were also reviewed. The following LER's were reviewed:

	LER No.	LER DATE	Event Date	Subject
and	2-81-32/1P 2-81-32/1T	May 23, 1981 June 4, 1981	May 20, 1981	Analysis shows concrete walls of computer room unstable under postulated tornado depressurization and Cardox injection.
and	2-81-34/1P 2-81-34/1T	June 12, 1981 June 26, 1981	June 12, 1981	Four cables in each unit associated with control of room coolers for RHR, Core Spray, HPCI and RCIC rooms were improperly routed.
	2-81-35/1P	June 22, 1981	June 22, 1981	Technical Specification allowable gross activity (gaseous) release rate was exceeded for seven minutes (see Detail 4)

Additionally, the inspector verified that computer room doors remained physically blocked open as specified in 2-81-31/1P and 1T.

The inspector discussed ECCS room cooler control circuitry with licensee representatives and determined that running appropriate coolers continuously, as stated in the LER, provides adequate short-term corrective action pending rerouting cables. Additionally, the inspector verified that selected cooling fans were in continuous operation.

7. Radiation Protection

During this report period, the inspector examined work in progress in accessible areas of the Unit 2 and Unit 3 facilities. Areas examined included:

a. Health Physics (HP) controls

b. Badging

c. Usage of protective clothing

d. Personnel adherence to RWP requirements

e. Surveys

f. Handling of potentially contaminated equipment and materials

Additionally, inspections were conducted of frisker and portal monitor usage by personnel exiting various RWP areas, the power block, and the licensee's final exit point. More than 50 people were observed to meet frisking requirements of Health Physics procedures dur ng the month. A sampling of high radiation doors was verified to be locked as required.

Compliance with RWP requirements was verified during each tour; special emphasis was placed on RWP adherence at the Unit 3 drywell and torus. Over 20 RWPs were checked during the month. Several hundred line entries were reviewed to verify that personnel had provided the required information and about 30 people working in RWP areas were observed to be meeting the applicable requirements.

8. Physical Security

The inspector spot-checked compliance with the accepted Security Plan and implementing procedures, including operations of the CAS and SAS, over 20 spot-checks of vehicles onsite to verify proper control, observation of protected area access control and badging procedures on each shift, inspection of physical barriers, checks on control of vital area access and escort procedures. A qualitative assessment of the adequacy of protected area lighting was made during darkness on June 22, 1981.

The inspector observed portions of security guards weapons requalification training on June 9, 11, 12 and 15 to verify that training was conducted in a proper and professional manner and that qualification scores were accurately computed and recorded. No unacceptable conditions were identified. The inspector noted, however, that many guards required considerable practice in order to attain the required requalification scores. Weapons requalification was also observed by a region-based inspector (reference combined report 50-277/81-17 and 50-278/81-18).

During protected areas tours the inspector noted that out-of-date copies of procedure PP-25, "Instruction to Personnel Escorts", were posted in two locations -- in the Administrative Building and by the entrance turnstile in the Security Building. No instances of use of out-of-date procedure use by personnel escorts were noted. When notified, the Security Supervisor removed both out-of-date procedures and posted a correct copy at the Security Building location. The inspector stated that a control system could provide assurance that posted procedures were kept up-to-date.

9. Review of TMI Action Plan (TAP) Requirements

The inspector reviewed the status of licensee action of the following TAP requirements to verify that the licensee is meeting his NRC commitments.

a. TAP Item II.E.4.2 "Containment Isolation Dependability"

Position (6) of this item required, by January 1, 1981, that containment purge valves not meeting the operability criteria of the Staff Interim Position of October 23, 1979 be sealed closed. The inspector reviewed a letter from NRC:NRR to the licensee, dated November 5, 1980, which accepts the licensee's commitments in response to the staff interim position. The inspector concluded, therefore, that the licensee meets January 1, 1981 requirements without sealing containment purge valves. (Some containment purge valves have been sealed for other reasons, i.e. seismic concerns, as reported in 50-277/81-05 and 50-278/81-05).

The inspector also verified licensee compliance with containment ventilation and purge valve commitments. Licensee correspondence dated December 11, 1979 stated that:

1. Use of large diameter purge and vent valves during power operation will be minimized and shall not exceed 90 hours per year, except if performed in a "batch" mode (at least one isolation valve in each line closed at all times).

2. Valve opening is limited to 37 degrees whenever the reactor is not in the cold shutdown or refueling mode.

The inspector reviewed the following procedures:

S.3.9.1.A, "Inerting Primary Containment", revision 11, dated October 3, 1980.

S.3.9.1.B, "De-inerting and Purging Primary Containment Via SBGTS," revision 7, dated October 3, 1980.

S.3.9.1.H, "Operating Procedure for Containment Purge, Inerting, and Exhaust Valves", revision 10, dated February 19, 1981.

ST 9.16, "Containment Gross Leak Rate Detection", revision 10, dated February 26, 1980.

ST 7.9.2, "Daily Check of Containment Isolation Valve N^2 Bottle Pressure," revision 2, dated August 29, 1980.

The inspector determined that the commitment to minimize purging is being met. Review of completed copies of ST 9.16 indicated that large diameter vent and purge valves were open in 1980 during operation for 69.5 hours at Unit 2 and 77 hours at Unit 3.

With respect to limiting valve opening to 37 degrees, however, procedures were found to require this only when the reactor is both critical and above 105 psi pressure, rather than anytime the reactor is not in cold shutdown or refuel mode. The licensee was informed of this inconsistency on June 17, 1981 and initiated steps to conform to the commitment and to revise procedures. On June 19, with the unit in Hot Shutdown, the inspector verified, through discussions with operators and observations of selected valves, that spring clips were installed on valve operating mechanisms to limit opening to 37 degrees. A licensee representative also indicated that procedures had been revised and reviewed by PORC. Resolution of this matter awaits further NRC review. (81-16-04 and 81-17-04).

b. TAP Item I.A.1.3 "Shift Manning: Limit Overtime"

Overtime is to be avoided, to the extent practicable, for the plant staff who perform safety-related functions. In the event overtime must be used, certain restrictions should be followed. Guidelines were listed in NUREG-0737.

The licensee has revised administrative procedures for licensed shift staffing to meet the overtime guidelines of this TAP item. Administrative procedure A-7, "Shift Operations", Revision 16, dated March 17, 1981, was reviewed and found to be in general agreement with NUREG-0737 for licensed shift staffing overtime limitations. A licensee letter dated March 10, 1981 clarified the licensee's position regarding the following NUREG-0737 statement: "If a reactor operator or senior reactor operator has been working more than 12 hours during periods of extended shutdown (e.g., at duties away from the control board), such individuals shall not be assigned shift duty in the control room without at least a 12-hour break preceeding such an assignment." The licensee's clarification states that: 1) The licensee intends to permit deviations from this restriction, as for other restrictions, with approval of the Station Superintendent, his alternate, or higher levels of management. 2) During extended shutdowns the "12-hour break" is considered to be 12 hours away from duties at the control board (i.e. not necessarily 12 hours off-site). The licensee has stated that, in practice,

conditions resulting in an operator working 16 hours one day sometimes result in his coming back on duty with only eight hours break -- changing schedules to allow a twelve-hour break can disturb other operator's rest schedule (e.g., operator called to report to work at 3:00 a.m.).

The overtime restrictions for licensed operators have also been applied to STAs, since onsite STA sleeping quarters are not provided.

For other personnel involved in performing safety-related functions on an operating unit, licensee procedures require:

1. An individual shall not be scheduled in advance to work more than 12 consecutive hours (excluding meal periods), nor more than 14 consecutive days.

2. If circumstances arise which require an individual to work more than 12 consecutive hours, such work shall be authorized by his supervisor, who shall document the cause on a "Staffing Deviation Form".

Licensee justification for these alternatives to the NUREG-0737 guidelines was submitted in correspondence dated March 31, 1981. The licensee believes that additional restrictions could result in a need to change personnel in the middle of specific work assignments resulting in job disruptions, a reduction in task-specific experience level, and turnover difficulties (e.g. lack of face-to-face turnover). The inspector discussed these considerations with station management. No unacceptable conditions were identified.

c. TAP Item I.C.5, "Procedures for Feedback of Operating Experience to Plant Staff"

Each licensee shall have procedures to assure that operating information pertinent to plant safety originating both within and outside the utility organization is continually supplied to operators and other personnel and is incorporated into training and retraining programs. Criteria were listed in NUREG-0737.

Licensee correspondence dated June 20, 1980 indicated that the required functions are performed through the Plant Operations Review Committee (PORC), the operating shift, and the Operating Expereince Assessment Committee (OEAC). The inspector reviewed station administrative procedures governing PORC activities and shift operations, as well as a corporate level procedure regarding the OEAC activities. The procedures collectively cover all requirements

of TAP item I.C.5., but the corporate level procedure in use has not been formally approved. This was identified in an audit by the licensee's Quality Assurance Division and is being corrected.

No unacceptable conditions were identified. The inspector concluded that formalization of the OEAC procedure will complete the establishment of an acceptable program for feedback of operation experience to plant staff. Routine inspection will verify the program's effectiveness.

10. In-Office Review of Monthly Operating Reports

The following licensee reports have been reviewed in-office onsite. Peach Bottom Atomic Power Station Monthly Operating Report for:

May 1981 dated June 12, 1981

This report was reviewed pursuant to Technical Specifications to verify that operating statistics had been accurately reported and that narrative summaries of the month's operating experience were contained therein. No unacceptable conditions were identified.

11. Unresolved Items

Unresolved items are items about which more information is required to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items are discussed in Details 3, 4, and 9.

12. Management Meetings

a. Preliminary Inspection Findings

A summary of preliminary findings was provided to the Station Superintendent at the conclusion of the inspection. During this inspection, licensee management was periodically notified of the preliminary findings by the resident inspectors. The dates involved, the senior licensee representative contacted, and subjects discussed were as follows:

Date	Subject	Senior Licensee Representative Present
June 5	Routine Discussions	Station Superintendent
June 12	Routine Discussions	Station Superintendent
June 17	Containment Purge Procedures	Technical Engineer
June 19	Routine Discussions	Station Superintendent
June 22	Unplanned Radioactive Release	Outage Coordinator

June 22	Emergency Plan Implementation	Assist. Station Superintendent
June 26	Routine Discussions Fire Protection	Station Superintendent

b. Attendance at Management Meetings Conducted by Region-Based Inspectors

Date	Subject	Inspection Report No.	Reporting Inspector
June 12 (Exit)	Security (Weapons Requalification)	50-277/81-17 and 50-278/81-18	R. Ladun