



PEACH BOTTOM--THE POWER OF EXCELLENCE

**PHILADELPHIA ELECTRIC COMPANY**

PEACH BOTTOM ATOMIC POWER STATION

R. D. 1, Box 208

Delta, Pennsylvania 17314

(717) 456-7014

D. M. Smith  
Vice President

April 12, 1990

Docket Nos. 50-277  
50-278

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station Monthly Operating Report

Gentlemen:

Enclosed are twelve copies of the monthly operating report for Peach Bottom Units 2 and 3 for the month of March 1990 forwarded pursuant to Technical Specification 6.9.1.d under the guidance of Regulatory Guide 10.1, Revision 4.

Sincerely,

DMS/TEC/MJB:cmc

Enclosure

cc: R.A. Burricelli, Public Service Electric & Gas  
T.M. Gerusky, Commonwealth of Pennsylvania  
J.J. Lyash, USNRC Senior Resident Inspector  
T.E. Magette, State of Maryland  
T.T. Martin, Administrator, Region I, USNRC  
H.C. Schwemm, Atlantic Electric  
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**NRC Monthly Operations Summary  
Peach Bottom Atomic Power Station  
March 1990**

**UNIT 2**

The unit began the month at 73% power with preparations for shutdown in progress. The mode switch was placed in shutdown for the scheduled mid-cycle maintenance outage on March 2.

The Safety Systems Functional Inspection exit meeting was held on March 8. The most serious area of concern was that the operability of the Emergency Service Water System had not been demonstrated. Justification for continued operation of unit 3 only was made and diagnostic testing was started.

Mid-cycle outage activities were completed on March 19. The unit remained shut down for the rest of the month for Emergency Service Water System flow testing and cleaning.

**UNIT 3**

The unit began the month at 100% power. On March 6, the unit experienced a turbine trip and reactor scram. The turbine trip was caused by the trip of the stator cooling water pump which occurred while the second stator cooling water pump was blocked for maintenance. Forced outage maintenance activities were performed but startup was delayed pending resolution of a Justification for Interim Operation related to environmental qualification of certain HPCI components.

On March 10, after the concerns were resolved, the unit was placed in startup. The generator was synchronized to the grid on March 11. Power was increased to nominal 90% by March 15 but was reduced to 62% for control rod pattern adjustment and minor maintenance work.

The unit reached 100% power on March 17 and remained at that level until March 24 when power was reduced to repair a feedwater heater drain valve. The valve was repaired and power was returned to 100% on March 25. The unit remained at 100% for the rest of the month.

**UNIT 2 REFUELING INFORMATION**

1. Name of facility:

Peach Bottom Unit 2

2. Scheduled date for next refueling shutdown:

Reload 8 scheduled for January 6, 1991

3. Scheduled date for restart following refueling:

Restart following refueling scheduled for April 5, 1991

4. Will refueling or resumption of operation therefore require a technical specification change or other license amendment?

Yes.

If answer is yes, what, in general, will these be?

Reload amendments for cycle 8.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

To be determined.

6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

In order for PECO to do reload licensing analyses in-house for Unit 2 Cycle 9, NRC approval of one report (PECO-FMS-006) must be obtained by May 31, 1990. This report is the last in a series of six reports to demonstrate PECO's ability to perform the analyses. The report has been submitted and is scheduled for completion in May 1990.

7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:

(a) Core - 764 Fuel Assemblies

(b) Fuel Pool - 1734 Fuel Assemblies, 58 Fuel Rods

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UNIT 2 REFUELING INFORMATION (Continued)

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

The spent fuel pool storage capacity has been relicensed for 3819 fuel assemblies.

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present capacity:

September 2003 without full core offload capability.

September 1997 with full core offload capability.

UNIT 3 REFUELING INFORMATION

1. Name of facility:  
Peach Bottom Unit 3
2. Scheduled date for next refueling shutdown:  
Reload 8 scheduled for August 31, 1991
3. Scheduled date for restart following refueling  
Restart following refueling scheduled for October 29, 1991
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?  
Yes.  
If answer is yes, what, in general, will these be?  
Reload amendments for cycle 8.
5. Scheduled date(s) for submitting proposed licensing action and supporting information:  
To be determined.
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:  
  
In order for PECO to do reload licensing analyses in-house for Unit 3 Cycle 9, NRC approval of one report (PECO-FMS-006) must be obtained by May 31, 1990. This report is the last in a series of six reports to demonstrate PECO's ability to perform the analyses. The report has been submitted and is scheduled for completion in May 1990.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool:  
  - (a) Core - 764 Fuel Assemblies
  - (b) Fuel Pool - 1496 Fuel Assemblies, 6 Fuel Rods

UNIT 3 REFUELING INFORMATION (Continued)

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

The spent fuel pool storage capacity has been relicensed for 3819 fuel assemblies. Modification of the fuel pool is expected to be complete in the fourth quarter of 1990.

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present capacity:

With the current fuel pool capacity (prior to the completion of the fuel pool reracking modification):

September 1996 without full core offload capability.

End of next cycle with full core offload capability (est. January 1991).

With increased fuel pool capacity (subsequent to the completion of the fuel pool reracking modification):

September 2004 without full core offload capability.

September 1998 with full core offload capability.



# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 277

UNIT PEACH BOTTOM UNIT 2

DATE APRIL 15, 1990

COMPANY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON  
SUPERVISOR  
REPORTS GROUP  
PEACH BOTTOM ATOMIC POWER STATION

TELEPHONE (717) 456-7034 EXT. 8321

MONTH MARCH 1990

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	747	17	0
2	633	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

# AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 278

UNIT PEACH BOTTOM UNIT 3

DATE APRIL 15, 1990

COMPANY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON  
SUPERVISOR  
REPORTS GROUP  
PEACH BOTTOM ATOMIC POWER STATION

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MONTH MARCH 1990

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1070	17	1035
2	1070	18	1063
3	1058	19	1063
4	1071	20	1071
5	1068	21	1058
6	118	22	1062
7	0	23	1070
8	0	24	1013
9	0	25	1054
10	0	26	1066
11	1	27	1066
12	512	28	1071
13	848	29	1066
14	939	30	1066
15	914	31	1070
16	864		



# OPERATING DATA REPORT

DOCKET NO. 50 - 277

DATE APRIL 15, 1990

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON

SUPERVISOR

REPORTS GROUP

PEACH BOTTOM ATOMIC POWER STATION

TELEPHONE (717) 456-7014 EXT. 3321

## OPERATING STATUS

1. UNIT NAME: PEACH BOTTOM UNIT 2
2. REPORTING PERIOD: MARCH, 1990
3. LICENSED THERMAL POWER(MWT): 3293
4. NAMEPLATE RATING (GROSS MWE): 1152
5. DESIGN ELECTRICAL RATING (NET MWE): 1065
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1098
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

## NOTES:

UNIT WAS SHUT DOWN THROUGH MOST OF MARCH FOR SCHEDULED MID-CYCLE MAINTENANCE OUTAGE. THE UNIT REMAINED SHUT DOWN AFTER OUTAGE ACTIVITIES WERE COMPLETED FOR EMERGENCY SERVICE WATER FLOW TESTING.

8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS NUMBER 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS:
9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE):
10. REASONS FOR RESTRICTIONS, IF ANY:

	THIS MONTH	YR-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	744	2,160	137,976
12. NUMBER OF HOURS REACTOR WAS CRITICAL	45.4	1,416.8	80,944.1
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	45.4	1,398.6	78,003.9
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	104,112	3,977,064	229,273,257
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	34,200	1,308,400	75,368,290
18. NET ELECTRICAL ENERGY GENERATED (MWH)	28,843	1,265,134	72,119,983

OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 277

DATE APRIL 15, 1990

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	6.1	64.7	56.5
20. UNIT AVAILABILITY FACTOR	6.1	64.7	56.5
21. UNIT CAPACITY FACTOR (USING MDC NET)	3.7	55.5	49.5
22. UNIT CAPACITY FACTOR (USING DER NET)	3.6	55.0	49.1
23. UNIT FORCED OUTAGE RATE	0.0	4.3	14.3
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:  
PENDING ESW FLOW TEST RESULTS.

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):	FORECAST	ACHIEVED
INITIAL CRITICALITY		09/16/73
INITIAL ELECTRICITY		02/18/74
COMMERCIAL OPERATION		07/05/74

# OPERATING DATA REPORT

DOCKET NO. 50 - 278

DATE APRIL 15, 1990

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON  
SUPERVISOR  
REPORTS GROUP

PEACH BOTTOM ATOMIC POWER STATION  
TELEPHONE (717) 456-7014 EXT. 3321

## OPERATING STATUS

1. UNIT NAME: PEACH BOTTOM UNIT 3
2. REPORTING PERIOD: MARCH, 1990
3. LICENSED THERMAL POWER(MWT): 3293
4. NAMEPLATE RATING (GROSS MWE): 1152
5. DESIGN ELECTRICAL RATING (NET MWE): 1065
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1098
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1035

NOTES:

8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS NUMBER 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS:
9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE):
10. REASONS FOR RESTRICTIONS, IF ANY:

	THIS MONTH	YR-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	744	2,160	133,872
12. NUMBER OF HOURS REACTOR WAS CRITICAL	636.2	1,991.6	79,150.3
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	605.3	1,923.8	76,326.0
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,886,309	6,039,509	222,202,378
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	629,000	2,008,100	72,880,232
18. NET ELECTRICAL ENERGY GENERATED (MWH)	609,287	1,950,510	69,793,078



OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 278

DATE APRIL 15, 1990

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	81.4	89.1	57.0
20. UNIT AVAILABILITY FACTOR	81.4	89.1	57.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	79.1	87.2	50.4
22. UNIT CAPACITY FACTOR (USING DER NET)	76.9	84.8	49.0
23. UNIT FORCED OUTAGE RATE	18.6	10.9	13.2

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):  
MID-CYCLE MAINTENANCE OUTAGE, 21 DAY DURATION, STARTING 10/27/90.

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):	FORECAST	ACHIEVED
INITIAL CRITICALITY		08/07/74
INITIAL ELECTRICITY		09/01/74
COMMERCIAL OPERATION		12/23/74

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 277

UNIT NAME PEACH BOTTOM UNIT 2

DATE APRIL 15, 1990

REPORT MONTH MARCH, 1990

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

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NO.	DATE	TYPE (1)	DURATION (HOURS)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
2	900302	S	0.0	H	1	N/A	XX	XXXXXX	MID-CYCLE OUTAGE.

(1)

F - FORCED  
S - SCHEDULED

(2)

## REASON

A - EQUIPMENT FAILURE (EXPLAIN)  
 B - MAINTENANCE OR TEST  
 C - REFUELING  
 D - REGULATORY RESTRICTION  
 E - OPERATOR TRAINING + LICENSE EXAMINATION  
 F - ADMINISTRATIVE  
 G - OPERATIONAL ERROR (EXPLAIN)  
 H - OTHER (EXPLAIN)

(3)

## METHOD

1 - MANUAL  
 2 - MANUAL SCRAM.  
 3 - AUTOMATIC SCRAM.  
 4 - OTHER (EXPLAIN)

(4)

EXHIBIT G - INSTRUCTIONS  
 FOR PREPARATION OF DATA  
 ENTRY SHEETS FOR LICENSEE  
 EVENT REPORT (LER)  
 FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 2/8

UNIT NAME PEACH BOTTOM UNIT 3

DATE APRIL 15, 1990

REPORT MONTH MARCH, 1990

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

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NO.	DATE	TYPE (1)	DURATION (HOURS)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
2	900306	F	138.7	A	3	3-90-03	CH	PUMPXX	STATOR COOLING PUMP TRIP CAUSING TURBINE TRIP AND RX AUTO-SCRAM
3	900316	S	1.2	H	4	N/A	RB	CONROD	FINAL ROD PATTERN ADJUSTMENT REACTOR WAS NOT SHUT DOWN
4	900324	F	0.0	A	4	N/A	CH	VALVXX	A3 FEEDWATER HEATER ISOLATION RECIRC RUNBACK PER OT-104 REACTOR WAS NOT SHUT DOWN
			139.9						

(1)

F - FORCED  
S - SCHEDULED

(2)

REASON  
A - EQUIPMENT FAILURE (EXPLAIN)  
B - MAINTENANCE OR TEST  
C - REFUELING  
D - REGULATORY RESTRICTION  
E - OPERATOR TRAINING + LICENSE EXAMINATION  
F - ADMINISTRATIVE  
G - OPERATIONAL ERROR (EXPLAIN)  
H - OTHER(EXPLAIN)

(3)

METHOD  
1 - MANUAL  
2 - MANUAL SCRAM.  
3 - AUTOMATIC SCRAM.  
4 - OTHER (EXPLAIN)

(4)

EXHIBIT G - INSTRUCTIONS  
FOR PREPARATION OF DATA  
ENTRY SHEETS FOR LICENSEE  
EVENT REPORT (LER)  
FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE