



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 23, 1991

Docket Nos. 50-277  
and 50-278

Posted  
Amdt. 167 to DPR-56

Mr. George J. Beck  
Manager-Licensing, MC 5-2A-5  
Philadelphia Electric Company  
Nuclear Group Headquarters  
Correspondence Control Desk  
P.O. Box No. 195  
Wayne, Pennsylvania 19087-0195

Dear Mr. Beck:

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3, PRIMARY  
REACTOR CONTAINMENT LEAKAGE TESTING, (TAC NOS. 54823, 54824, 79452  
AND 79453)

The Commission has issued the enclosed Amendments Nos. 164 and 167 to Facility Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. These amendments consist of changes to the Technical Specifications responding in part to your application dated November 18, 1976 and supplemented April 19, 1984, October 10, 1986, April 21 and June 23, 1988 and May 17, 1991.

These amendments relate to 10 CFR Part 50, Appendix J, Section III, Primary Reactor Containment Leakage Testing. In addition to Technical Specifications changes, you requested certain exemptions from Appendix J. The staff responded to the exemptions requested by letter dated November 21, 1990, with the exception of one request which you withdrew by letter dated September 27, 1991.

After careful review, the NRC staff has concluded that a portion of your request related to Technical Specification changes cannot be approved. We have provided the reason for our conclusion in the related Safety Evaluation. A copy of the Notice of Denial of Amendment to be published in the Federal Register, is enclosed for your information.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

*Charles L. Miller*

Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 164 to DPR-44
- 2. Amendment No. 167 to DPR-56
- 3. Safety Evaluation
- 4. Notice of Denial

cc w/enclosures:  
See next page

DISTRIBUTION

Docket File  
 NRC & Local PDR  
 PDI-2 Reading  
 SVarga  
 JCalvo  
 CMiller  
 MO'Brien(3)  
 VRooney/PClark  
 JShea  
 OGC  
 PMilano  
 DHagan, 3206  
 GHill(8), P1-37  
 Wanda Jones, 7103  
 CGrimes, 11E21  
 CMcCracken  
 JGuo  
 ACRS(10)  
 GPA/PA  
 OC/LFMB  
 RBlough, RGN-I  
 LDoerflein, RGN-I  
 \*Previous Concurrence

*[Handwritten signature]*

OFF	:PDI-2/AA	:PDI-3/PM	:PDI-2/PM	:*SPLB	:*OGC	:PDI-2/D
NAME	:MO'Brien	:VRooney:rb	:JShea	:CMcCracken		:CMiller
DATE	:10/23/91	:10/10/91	:10/22/91	:09/23/91	:09/25/91	:10/23/91

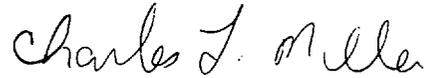
Mr. George J. Beck

- 2 -

October 23, 1991

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,



Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 164 to DPR-44
2. Amendment No. 167 to DPR-56
3. Safety Evaluation
4. Notice of Denial

cc w/enclosures:

See next page

Mr. George J. Beck  
Philadelphia Electric Company

Peach Bottom Atomic Power Station,  
Units 2 and 3

cc:

J. W. Durham, Sr., Esquire  
Sr. V.P. & General Counsel  
Philadelphia Electric Company  
2301 Market Street, S26-1  
Philadelphia, Pennsylvania 19101

Single Point of Contact  
P. O. Box 11880  
Harrisburg, Pennsylvania 17108-1880

Philadelphia Electric Company  
ATTN: Mr. D. B. Miller, Vice President  
Peach Bottom Atomic Power Station  
Route 1, Box 208  
Delta, Pennsylvania 17314

Mr. Thomas M. Gerusky, Director  
Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Resources  
P. O. Box 2063  
Harrisburg, Pennsylvania 17120

Philadelphia Electric Company  
ATTN: Regulatory Engineer, A1-2S  
Peach Bottom Atomic Power Station  
Route 1, Box 208  
Delta, Pennsylvania 17314

Board of Supervisors  
Peach Bottom Township  
R. D. #1  
Delta, Pennsylvania 17314

Resident Inspector  
U.S. Nuclear Regulatory Commission  
Peach Bottom Atomic Power Station  
P.O. Box 399  
Delta, Pennsylvania 17314

Public Service Commission of Maryland  
Engineering Division  
ATTN: Chief Engineer  
231 E. Baltimore Street  
Baltimore, MD 21202-3486

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, Pennsylvania 19406

Mr. Richard McLean  
Power Plant and Environmental  
Review Division  
Department of Natural Resources  
B-3, Tawes State Office Building  
Annapolis, Maryland 21401

Mr. Roland Fletcher  
Department of Environment  
201 West Preston Street  
Baltimore, Maryland 21201



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

PHILADELPHIA ELECTRIC COMPANY  
PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
DELMARVA POWER AND LIGHT COMPANY  
ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 164  
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Philadelphia Electric Company, et. al. (the licensee) dated November 18, 1976 and supplemented April 19, 1984, October 10, 1986, April 21 and June 23, 1988 and May 17, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I.
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health or safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. DPR-44 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 164, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Charles L. Miller*

Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 23, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 164

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

<u>Remove</u>	<u>Insert</u>
166	166
167	167
168	168
169	169
170	170
184	184
-	184a
185	185
186	186
187	187
-	187a
-	187b
188	188
-	188a
-	188b
-	188c

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS.A Primary Containment (Cont'd.)

2. Primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel except while performing "open vessel" physics tests at power levels not to exceed 5 Mw(t).
3. If the primary containment integrity is breached when it is required by 3.7.A.2, that integrity shall be reestablished within 24 hours or the reactor placed in a cold shutdown condition within 24 hours.

4.7.A Primary Containment (Cont'd.)2. Integrated Leak Rate Testing

- a. Integrated leak rate tests (ILRT's) shall be performed to verify primary containment integrity. Primary containment integrity is confirmed if the leakage rate does not exceed the equivalent of 0.5 percent of the primary containment volume per 24 hours at 49.1 psig.
- b. Integrated leak rate tests may be performed at either 49.1 psig or 25 psig, the leakage rate test period, extending to 24 hours of retained internal pressure. If it can be demonstrated to the satisfaction of those responsible for the acceptance of the containment structure that the leakage rate can be accurately determined during a shorter test period, the agreed-upon shorter period may be used.

Prior to initial operation, integrated leak rate tests must be performed at 49.1 and 25 psig (with the 25 psig test being performed prior to the 49.1 psig test) to establish the allowable leak rate (in percent of containment volume per 24 hours) at 25 psig as the lesser of the following values:

$$L_t = L_a (L_{tm}/L_{am})$$

where

$L_a$  = 0.5 percent of the primary containment volume per 24 hours at 49.1 psig.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS7.A Primary Containment (Cont'd.)4.7.A Primary Containment (Cont'd.)

$L_{tm}$  = measured ILR at 25 psig ( $P_t$ )

$L_{am}$  = measured ILR at 49.1 psig ( $P_a$ ), and

$\frac{L_{tm}}{L_{am}} \leq 0.7$ , otherwise

$L_t = L_a (P_t/P_a)^{1/2}$

where

$L_a$  = 0.5 percent of the primary containment volume per 24 hours at 49.1 psig

$P_a$  = peak accident pressure (psig)

$P_t$  = appropriately measured test pressures (psig)

c. The ILRT's shall be performed at the following minimum frequency:

1. Prior to initial unit operation.
2. After the preoperational leakage rate tests, a set of three Type A tests shall be performed at approximately equal intervals during each 10 year service period. These intervals may be extended up to eight months if necessary to coincide with re-fueling outage.

d. The allowable leakage rates,  $L_{tm}$  and  $L_{am}$ , shall be less than  $0.75 L_t$  and  $0.75 L_a$  for the reduced pressure tests and peak pressure tests, respectively.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

.7.A Primary Containment (Cont'd.)      4.7.A Primary Containment (Cont'd.)

- e. Except for the initial ILRT, all ILRT's shall be performed without any preliminary leak detection surveys and leak repairs immediately prior to the test.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.A Primary Containment (Cont'd.)4.7.A Primary Containment (Cont'd.)

- f. Local leak rate tests (LLRT's) shall be performed on the primary containment testable penetrations and isolation valves in accordance with Tables 3.7.2, 3.7.3, & 3.7.4 at a pressure of 49.1 psig (except for the main steam isolation valves, see below) each operating cycle, but in no case at intervals greater than two years. Bolted double-gasketed seals shall be tested whenever the seal is closed after being opened and at least once per operating cycle, but in no case at intervals greater than two years.

The Main Steamline isolation valves shall be tested at a pressure of 25 psig for leakage during each refueling outage, but in no case at intervals greater than two years. If a total leakage rate of 11.5 scf/hr for any one main steamline isolation valve is exceeded, repairs and retest shall be performed to correct the condition.

g. Continuous Leak Rate Monitor

When the primary containment is inerted, the containment shall be continuously monitored for gross leakage by review of the inerting system makeup requirements. This monitoring system may be taken out of service for maintenance but shall be returned to service as soon as practicable.

## PBAPS

TABLE 3.7.3

TESTABLE PENETRATIONS WITH TESTABLE BELLOWS

<u>Pen No.</u>		<u>Notes</u>	<u>Pen No.</u>		<u>Notes</u>
N-7A	Main Steam Line 'A'	(1)(2)(4) (6)	N-13A	RHR Pump Discharge	(1)(2)(4) (6)
N-7B	Main Steam Line 'B'	(1)(2)(4) (6)	N-13B	RHR Pump Discharge	(1)(2)(4) (6)
N-7C	Main Steam Line 'C'	(1)(2)(4) (6)	N-14	Reactor Water Cleanup Line	(1)(2)(4) (6)
N-7D	Main Steam Line 'D'	(1)(2)(4) (6)	N-16A	Core Spray Pump Discharge	(1)(2)(4) (6)
N-9A	Feedwater Line 'A'	(1)(2)(4) (6)	N-16B	Core Spray Pump Discharge	(1)(2)(4) (6)
N-9B	Feedwater Line 'B'	(1)(2)(4) (6)	N-17	RHR Head Spray	(1)(2)(4) (6)
N-11	Steam Line to HPCI Turbine	(1)(2)(4) (6)	N-201A through N-201H	Suppression Chamber to Drywell Vent Line	(1)(2)(4) (6)
N-12	RHR Shutdown Cooling Pump Suction	(1)(2)(4) (6)			

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS7.A Primary Containment (Cont'd.)3. Pressure Suppression Chamber-Reactor Building Vacuum Breakers

- a. Except as specified in 3.7.A.3.b below, two pressure suppression chamber-reactor building vacuum breakers shall be operable at all times when primary containment integrity is required. The setpoint of the differential pressure instrumentation which actuates the pressure suppression chamber-reactor building vacuum breakers shall be  $0.5 \pm 0.25$  psid.
- b. From and after the date that one of the pressure suppression chamber-reactor building vacuum breakers is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding seven days unless such vacuum breaker is sooner made operable provided that the repair procedure does not violate primary containment integrity.

4. Drywell-Pressure Suppression Chamber Vacuum Breakers

- a. When primary containment is required, all drywell-suppression chamber vacuum breakers shall be operable and positioned in the fully closed position (except during testing) except as specified in 3.7.A.4.b and c below.
- b. Drywell-suppression chamber vacuum breaker(s) may be "not fully seated" as shown by position indication if testing confirms that the bypass area is less than or equivalent to a one-inch diameter hole. Testing shall be initiated within 8 hours of initial detection of a "not fully seated" position

4.7.A Primary Containment (Cont'd.)h. Drywell Surfaces

The interior surfaces of the drywell and torus shall be visually inspected each operating cycle for evidence of deterioration. In addition, the external surfaces of the torus below the water level shall be inspected on a routine basis for evidence of torus corrosion or leakage.

3. Pressure Suppression Chamber-Reactor Building Vacuum Breakers

- a. The pressure suppression chamber-reactor building vacuum breakers and associated instrumentation including setpoint shall be checked for proper operation every refueling outage.

4. Drywell-Pressure Suppression Chamber Vacuum Breakers

- a. Each drywell-suppression chamber vacuum breaker shall be exercised through an opening-closing cycle once a month.
- b. When it is determined that a vacuum breaker is inoperable for opening at a time when operability is required, all other operable vacuum breakers shall be exercised immediately and every 15 days thereafter until the inoperable vacuum breaker has been returned to normal service.
- c. Once per operating cycle each vacuum breaker shall be visually inspected

TABLE 3.7.2TESTABLE PENETRATIONS WITH DOUBLE O-RINGS SEALS

<u>Pen No.</u>		<u>Notes</u>						
N-1	Equipment Access Hatch	(1)(2)(4)(6)						
N-2	Equipment Access and Personnel Air Lock	(1)(4)(7)(8)						
N-4	Drywell Head Access Hatch	(1)(2)(4)(6)						
N-6	CRD Removal Hatch	(1)(2)(4)(6)						
N-25	A0-2520 (Unit #2); A0-3520 (Unit #3) Purge System Valves	(1)(2)(4)(6)						
N-26	A0-2506 (Unit #2); A0-3506 (Unit #3) Purge System Valves	(1)(2)(4)(6)						
N-35-A through N-35-G	TIP System	(1)(2)(4)(6)						
-200A&B	Suppression Chamber Access Hatch	(1)(2)(4)(6)						
N-205B	A0-2521B (Unit #2); A0-3521B (Unit #3)	<table border="1"> <tr> <td>Purge</td> <td>(1)(2)(4)(6)</td> </tr> <tr> <td>System</td> <td>(1)(2)(4)(6)</td> </tr> <tr> <td>Valves</td> <td>(1)(2)(4)(6)</td> </tr> </table>	Purge	(1)(2)(4)(6)	System	(1)(2)(4)(6)	Valves	(1)(2)(4)(6)
Purge	(1)(2)(4)(6)							
System	(1)(2)(4)(6)							
Valves	(1)(2)(4)(6)							
N-205A	A0-2502A (Unit #2); A0-3502A (Unit #3)							
N-212	A0-2502B (Unit #2); A0-3502B (Unit #3) Stop Check 13-9 (RCIC Stop Check)	(1)(2)(4)(6)						
N-213A&B	Construction Drain	(1)(2)(4)(6)						
N-214	Stop Check 23-12 (HPCI Stop Check)	(1)(2)(4)(6)						

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
7A to D	A0-2-80A to D A0-2-86A to D	1,2,3,4,5,9,11 1,2,3,4,5
8	M0-2-74 M0-2-77	1,2,4,5,9,10 1,2,4,5
9A	M0-23-19; M0-2-38A Check Valves 2-28A and 2-96A	1,2,4,5 1,2,4,5
9B	M0-13-21; M0-2-38B; M0-12-68 Check Valves 2-28A and 2-96B	1,2,4,5 1,2,4,5
10	M0-13-15 M0-13-16	1,2,4,5,9,10 1,2,4,5
11	M0-23-15 M0-23-16 A0-4807 (Unit #2)	1,2,4,5,9,10 1,2,4,5 1,2,4,5
12	M0-10-18; M0-10-17	1,2,4,5,9,10 1,2,4,5
3A	M0-10-25B; A0-10-46B; A0-10-163B	1,2,4,5
13B	M0-10-25A; A0-10-46A; A0-10-163A	1,2,4,5
14	M0-12-15 (Unit #2) M0-12-15 (Unit #3) M0-12-18	1,2,4,5,9,10 1,2,4,5,9,11 1,2,4,5
16A	M0-14-11B; M0-14-12B (M0-14-12B; A0-14-13B; A0-14-15B)*	1,2,4,5 (1,2,4,5)*
16B	M0-14-11A; M0-14-11B (M0-14-12A; A0-14-13A; A0-14-15A)*	1,2,4,5 (1,2,4,5)*
17	M0-10-32 M0-10-33	1,2,4,5,9,10 1,2,4,5
18	A0-20-82 A0-20-83	1,2,4,5,9,11 1,2,4,5
19	A0-20-94 A0-20-95	1,2,4,5,9,11 1,2,4,5
21	Service Air System Inner Globe Valve Service Air System Outer Globe Valve	1,2,4,5,9,11 1,2,4,5

Effective isolation boundary for this penetration following the 8th Refueling Outage on Unit 3.

TABLE 3.7.4

PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
22	A0-2969A (Unit #2); A0-3969A (Unit #3) Check Valve	1,2,4,5 1,2,4,5
23	M0-2373 (Unit #2); M0-3373 (Unit #3)	1,2,4,5
24	M0-2374 (Unit #2); M0-3374 (Unit #3)	1,2,4,5
25, 205B	A0-2502A (Unit #2); A0-3502A (Unit #3) A0-2505 (Unit #2); A0-3505 (Unit #3) A0-2519 (Unit #2); A0-3519 (Unit #3) A0-2520 (Unit #2); A0-3520 (Unit #3) A0-2521A (Unit #2); A0-3521A (Unit #3) A0-2521B (Unit #2); A0-3521B (Unit #3) A0-2523 (Unit #2); A0-3523 (Unit #3) Check Valve 9-26A; Two Check Valves	1,2,4,5,9,12 1,2,4,5 1,2,4,5 1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,12 1,2,4,5 1,2,4,5
26	A0-2506 (Unit #2); A0-3506 (Unit #3) A0-2507 (Unit #2); A0-3507 (Unit #3) A0-2509 (Unit #2); A0-3509 (Unit #3) A0-2510 (Unit #2); A0-3510 (Unit #3) A0-4235 (Unit #2); A0-5235 (Unit #3) SV-2671G (Unit #2); SV-3671G (Unit #3) SV-2978G (Unit #2); SV-3978G (Unit #3) SV-4960B (Unit #2); SV-5960B (Unit #3) SV-4961B (Unit #2); SV-5961B (Unit #3) SV-4966B (Unit #2); SV-5966B (Unit #3) SV-8100 (Unit #2); SV-9100 (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5
32C, D	ILRT System Two Globe Valves	1,2,4,5,13
35A to E	TIP Ball Valves TIP Shear Valves	1,2,4,5 19
35F	SV-109; Check Valve	1,2,4,5
37A to D	CRD Insert; HCU	18
38	CV-3-32A; CV-3-32B; CV-3-33 CV-3-35A; CV-3-35B; CV-3-36 CRD Withdrawal; HCU	1,2,4,5 1,2,4,5 18
39A	M0-10-31B M0-10-26B SV-4949B (Unit #2); SV-5949B (Unit #3) Check Valve	1,2,4,5,9,10 1,2,4,5 1,2,4,5 1,2,4,5
39B	M0-10-31A M0-10-26A SV-4949A (Unit #2); SV-5949A (Unit #3) Check Valve	1,2,4,5,9,10 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
41	A0-2-39 A0-2-40	1,2,4,5,9,11 1,2,4,5
42	Check Valve 11-16 XV-14A,B	1,2,4,5 1,2,4,5,20
47	SV-8130B (Unit #2); SV-9130B (Unit #3) Check Valve	1,2,4,5 1,2,4,5
51A	SV-2671E (Unit #2); SV-3671E (Unit #3) SV-2978E (Unit #2); SV-3978E (Unit #3)	1,2,4,5 1,2,4,5
51B	SV-2671D (Unit #2); SV-3671D (Unit #3) SV-2978D (Unit #2); SV-3978D (Unit #3)	1,2,4,5 1,2,4,5
51C	SV-2671C (Unit #2); SV-3671C (Unit #3) SV-2978C (Unit #2); SV-3978C (Unit #3) SV-4960C (Unit #2); SV-5960C (Unit #3) SV-4961C (Unit #2); SV-5961C (Unit #3) SV-4966C (Unit #2); SV-5966C (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5
1D	SV-2980 (Unit #2); SV-3980 (Unit #3) Check Valve	1,2,4,5
52F	A0-2969B (Unit #2); A0-3969B (Unit #3) Check Valve	1,2,4,5
53	M0-2201B (Unit #2); M0-3201B (Unit #3)	1,2,4,5
54	M0-2200B (Unit #2); M0-3200B (Unit #3)	1,2,4,5
55	M0-2200A (Unit #2); M0-3200A (Unit #3)	1,2,4,5
56	M0-2201A (Unit #2); M0-3201A (Unit #3)	1,2,4,5
57	A0-2-316 A0-2-317	1,2,4,5,9,11 1,2,4,5
102B	Breathing Air System - 2 Gate Valves (Unit #3) SV-8130A (Unit #2); SV-9130A (Unit #3) Check Valve	1,2,4,5,9,21 1,2,4,5 1,2,4,5
203	SV-2671B (Unit #2); SV-3671B (Unit #3) SV-2978B (Unit #2); SV-3978B (Unit #3) SV-4960D (Unit #2); SV-5960D (Unit #3) SV-4961D (Unit #2); SV-5961D (Unit #3) SV-4966D (Unit #2); SV-5966D (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
205A	A0-2502B (Unit #2); A0-3502B (Unit #3) Check Valve 9-26B	1,2,4,5,9,22 1,2,4,5
210A	M0-10-34B Check Valve 10-19B,D	1,2,4,5,9,11 17
210B	M0-10-34A Check Valve 10-19A,C	1,2,4,5,9,11 17
211A	M0-10-38B M0-10-39B; M0-10-34B; Check Valve SV-4951B (Unit #2); SV-5951B (Unit #3)	1,2,4,5,9,11 1,2,4,5 1,2,4,5
211B	M0-10-38A M0-10-39A; M0-10-34A; Check Valve SV-4951A (Unit #2); SV-5951A (Unit #3)	1,2,4,5,9,11 1,2,4,5 1,2,4,5
212, 214, 217B	A0-4240 (Unit #2); A0-5240 (Unit #3) A0-4241 (Unit #2); A0-5241 (Unit #3) A0-4247 (Unit #2); A0-5247 (Unit #3) A0-4248 (Unit #2); A0-5248 (Unit #3) M0-4244 (Unit #2); M0-5244 (Unit #3) M0-4244A (Unit #2); M0-5244A (Unit #3) Check Valve 13-50; Check Valve 23-65 Check Valve 13-9; Check Valve 23-12	1,2,4,5,9,11 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5,14 1,2,4,5,14 1,2,4,5 15
216	Check Valve 23-62	17
218A	A0-2968 (Unit #2); A0-3968 (Unit #3) Check Valve	1,2,4,5 1,2,4,5
218B	SV-2671A (Unit #2); SV-3671A (Unit #3) SV-2978A (Unit #2); SV-3978A (Unit #3)	1,2,4,5 1,2,4,5
218C	ILRT System-Two Globe Valves	1,2,4,5,13
219	A0-2511 (Unit #2); A0-3511 (Unit #3) A0-2512 (Unit #2); A0-3512 (Unit #3) A0-2513 (Unit #2); A0-3513 (Unit #3) A0-2514 (Unit #2); A0-3514 (Unit #3) SV-2671F (Unit #2); SV-3671F (Unit #3) SV-2978F (Unit #2); SV-3978F (Unit #3) SV-4960A (Unit #2); SV-5960A (Unit #3) SV-4961A (Unit #2); SV-5961A (Unit #3) SV-4966A (Unit #2); SV-5966A (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
221	Check Valve 13-38	17
	Check Valve 13-10	15
223	Check Valve 23-56	17
	Check Valve 23-13	15
224	M0-14-26A; Check Valve 14-66A; (Unit #2)	17
	Check Valve 14-66C; 3 Check Valves (Unit #2)	17
225	M0-14-71; M0-13-39	17
	M0-13-41; M0-14-70	1,2,4,5,9
226A to D	M0-10-13A to D; RV-10-72A to D	17
227	M0-23-57	17
	M0-23-58	1,2,4,5,9
228A to D	M0-14-7A to D	17
229	Check Valve 14-66B (Unit #2)	17
	2 Check Valves (Unit #2 only)	17
	Check Valve 14-66D (Unit #2)	17
230	Check Valve 13-29	17
233	M0-23-31 (Unit #2)	17
234	M0-14-26B (Unit #2)	17
	2 Check Valves (Unit #2)	17
	PASS Check Valve (Unit #2)	17
234A	M0-14-26B (Unit 3)	17
	3 Check Valves (Unit #3)	17
234B	M0-14-26A (Unit #3)	17
	2 Check Valves (Unit #3)	17
	Pass & Check Valve (Unit #3)	17
235	M0-23-31 (Unit #3)	17
236A	Check Valve 14-66B (Unit #3)	17
	Check Valve 14-66D (Unit #3)	17
236B	Check Valve 14-66A (Unit #3)	17
	Check Valve 14-66C (Unit #3)	17
	2 Check Valves (Unit #3)	17

## PBAPS

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4

- (1) Minimum test duration for all valves and penetrations listed is one hour.
- (2) Test pressures of at least 49.1 psig for all valves and penetrations except MSIV's which are tested at 25 psig.
- (3) MSIV's acceptable leakage is 11.5 scfh/valve of air.
- (4) The total acceptable leakage for all valves and penetrations other than the MSIV's is 0.60 La.
- (5) Local leak tests on all testable isolation valves shall be performed each operating cycle but in no case at intervals greater than 2 years.
- (6) Local leak tests on all testable penetrations shall be performed each operating cycle but in no case at intervals greater than 2 years.
- (7) Personnel Air Locks shall be tested at 6-month intervals.
- (8) The personnel air locks are tested at 49.1 psig.
- (9) Identifies isolation valves that may be tested by applying pressure between the inboard and outboard valves.
- (10) Gate valves are tested in reverse direction. Test acceptable since the normal force between the seat and the disc generated by stem action alone is greater than ten (10) times the normal force induced by test differential pressure except for valves MO-10-31A,B which is 7.97. This applies to the following valves:

MO-2-74	MO-10-31A, B
MO-13-15	MO-10-18
MO-23-15	MO-12-15 (Unit #2)
MO-10-32 (Unit #2)	

## PBAPS

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (11) Globe valve which may be tested in reverse direction. Test acceptable since test pressure is applied under the valve seat. This applies to the following valves:

AO-02-80A to D	M0-12-15 (Unit #3)
AO-4240 (5240)	AO-20-94
AO-4247 (5247)	AO-2509 (3509)
M0-10-38A and B	AO-2-39
M0-10-34A and B	AO-2-316
AO-20-82	AO-2513 (3513)

Inner manual valve on penetration N-21.

- (12) Butterfly valve tested in reverse direction. Test acceptable since valve is equipped with inflatable seals which provide equivalent bi-directional sealing. This applies to the following valves:

AO-2520 (3520)	AO-2506 (3506)
AO-2511 (3511)	AO-2521B (3521B)
AO-2502A (3502A)	

- (13) Manual globe valves tested in reverse direction. This applies to valves on the following penetrations:

N-32C	(two valves)
N-218C	(two valves)
N-32D	(two valves)

These valves are locked closed except during ILRT's.

- (14) Gate valve utilized for containment isolation in both directions. Test performed only in one direction. Valve normal force ratio is 17.9. Leakage path is between separate torus penetrations only.

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (15) These stop-check valves serve as block valves to allow testing of the outboard check valve. The check function of these valves is not leak tested. This applies to the following valves:

Check Valve 13-9  
Check Valve 23-12  
Check Valve 23-13  
Check Valve 13-10

- (16) Deleted

- (17) These lines discharge below the minimum torus water level and will thus have a water seal after an accident. Therefore Type C testing of these valves is not required per Appendix J to 10 CFR 50, Section III.C.3.

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (18) Individual valves on the CRD hydraulic control units are not Typed C tested. Leakage is tested during the Type A and reactor vessel hydrostatic testing.
- (19) The TIP shear valves are not Type C tested because squib detonation is required for closure. This is an exemption to 10 CFR 50, Appendix J. These valves are located in small diameter (3/8") tubing lines. The possible leakage paths which include these valves are tested during the Type A tests.
- (20) Explosive valve may be tested in reverse direction. Valve is normally closed and opens only on SLCS actuation.
- (21) Inboard manual gate valve tested in the reverse direction. Valve is locked closed except during refueling outages when containment breathing air is required.
- (22) Butterfly valve tested in reverse direction. Test acceptable since valve provides equivalent bi-directional sealing. This applies to valves A0-2502B and A0-3502B.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

PHILADELPHIA ELECTRIC COMPANY  
PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
DELMARVA POWER AND LIGHT COMPANY  
ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 167  
License No. DPR-56

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Philadelphia Electric Company, et. al. (the licensee) dated November 18, 1976 and supplemented April 19, 1984, October 10, 1986, April 21 and June 23, 1988 and May 17, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I.
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health or safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. DPR-56 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 167, are hereby incorporated in the license. PECO shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Charles L. Miller*

Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Charges to the Technical  
Specifications

Date of Issuance: October 23, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 167

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

<u>Remove</u>	<u>Insert</u>
166	166
167	167
168	168
169	169
170	170
184	184
-	184a
185	185
186	186
187	187
-	187a
-	187b
188	188
-	188a
-	188b
-	188c

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.A Primary Containment (Cont'd.)

2. Primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel except while performing "open vessel" physics tests at power levels not to exceed 5 Mw(t).
3. If the primary containment integrity is breached when it is required by 3.7.A.2, that integrity shall be reestablished within 24 hours or the reactor placed in a cold shutdown condition within 24 hours.

4.7.A Primary Containment (Cont'd.)

2. Integrated Leak Rate Testing
  - a. Integrated leak rate tests (ILRT's) shall be performed to verify primary containment integrity. Primary containment integrity is confirmed if the leakage rate does not exceed the equivalent of 0.5 percent of the primary containment volume per 24 hours at 49.1 psig.
  - b. Integrated leak rate tests may be performed at either 49.1 psig or 25 psig, the leakage rate test period, extending to 24 hours of retained internal pressure. If it can be demonstrated to the satisfaction of those responsible for the acceptance of the containment structure that the leakage rate can be accurately determined during a shorter test period, the agreed-upon shorter period may be used.

Prior to initial operation, integrated leak rate tests must be performed at 49.1 and 25 psig (with the 25 psig test being performed prior to the 49.1 psig test) to establish the allowable leak rate (in percent of containment volume per 24 hours) at 25 psig as the lesser of the following values:

$$L_t = L_a (L_{tm}/L_{am})$$

where

$L_a = 0.5$  percent of the primary containment volume per 24 hours at 49.1 psig.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.A Primary Containment (Cont'd.)4.7.A Primary Containment (Cont'd.)

$L_{tm}$  = measured ILR at 25 psig ( $P_t$ )

$L_{am}$  = measured ILR at 49.1 psig ( $P_a$ ), and

$\frac{L_{tm}}{L_{am}} \leq 0.7$ , otherwise

$L_t = L_a (P_t/P_a)^{1/2}$

where

$L_a$  = 0.5 percent of the primary containment volume per 24 hours at 49.1 psig

$P_a$  = peak accident pressure (psig)

$P_t$  = appropriately measured test pressures (psig)

- c. The ILRT's shall be performed at the following minimum frequency:
1. Prior to initial unit operation.
  2. After the preoperational leakage rate tests, a set of three Type A tests shall be performed at approximately equal intervals during each 10 year service period. These intervals may be extended up to eight months if necessary to coincide with re-fueling outage.
- d. The allowable leakage rates,  $L_{tm}$  and  $L_{am}$ , shall be less than  $0.75 L_t$  and  $0.75 L_a$  for the reduced pressure tests and peak pressure tests, respectively.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

3.7.A Primary Containment (Cont'd.) 4.7.A Primary Containment (Cont'd.)

- e. Except for the initial ILRT, all ILRT's shall be performed without any preliminary leak detection surveys and leak repairs immediately prior to the test.

LIMITING CONDITIONS FOR OPERATION3.7.A Primary Containment (Cont'd.)SURVEILLANCE REQUIREMENTS4.7.A Primary Containment (Cont'd.)

- f. Local leak rate tests (LLRT's) shall be performed on the primary containment testable penetrations and isolation valves in accordance with Tables 3.7.2, 3.7.3, & 3.7.4 at a pressure of 49.1 psig (except for the main steam isolation valves, see below) each operating cycle, but in no case at intervals greater than two years. Bolted double-gasketed seals shall be tested whenever the seal is closed after being opened and at least once per operating cycle, but in no case at intervals greater than two years.

The Main Steamline isolation valves shall be tested at a pressure of 25 psig for leakage during each refueling outage, but in no case at intervals greater than two years. If a total leakage rate of 11.5 scf/hr for any one main steamline isolation valve is exceeded, repairs and retest shall be performed to correct the condition.

g. Continuous Leak Rate Monitor

When the primary containment is inerted, the containment shall be continuously monitored for gross leakage by review of the inerting system makeup requirements. This monitoring system may be taken out of service for maintenance but shall be returned to service as soon as practicable.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS7.A Primary Containment (Cont'd.)3. Pressure Suppression Chamber-Reactor Building Vacuum Breakers

- a. Except as specified in 3.7.A.3.b below, two pressure suppression chamber-reactor building vacuum breakers shall be operable at all times when primary containment integrity is required. The setpoint of the differential pressure instrumentation which actuates the pressure suppression chamber-reactor building vacuum breakers shall be  $0.5 \pm 0.25$  psid.
- b. From and after the date that one of the pressure suppression chamber-reactor building vacuum breakers is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding seven days unless such vacuum breaker is sooner made operable provided that the repair procedure does not violate primary containment integrity.

4. Drywell-Pressure Suppression Chamber Vacuum Breakers

- a. When primary containment is required, all drywell-suppression chamber vacuum breakers shall be operable and positioned in the fully closed position (except during testing) except as specified in 3.7.A.4.b and c below.
- b. Drywell-suppression chamber vacuum breaker(s) may be "not fully seated" as shown by position indication if testing confirms that the bypass area is less than or equivalent to a one-inch diameter hole. Testing shall be initiated within 8 hours of initial detection of a "not fully seated" position

4.7.A Primary Containment (Cont'd.)h. Drywell Surfaces

The interior surfaces of the drywell and torus shall be visually inspected each operating cycle for evidence of deterioration. In addition, the external surfaces of the torus below the water level shall be inspected on a routine basis for evidence of torus corrosion or leakage.

3. Pressure Suppression Chamber-Reactor Building Vacuum Breakers

- a. The pressure suppression chamber-reactor building vacuum breakers and associated instrumentation including setpoint shall be checked for proper operation every refueling outage.

4. Drywell-Pressure Suppression Chamber Vacuum Breakers

- a. Each drywell-suppression chamber vacuum breaker shall be exercised through an opening-closing cycle once a month.
- b. When it is determined that a vacuum breaker is inoperable for opening at a time when operability is required, all other operable vacuum breakers shall be exercised immediately and every 15 days thereafter until the inoperable vacuum breaker has been returned to normal service.
- c. Once per operating cycle each vacuum breaker shall be visually inspected

TABLE 3.7.2TESTABLE PENETRATIONS WITH DOUBLE O-RINGS SEALS

<u>Pen No.</u>		<u>Notes</u>
N-1	Equipment Access Hatch	(1)(2)(4)(6)
N-2	Equipment Access and Personnel Air Lock	(1)(4)(7)(8)
N-4	Drywell Head Access Hatch	(1)(2)(4)(6)
N-6	CRD Removal Hatch	(1)(2)(4)(6)
N-25	A0-2520 (Unit #2); A0-3520 (Unit #3) Purge System Valves	(1)(2)(4)(6)
N-26	A0-2506 (Unit #2); A0-3506 (Unit #3) Purge System Valves	(1)(2)(4)(6)
N-35-A through N-35-G	TIP System	(1)(2)(4)(6)
200A&B	Suppression Chamber Access Hatch	(1)(2)(4)(6)
N-205B	A0-2521B (Unit #2); A0-3521B (Unit #3)	Purge System Valves
N-205A	A0-2502A (Unit #2); A0-3502A (Unit #3)	
N-212	A0-2502B (Unit #2); A0-3502B (Unit #3) Stop Check 13-9 (RCIC Stop Check)	
N-213A&B	Construction Drain	(1)(2)(4)(6)
N-214	Stop Check 23-12 (HPCI Stop Check)	(1)(2)(4)(6)

## PBAPS

TABLE 3.7.3

TESTABLE PENETRATIONS WITH TESTABLE BELLOWS

<u>Pen No.</u>		<u>Notes</u>	<u>Pen No.</u>		<u>Notes</u>
N-7A	Main Steam Line 'A'	(1)(2)(4) (6)	N-13A	RHR Pump Discharge	(1)(2)(4) (6)
N-7B	Main Steam Line 'B'	(1)(2)(4) (6)	N-13B	RHR Pump Discharge	(1)(2)(4) (6)
N-7C	Main Steam Line 'C'	(1)(2)(4) (6)	N-14	Reactor Water Cleanup Line	(1)(2)(4) (6)
N-7D	Main Steam Line 'D'	(1)(2)(4) (6)	N-16A	Core Spray Pump Discharge	(1)(2)(4) (6)
N-9A	Feedwater Line 'A'	(1)(2)(4) (6)	N-16B	Core Spray Pump Discharge	(1)(2)(4) (6)
N-9B	Feedwater Line 'B'	(1)(2)(4) (6)	N-17	RHR Head Spray	(1)(2)(4) (6)
N-11	Steam Line to HPCI Turbine	(1)(2)(4) (6)	N-201A through N-201H	Suppression Chamber to Drywell Vent Line	(1)(2)(4) (6)
N-12	RHR Shutdown Cooling Pump Suction	(1)(2)(4) (6)			

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
7A to D	A0-2-80A to D A0-2-86A to D	1,2,3,4,5,9,11 1,2,3,4,5
8	M0-2-74 M0-2-77	1,2,4,5,9,10 1,2,4,5
9A	M0-23-19; M0-2-38A Check Valves 2-28A and 2-96A	1,2,4,5 1,2,4,5
9B	M0-13-21; M0-2-38B; M0-12-68 Check Valves 2-28A and 2-96B	1,2,4,5 1,2,4,5
10	M0-13-15 M0-13-16	1,2,4,5,9,10 1,2,4,5
11	M0-23-15 M0-23-16 A0-4807 (Unit #2)	1,2,4,5,9,10 1,2,4,5 1,2,4,5
12	M0-10-18; M0-10-17	1,2,4,5,9,10 1,2,4,5
3A	M0-10-25B; A0-10-46B; A0-10-163B	1,2,4,5
13B	M0-10-25A; A0-10-46A; A0-10-163A	1,2,4,5
14	M0-12-15 (Unit #2) M0-12-15 (Unit #3) M0-12-18	1,2,4,5,9,10 1,2,4,5,9,11 1,2,4,5
16A	M0-14-11B; M0-14-12B (M0-14-12B; A0-14-13B; A0-14-15B)*	1,2,4,5 (1,2,4,5)*
16B	M0-14-11A; M0-14-11B (M0-14-12A; A0-14-13A; A0-14-15A)*	1,2,4,5 (1,2,4,5)*
17	M0-10-32 M0-10-33	1,2,4,5,9,10 1,2,4,5
18	A0-20-82 A0-20-83	1,2,4,5,9,11 1,2,4,5
19	A0-20-94 A0-20-95	1,2,4,5,9,11 1,2,4,5
21	Service Air System Inner Globe Valve Service Air System Outer Globe Valve	1,2,4,5,9,11 1,2,4,5

Effective isolation boundary for this penetration following the 8th Refueling Outage on Unit 3.

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
22	A0-2969A (Unit #2); A0-3969A (Unit #3) Check Valve	1,2,4,5 1,2,4,5
23	M0-2373 (Unit #2); M0-3373 (Unit #3)	1,2,4,5
24	M0-2374 (Unit #2); M0-3374 (Unit #3)	1,2,4,5
25, 205B	A0-2502A (Unit #2); A0-3502A (Unit #3) A0-2505 (Unit #2); A0-3505 (Unit #3) A0-2519 (Unit #2); A0-3519 (Unit #3) A0-2520 (Unit #2); A0-3520 (Unit #3) A0-2521A (Unit #2); A0-3521A (Unit #3) A0-2521B (Unit #2); A0-3521B (Unit #3) A0-2523 (Unit #2); A0-3523 (Unit #3) Check Valve 9-26A; Two Check Valves	1,2,4,5,9,12 1,2,4,5 1,2,4,5 1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,12 1,2,4,5 1,2,4,5
26	A0-2506 (Unit #2); A0-3506 (Unit #3) A0-2507 (Unit #2); A0-3507 (Unit #3) A0-2509 (Unit #2); A0-3509 (Unit #3) A0-2510 (Unit #2); A0-3510 (Unit #3) A0-4235 (Unit #2); A0-5235 (Unit #3) SV-2671G (Unit #2); SV-3671G (Unit #3) SV-2978G (Unit #2); SV-3978G (Unit #3) SV-4960B (Unit #2); SV-5960B (Unit #3) SV-4961B (Unit #2); SV-5961B (Unit #3) SV-4966B (Unit #2); SV-5966B (Unit #3) SV-8100 (Unit #2); SV-9100 (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5
32C, D	ILRT System Two Globe Valves	1,2,4,5,13
35A to E	TIP Ball Valves TIP Shear Valves	1,2,4,5 19
35F	SV-109; Check Valve	1,2,4,5
37A to D	CRD Insert; HCU	18
38	CV-3-32A; CV-3-32B; CV-3-33 CV-3-35A; CV-3-35B; CV-3-36 CRD Withdrawal; HCU	1,2,4,5 1,2,4,5 18
39A	M0-10-31B M0-10-26B SV-4949B (Unit #2); SV-5949B (Unit #3) Check Valve	1,2,4,5,9,10 1,2,4,5 1,2,4,5 1,2,4,5
39B	M0-10-31A M0-10-26A SV-4949A (Unit #2); SV-5949A (Unit #3) Check Valve	1,2,4,5,9,10 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4

PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
41	A0-2-39 A0-2-40	1,2,4,5,9,11 1,2,4,5
42	Check Valve 11-16 XV-14A,B	1,2,4,5 1,2,4,5,20
47	SV-8130B (Unit #2); SV-9130B (Unit #3) Check Valve	1,2,4,5 1,2,4,5
51A	SV-2671E (Unit #2); SV-3671E (Unit #3) SV-2978E (Unit #2); SV-3978E (Unit #3)	1,2,4,5 1,2,4,5
51B	SV-2671D (Unit #2); SV-3671D (Unit #3) SV-2978D (Unit #2); SV-3978D (Unit #3)	1,2,4,5 1,2,4,5
51C	SV-2671C (Unit #2); SV-3671C (Unit #3) SV-2978C (Unit #2); SV-3978C (Unit #3) SV-4960C (Unit #2); SV-5960C (Unit #3) SV-4961C (Unit #2); SV-5961C (Unit #3) SV-4966C (Unit #2); SV-5966C (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5
51D	SV-2980 (Unit #2); SV-3980 (Unit #3) Check Valve	1,2,4,5
52F	A0-2969B (Unit #2); A0-3969B (Unit #3) Check Valve	1,2,4,5
53	M0-2201B (Unit #2); M0-3201B (Unit #3)	1,2,4,5
54	M0-2200B (Unit #2); M0-3200B (Unit #3)	1,2,4,5
55	M0-2200A (Unit #2); M0-3200A (Unit #3)	1,2,4,5
56	M0-2201A (Unit #2); M0-3201A (Unit #3)	1,2,4,5
57	A0-2-316 A0-2-317	1,2,4,5,9,11 1,2,4,5
102B	Breathing Air System - 2 Gate Valves (Unit #3) SV-8130A (Unit #2); SV-9130A (Unit #3) Check Valve	1,2,4,5,9,21 1,2,4,5 1,2,4,5
203	SV-2671B (Unit #2); SV-3671B (Unit #3) SV-2978B (Unit #2); SV-3978B (Unit #3) SV-4960D (Unit #2); SV-5960D (Unit #3) SV-4961D (Unit #2); SV-5961D (Unit #3) SV-4966D (Unit #2); SV-5966D (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4

PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
205A	A0-2502B (Unit #2); A0-3502B (Unit #3) Check Valve 9-26B	1,2,4,5,9,22 1,2,4,5
210A	M0-10-34B Check Valve 10-19B,D	1,2,4,5,9,11 17
210B	M0-10-34A Check Valve 10-19A,C	1,2,4,5,9,11 17
211A	M0-10-38B M0-10-39B; M0-10-34B; Check Valve SV-4951B (Unit #2); SV-5951B (Unit #3)	1,2,4,5,9,11 1,2,4,5 1,2,4,5
211B	M0-10-38A M0-10-39A; M0-10-34A; Check Valve SV-4951A (Unit #2); SV-5951A (Unit #3)	1,2,4,5,9,11 1,2,4,5 1,2,4,5
212, 214, 217B	A0-4240 (Unit #2); A0-5240 (Unit #3) A0-4241 (Unit #2); A0-5241 (Unit #3) A0-4247 (Unit #2); A0-5247 (Unit #3) A0-4248 (Unit #2); A0-5248 (Unit #3) M0-4244 (Unit #2); M0-5244 (Unit #3) M0-4244A (Unit #2); M0-5244A (Unit #3) Check Valve 13-50; Check Valve 23-65 Check Valve 13-9; Check Valve 23-12	1,2,4,5,9,11 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5,14 1,2,4,5,14 1,2,4,5 15
216	Check Valve 23-62	17
218A	A0-2968 (Unit #2); A0-3968 (Unit #3) Check Valve	1,2,4,5 1,2,4,5
218B	SV-2671A (Unit #2); SV-3671A (Unit #3) SV-2978A (Unit #2); SV-3978A (Unit #3)	1,2,4,5 1,2,4,5
218C	ILRT System-Two Globe Valves	1,2,4,5,13
219	A0-2511 (Unit #2); A0-3511 (Unit #3) A0-2512 (Unit #2); A0-3512 (Unit #3) A0-2513 (Unit #2); A0-3513 (Unit #3) A0-2514 (Unit #2); A0-3514 (Unit #3) SV-2671F (Unit #2); SV-3671F (Unit #3) SV-2978F (Unit #2); SV-3978F (Unit #3) SV-4960A (Unit #2); SV-5960A (Unit #3) SV-4961A (Unit #2); SV-5961A (Unit #3) SV-4966A (Unit #2); SV-5966A (Unit #3) SV-8101 (Unit #2); SV-9101 (Unit #3)	1,2,4,5,9,12 1,2,4,5 1,2,4,5,9,11 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5 1,2,4,5

TABLE 3.7.4PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>Pen No.</u>		<u>Notes</u>
221	Check Valve 13-38	17
	Check Valve 13-10	15
223	Check Valve 23-56	17
	Check Valve 23-13	15
224	M0-14-26A; Check Valve 14-66A; (Unit #2)	17
	Check Valve 14-66C; 3 Check Valves (Unit #2)	17
225	M0-14-71; M0-13-39	17
	M0-13-41; M0-14-70	1,2,4,5,9
226A to D	M0-10-13A to D; RV-10-72A to D	17
227	M0-23-57	17
	M0-23-58	1,2,4,5,9
228A to D	M0-14-7A to D	17
229	Check Valve 14-66B (Unit #2)	17
	2 Check Valves (Unit #2 only)	17
	Check Valve 14-66D (Unit #2)	17
10	Check Valve 13-29	17
233	M0-23-31 (Unit #2)	17
234	M0-14-26B (Unit #2)	17
	2 Check Valves (Unit #2)	17
	PASS Check Valve (Unit #2)	17
234A	M0-14-26B (Unit 3)	17
	3 Check Valves (Unit #3)	17
234B	M0-14-26A (Unit #3)	17
	2 Check Valves (Unit #3)	17
	Pass & Check Valve (Unit #3)	17
235	M0-23-31 (Unit #3)	17
236A	Check Valve 14-66B (Unit #3)	17
	Check Valve 14-66D (Unit #3)	17
236B	Check Valve 14-66A (Unit #3)	17
	Check Valve 14-66C (Unit #3)	17
	2 Check Valves (Unit #3)	17

## PBAPS

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4

- (1) Minimum test duration for all valves and penetrations listed is one hour.
- (2) Test pressures of at least 49.1 psig for all valves and penetrations except MSIV's which are tested at 25 psig.
- (3) MSIV's acceptable leakage is 11.5 scfh/valve of air.
- (4) The total acceptable leakage for all valves and penetrations other than the MSIV's is 0.60 La.
- (5) Local leak tests on all testable isolation valves shall be performed each operating cycle but in no case at intervals greater than 2 years.
- (6) Local leak tests on all testable penetrations shall be performed each operating cycle but in no case at intervals greater than 2 years.
- (7) Personnel Air Locks shall be tested at 6-month intervals.
- (8) The personnel air locks are tested at 49.1 psig.
- (9) Identifies isolation valves that may be tested by applying pressure between the inboard and outboard valves.
- (10) Gate valves are tested in reverse direction. Test acceptable since the normal force between the seat and the disc generated by stem action alone is greater than ten (10) times the normal force induced by test differential pressure except for valves MO-10-31A,B which is 7.97. This applies to the following valves:

MO-2-74  
 MO-13-15  
 MO-23-15  
 MO-10-32 (Unit #2)

MO-10-31A, B  
 MO-10-18  
 MO-12-15 (Unit #2)

## PEAPS

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (11) Globe valve which may be tested in reverse direction. Test acceptable since test pressure is applied under the valve seat. This applies to the following valves:

AO-02-80A to D	M0-12-15 (Unit #3)
A0-4240 (5240)	A0-20-94
A0-4247 (5247)	A0-2509 (3509)
M0-10-38A and B	A0-2-39
M0-10-34A and B	A0-2-316
A0-20-82	A0-2513 (3513)

Inner manual valve on penetration N-21.

- (12) Butterfly valve tested in reverse direction. Test acceptable since valve is equipped with inflatable seals which provide equivalent bi-directional sealing. This applies to the following valves:

A0-2520 (3520)	A0-2506 (3506)
A0-2511 (3511)	A0-2521B (3521B)
A0-2502A (3502A)	

- (13) Manual globe valves tested in reverse direction. This applies to valves on the following penetrations:

N-32C	(two valves)
N-218C	(two valves)
N-32D	(two valves)

These valves are locked closed except during ILRT's.

- (14) Gate valve utilized for containment isolation in both directions. Test performed only in one direction. Valve normal force ratio is 17.9. Leakage path is between separate torus penetrations only.

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (15) These stop-check valves serve as block valves to allow testing of the outboard check valve. The check function of these valves is not leak tested. This applies to the following valves:

Check Valve 13-9  
Check Valve 23-12  
Check Valve 23-13  
Check Valve 13-10

- (16) Deleted

- (17) These lines discharge below the minimum torus water level and will thus have a water seal after an accident. Therefore Type C testing of these valves is not required per Appendix J to 10 CFR 50, Section III.C.3.

NOTES FOR TABLES 3.7.2 THROUGH 3.7.4 (CONT'D)

- (18) Individual valves on the CRD hydraulic control units are not Typed C tested. Leakage is tested during the Type A and reactor vessel hydrostatic testing.
- (19) The TIP shear valves are not Type C tested because squib detonation is required for closure. This is an exemption to 10 CFR 50, Appendix J. These valves are located in small diameter (3/8") tubing lines. The possible leakage paths which include these valves are tested during the Type A tests.
- (20) Explosive valve may be tested in reverse direction. Valve is normally closed and opens only on SLCS actuation.
- (21) Inboard manual gate valve tested in the reverse direction. Valve is locked closed except during refueling outages when containment breathing air is required.
- (22) Butterfly valve tested in reverse direction. Test acceptable since valve provides equivalent bi-directional sealing. This applies to valves A0-2502B and A0-3502B.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 164 AND 167 TO FACILITY OPERATING

LICENSE NOS. DPR-44 and DPR-56

PHILADELPHIA ELECTRIC COMPANY  
PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
DELMARVA POWER AND LIGHT COMPANY  
ATLANTIC CITY ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-277 AND 50-278

1.0 INTRODUCTION

As indicated in 10 CFR Part 50, Appendix J, Section III, a program is to be developed for leak testing the primary containment and components penetrating the containment boundary. On August 7, 1975, the staff requested the licensee (Philadelphia Electric Company, et. al.) to review its primary containment leak rate testing (PCLRT) program in order to determine the extent of compliance with the requirements of Appendix J at Peach Bottom Atomic Power Station, Units 2 and 3. By letter dated September 12, 1975, the licensee submitted its evaluation of the Peach Bottom containment leakage testing program and identified certain areas of the Technical Specifications (TS) which appeared to be inconsistent with the provisions of Appendix J but could not be changed to achieve conformity with Appendix J due to the unique design of the plant.

Subsequently, by letter dated November 18, 1976, the licensee submitted a proposed amendment for Facility Operating License Nos. DPR-44 and DPR-56 to bring certain areas of the containment leakage testing program, as specified in Sections 3.7A and 4.7A of the TS, into conformance with the requirements of Appendix J and also requested that certain test methodology, components and penetrations be exempted from the requirements of Appendix J. A revised proposed amendment was submitted by letter dated May 15, 1981. The staff and its contractor, the Franklin Research Center (FRC), reviewed the licensee's PCLRT program and provided a safety evaluation to the licensee in a letter dated December 28, 1981. In the safety evaluation, the staff concluded that certain areas of the PCLRT program needed to be improved.

As a followup, the staff notified the licensee on September 12, 1983, that the PCLRT program should be revised to reflect the staff's December 28, 1981 safety evaluation. Accordingly, by letter dated April 19, 1984, the licensee submitted proposed TS changes which revised the November 18, 1976 application. This request was noticed August 22, 1984 (49 FR 33367). By letter dated October 10, 1986, the licensee submitted a revised proposed amendment which replaced all earlier proposed amendments and reflected discussions with the staff regarding the PCLRT program. This proposal completely supersedes all previous proposals.

The staff requested certain additional information by letter dated January 9, 1991 and the licensee provided this information and further revised the October 18, 1986 proposal by letter dated May 17, 1991.

In addition, by letters dated April 21, 1988 and June 23, 1988, the licensee requested certain exemptions from Appendix J for the PCLRT program. The staff responded to the exemptions requested by letter dated November 21, 1990, with the exception of one request which you withdrew by letter dated September 27, 1991. The staff has completed its review of the proposed technical specification changes and provides the following evaluation.

## 2.0 EVALUATION

### 2.1 Primary Containment Leak Rate Test Program

The licensee in its letters dated October 10, 1986 and May 17, 1991, proposed the following TS changes for the PCLRT program:

#### 2.1.1 TS pages 166 and 167, Section 4.7.A.2, "Integrated Leak Rate Testing"

The licensee proposed to delete the statement "La is 0.5 percent" and add the definition for La in the TS, such that  $La = 0.5$  percent of the primary containment volume per 24 hours at 49.1 psig, and changed the formula for the maximum allowable test leakage rate from  $Lt = 0.5 (Ltm/Lpm)$  to  $Lt = La (Ltm/Lam)$ . The licensee also proposed to define that  $Ltm/Lam \geq 0.7$  in lieu of 1.0 in the current TS. The staff finds these changes in agreement with Appendix J, Section III.A.4(a)(1)(iii) and therefore, acceptable.

#### 2.1.2 TS pages 168 and 192, Section 4.7.A.2.e.

The licensee removed references to leak testing methodology which are not required by the staff in Standard Technical Specifications. The staff finds this change acceptable.

#### 2.1.3 TS page 169, Section 4.7.A.2.f

The licensee proposed to revise this TS section to require local leak rate testing (LLRT) of primary containment isolation barriers in accordance with Tables 3.7.2, 3.7.3, and 3.7.4 of the TS.

The staff finds the proposed change acceptable since it clearly defines the valves and penetration barriers to be local leak rate tested.

#### 2.1.4 TS Page 184, Table 3.7.2, "Testable Penetrations with Double O-Ring Seals."

The licensee proposed to revise the nomenclature for penetration N-2 in Table 3.7.2 to correctly identify it as the "equipment access and personnel airlock" penetration, and to insert Note (7) to specify its test frequency. The

licensee also proposed to add to Table 3.7.2 six penetrations, which have potential leakage pathways in valve to pipe penetrations that contain testable O-ring seals. The staff finds that the change would clearly define the air lock test requirement and test frequency in accordance with Appendix J, and would provide needed additions to Table 3.7.2, and, therefore, is acceptable.

2.1.5 TS Page 184a, Table 3.7.3, "Testable Penetrations with Testable Bellows."

The licensee proposed to revise Table 3.7.3 to correct the nomenclature for penetration N-9B from "RPV Head Spray" to "RHR Head Spray," and to revise the nomenclature for the MSL and the RHR shutdown cooling.

The changes are only editorial in nature and are acceptable since they reflect the present plant nomenclature for the penetration.

2.1.6 TS Pages 185 thru 188, Table 3.7.4, "Primary Containment Testable Isolation Valves."

The licensee proposed to replace Table 3.7.4 in its entirety with the revised Table 3.7.4 as shown on revised pages 185, 186, 187, 187a, 188, and new pages 187b, 188a, 188b and 188c. The changes in Table 3.7.4 are evaluated as follows:

- (1) The asterisk footnote on page 85 was revised to read "Effective isolation boundary for this penetration following the 8th refueling outage on Unit 3" for penetrations 16A and 16B. Also, penetrations 13A and 13B have been revised to reflect the removal of this footnote. The staff finds the change reflects the present plant configuration as a result of modifications and is, therefore, acceptable.
- (2) New testable isolation valves on penetrations 234 (Unit 2) and 234B (Unit 3) were added as a result of the installation of a new post-accident sampling system (PASS). The change is merely an addition as a result of plant modifications and is, therefore, acceptable.
- (3) The valve number and reference notes in penetration 14 were revised to differentiate between the MO-12-15 valves on Units 2 and 3 since the MO-12-15 valve on Unit 2 is a gate valve, and the MO-12-15 valve on Unit 3 is a globe valve. The change is only editorial in nature, and is, therefore, acceptable.
- (4) Penetration 35F and associated reference notes were added to identify check valve, SV-109, as a testable isolation valve. The check valve (SV-109) on the 1-inch nitrogen supply line to the TIP system was previously indicated as not capable of being tested because of the plant design. The staff finds that modifications were made which permit the valve to be tested, and, therefore, the TS change is acceptable.
- (5) Note 9 was revised to delete mention of testing in a conservative direction, which was merely explanatory. The matter of direction of testing for MSIV's was fully addressed in the Appendix J Exemption issued November 21, 1990. This change in wording is consistent with that exemption and is acceptable.

- (6) Note (10) was revised to permit the following gate valves to be tested in the reverse direction: MO-2-74, MO-13-15, MO-23-15, MO-10-32 (Unit 2), MO-10-31A, B, MO-10-18, and MO-12-15 (Unit 2). Appendix J, Section III.C.1 states the test pressure shall be applied in the same direction as when the valve would be required to perform its safety function, unless it can be shown that applying the test pressure in a different direction will yield equivalent or more conservative results. The licensee's basis for the requested exemption is that normal force between the seat and the disk generated by the stem force alone is greater than ten times the post-accident normal force induced by peak containment differential pressure, Pa (49.1 psig), except for valves MO-10-31A, B which is 7.97 times the post-accident normal force, therefore, it is unlikely that the 49.1 psig test pressure will lift the valve disk off its seat during the LLRT due to the magnitude of the thrust generated. The sealing capabilities are essentially equivalent regardless of the direction in which the test pressure is applied. This change is, therefore, acceptable.
- (7) Note (11) was added to permit the following globe valves to be tested in the reverse direction: AO-02-80A to D, AO-4240 (5240), AO-4247 (5247), MO-10-38A, B, AO-10-34A, B, AO-20-82, MO-12-15 (Unit 3), AO-20-94, AO-2509 (3509), AO-2-39, AO-2-316, and AO-2513 (3513). This note is conservative because testing pressure applied in the reverse direction on these valves yields conservative results since the force from test pressure is in the direction of lifting the plug off its seat. Testing in the reverse direction is, therefore, acceptable.
- (8) Note (12) was added to permit the following butterfly valves to be tested in the reserve direction: AO-2520 (3520), AO-2511 (3511), AO-2502A (3502A), AO-2506 (3506), and AO-2521B (3521B). This note is acceptable since the valves are equipped with inflatable resilient seats which provide equivalent bi-directional sealing.
- (9) Note (13) was added to permit the manual globe valves in the following penetrations to be tested in the reverse direction: N-32C, N-218C, and N32D. These valves are oriented such that the leakage test pressure is applied in the reverse direction and tends to push the valve disk into the valve seat. The valve manufacturer stated that the test pressure applied either over or under the disk of the valve will yield equivalent leakage results. Testing in the reverse direction is, therefore, acceptable.
- (10) Note (14) was added to read: "Gate valves utilized for containment isolation in both directions. Test performed only in one direction. Valve normal force ratio is 17.9. Leakage path is between separate torus penetrations only." The note is referenced for valves, MO-4244, 4244A (Unit 2) and 5244, 5244A (Unit 3) in penetration 217B for the high pressure coolant injection and reactor core isolation cooling pump turbine exhaust lines to the suppression pool. The licensee's basis for not testing in both directions is that normal force between the seat and the disk generated by the stem alone is greater than ten (10) times the

post-accident force induced by peak containment differential pressure, Pa (49.1 psig). Therefore, it is unlikely that the 49.1 psig test pressure will lift the valve disk off its seat during the local leak rate test (LLRT). The sealing capabilities are essentially equivalent regardless of the direction in which the test pressure is applied. The staff, therefore, finds testing in only one direction acceptable, although the valves are used for containment isolation in both directions.

- (11) Note (15) was added and referenced for penetrations 217B, 221, and 223 to indicate that the stop-check valves (13-9, 23-12, 23-13, 13-10) serve only as block valves to allow testing of the outboard containment isolation valves. The staff has reviewed the system configuration and the licensee's rationale for not considering these valves require testing, as presented in the licensee's submittal dated May 17, 1991. Because these are not relied upon to perform a containment isolation function and are therefore, not containment isolation valves, the staff finds this change acceptable.
- (12) The licensee proposed to add a note which applies to valves MO-14-70, MO-23-58, and MO-13-41. The valves are retained in Table 3.7.4 of "Primary Containment Testable Isolation Valves," and the proposed footnote appears to present a rationale for not testing the valves. Appendix J does not require Type C testing of water sealed valves. Also these valves are identified in Table 3.7.4 by footnote (9) which calls for testing by applying pressure between the inboard and outboard valves, but the licensee's answer to question 17 in the licensee's submittal of May 17, 1991 speaks of deleting references to reverse testing. The staff finds the proposed change does not clearly indicate whether or not the licensee intends to test these valves. Because the proposed change is ambiguous, the staff finds it to be unacceptable.
- (13) Note (17) was added to state that certain valves discharge below the minimum torus water level and will thus have a water seal after an accident. Therefore, Type C testing of these valves is not required per Appendix J to 10 CFR Part 50, Section III.C.3. The staff finds this change acceptable.
- (14) Note (18) was added to exclude Type C testing for the individual valves on the CRD hydraulic control units. In the safety evaluation supporting the Appendix J Exemption for Peach Bottom Atomic Power Station, Units 2 and 3, dated November 21, 1990, the staff discussed the CRD hydraulic control units. The staff concluded that "these lines provide a continuous water seal and do not constitute a potential atmospheric leak pathway and Appendix J does not require Type C testing of the associated isolation valves."
- (15) Note (19) was added and referenced for penetrations 35A to E to indicate that the Transversing In-Core Probe (TIP) shear valves are not Type C tested. In the Appendix J Exemption for Peach Bottom Atomic Power Station, Units 2 and 3, dated November 21, 1990, the staff excluded the TIP shear valves from Type C testing. The staff finds note (19) acceptable.

- (16) Note [20] was added to permit the explosion valves (XV-14A, B) in penetration 42 to be tested in the reverse direction.

The licensee's justification for this position is that the explosion valves have a bi-directional sealing device, are normally closed, and open only on a standby liquid control system (SLCS) actuation. The staff agrees that testing in the reverse direction would provide equivalent results of that for a forward flow test. Therefore, the staff finds note (20) acceptable.

- (17) Note (21) was added and referenced for penetration No. 102B to indicate that two gate valves on the breathing air system are to be tested in the reverse direction. In the safety evaluation supporting the Appendix J Exemption for Peach Bottom Atomic Power Station, Units 2 and 3, dated November 21, 1990, the staff discussed the breathing air system. The staff found that "reverse direction testing is acceptable." Since it conforms with Appendix J, Section III.C.1, the staff finds note (21) acceptable.

- (18) Note (22) was added to indicate that the butterfly valves, AO-2402B and AO-3502B in penetration 205A are to be tested in the reverse direction. Since these valves provide equivalent bi-directional sealing, testing in the reverse direction will yield an equivalent test result to that for the forward direction, and, therefore, note (22) is acceptable.

#### 2.1.7 TS Page 192 and 192a

Clarifying changes to Bases pages 192 and 192a were proposed. Certain of the proposed changes relate to an Appendix J exemption request to exclude MSIV measured leakage from inclusion in the local leak rate test limit of 0.6 La. This request was under review by the staff and has since been withdrawn by the licensee by letter dated September 27, 1991. The change may create confusion and is, therefore, denied.

In summary, as described above, the staff finds the licensee's proposed technical specification changes acceptable with respect to:

1. Deletion of testing requirements for certain water-sealed valves which do not constitute a potential atmospheric leak pathway.
2. Certain wording changes so that technical specifications are consistent with the Appendix J Exemption for Peach Bottom Atomic Power Station issued November 21, 1990.
3. Certain proposed changes related to valve testing in the reverse direction.
4. Certain changes so that technical specifications agree with current plant configuration.
5. Wording changes to more closely match the plant technical specifications with Appendix J and Standard Technical Specifications.

6. Certain editorial changes.

The staff finds unacceptable:

1. The proposed addition of a note which the staff considers ambiguous to Table 3.7.4 related to testing valves MO-14-70, MO-23-58, and MO-13-41.
2. Changes to Bases pages 192 and 192a which pertain to a withdrawn exemption request and therefore could create confusion.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (56 FR 47242). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: J. S. Guo  
V. L. Rooney

Date: October 23, 1991

UNITED STATES NUCLEAR REGULATORY COMMISSION  
PHILADELPHIA ELECTRIC COMPANY  
PUBLIC SERVICE ELECTRIC AND GAS COMPANY  
DELMARVA POWER AND LIGHT COMPANY  
ATLANTIC CITY ELECTRIC COMPANY  
DOCKET NOS. 50-277 AND 50-278  
PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3  
NOTICE OF DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE  
AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) has denied a request by Philadelphia Electric Company, et. al. (licensee) for an amendment to Facility Operating License Nos. DPR-44 and DPR-56, issued to the licensee for operation of the Peach Bottom Atomic Power Station, Units 2 and 3, located in York County, Pennsylvania. Notice of Consideration of Issuance of this amendment was published in the FEDERAL REGISTER on September 18, 1991 (56 FR 47242).

The purpose of the licensee's amendment request was to revise the Technical Specifications (TS) related to 10 CFR Part 50, Appendix J, Section III, Primary Reactor Containment leakage testing.

The NRC staff has concluded that the licensee's request cannot be granted in full. The licensee was notified of the Commission's denial of a portion of the proposed change by letter dated October 23, 1991. The portion of the proposed change which was denied changed Technical Specification wording related to testing of certain valves in a manner which may create confusion.

By \_\_\_\_\_, the licensee may demand a hearing with respect to the denial described above. Any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C., by the above date.

A copy of any petitions should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to J. W. Durham, Sr., Esquire, Sr. V.P. and General Counsel, Philadelphia Electric Company, 2301 Market Street, Philadelphia, Pennsylvania 19101, attorney for the licensee.

For further details with respect to this action, see (1) the application for amendment dated November 18, 1976 and supplemented April 19, 1984, October 10, 1986, April 21 and June 23, 1988 and May 17, 1991.

These documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W. Washington, D.C. and at the Local Public Document Room located at Government Publications Section, State Library of Pennsylvania, (REGIONAL DEPOSITORY) Education

Building, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg,  
Pennsylvania 17105. A copy of item (2) may be obtained upon request  
addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555,  
Attention: Document Control Desk.

Dated at Rockville, Maryland, this 23rd day of October 1991.

FOR THE NUCLEAR REGULATORY COMMISSION

*Charles L. Miller*

Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation