CCN 90-14187

PHILADELPHIA ELECTRIC COMPANY
PEACH BOTTOM ATOMIC POWER STATION
R. D. 1, Box 208
Delta, Pennsylvania 17314
(717) 456-7014

PEACH BOTTOM—THE POWER OF EXCELLENCE

D. B. Miller, Jr.
Vice President

October 15, 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 September 1990 forwarded pursuant to Technical Specification 6.9.1.d under the guidance of Reguiatory Guide 10.1, Revision 4.

Sincerely,

for D. B. Miller

DBM/AAF/JBC/DRM/MJB:cmc

Enclosure

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

Unit 2

The unit began the month shut down with repairs to the level transmitters for the 2 "B" reactor level head chambers nearing completion. The unit was placed in Startup on September 2. On September 6, with power at 26%, hydraulic fluid began leaking from the #1 main turbine bypass valve. Power was reduced and the turbine was tripped. The reactor was placed in the refuel mode for repairs to the bypass valve and repair of a steam leak on the recombiner steam line drain.

The unit was placed in the startup mode on September 8, and the unit achieved 80% power by September 11. Except for the rod pattern adjustment on September 15, power was held at nominal 80% until September 30 because of high copper content in the feedwater and for completion of scheduled maintenance on the 2 "C" condensate pump. On September 30, power was reduced to 60% in support of maintenance on the A2 and B2 waterboxes.

On the evening of September 16, the unit experienced a loss of feedwater heating and a positive reactivity insertion when lightning struck the #3 startup source breaker. Extraction steam was restored and the breaker was closed by normal procedure the same evening.

A condensate demineralizer backwash valve problem was discovered on September 17. It was causing improper precoat and was contributing to rising copper levels in feedwater. The valve was repaired on September 19, and copper was below 0.3 ppb by September 24.

The waterbox repairs were completed on September 30, and the 2C condensate pump was returned to service on September 31. The unit ended the month at nominal 81%.

Unit 3

The unit began the month at 100% power. On September 6, power was reduced to 65% for waterbox testing. On the same day, the "B" reactor feed pump turbine control linkage failed. Power was further reduced to 43% for waterbox leak repairs, which were completed by September 9, as was the repair of the reactor feed pump turbine control linkage. Power reached 80% on September 10, but was then reduced to less than 50% until September 12 because of feedwater copper concentrations greater than 0.3 ppb. Power reached 100% on September 13, after copper levels were sufficiently reduced.

On the evening of September 16, the unit experienced a loss of feedwater heating and a positive reactivity insertion when lightning struck the #3 startup source breaker. Extraction steam was restored and the breaker was closed by normal procedure the same evening. Except for the brief reactivity insertion, power remained at 100% through the end of the month.

Docket No. 50-277
Attachment to
Monthly Operating
Report for September 1990

UNIT 2 REFUELING INFORMATION

1. Name of facility:

   Peach Bottom Unit 2

2. Scheduled date for next refueling shutdown:

   January 12, 1991

3. Scheduled date for restart following refueling:

   March 21, 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?

   Safety limit MCPR for cycle 9.

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

   January 1991

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:

   Resolution of licensing issues associated with lead fuel assemblies from new fuel vendors is pending.

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

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.

Docket No. 50-278
Attachment to
Monthly Operating
Report for September 1990

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 November 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?

   Safety limit MCPR for cycle 9 fuel.

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

   August 1991

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:

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 OCTOBER 15, 1990

COMPANY PHILADELPHIA ELECTRIC COMPANY

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

TELEPHONE (717) 456-7014 EXT. 3321

MONTH SEPTEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	0	17	821
2	0	18	823
3	0	19	816
4	0	20	824
5	10	21	817
6	57	22	822
7	0	23	838
8	0	24	856
9	101	25	847
10	701	26	851
11	786	27	843
12	793	28	847
13	857	29	843
14	828	30	843
15	751		
16	817		

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 278

UNIT PEACH BOTTOM UNIT 3

DATE OCTOBER 15, 1990

COMPANY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON
SUPERVISOR
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MONTH SEPTEMBER 1990

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1046	17	1051
2	1050	18	1062
3	1045	19	1051
4	1036	20	1063
5	1051	21	1059
6	750	22	1059
7	627	23	1067
8	384	24	1063
9	423	25	1059
10	717	26	1063
11	452	27	1063
12	836	28	1055
13	1021	29	1059
14	1051	30	1059
15	1055		
16	1040		

OPERATING DATA REPORT

DOCKET NO. 50 - 277

DATE OCTOBER 15, 1990

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

M. J. BARON
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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: SEPTEMBER, 1990
3. LICENSED THERMAL POWER(MWT): 3293
4. NAMEPLATE RATING (GROSS MWE): 1152
5. DESIGN ELECTRICAL RATING (NET MWE): 106.
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1098
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

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	720	6,551	142,367
12. NUMBER OF HOURS REACTOR WAS CRITICAL	568.4	5,049.7	84,577.0
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	526.1	4,897.5	81,502.8
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,371,864	14,599,704	239,895,897
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	433,500	4,787,600	78,847,490
18. NET ELECTRICAL ENERGY GENERATED (MWH)	416,317	4,606,617	75,461,466

DATE OCTOBER 15, 1990

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	73.1	74.8	57.2
20. UNIT AVAILABILITY FACTOR	73.1	74.8	57.2
21. UNIT CAPACITY FACTOR (USING MDC NET)	54.8	66.7	50.2
22. UNIT CAPACITY FACTOR (USING DER NET)	54.3	66.0	49.8
23. UNIT FORCED OUTAGE RATE	26.9	16.3	14.6

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:

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 OCTOBER 15, 1990

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OPERATING STATUS

1. UNIT NAME: PEACH BOTTOM UNIT 3
2. REPORTING PERIOD: SEPTEMBER, 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	720	6,551	138,263
12. NUMBER OF HOURS REACTOR WAS CRITICAL	720.0	6,260.0	83,418.8
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	720.0	6,147.4	80,549.6
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,155,488	18,929,909	235,092,778
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	707,500	6,226,900	77,099,032
18. NET ELECTRICAL ENERGY GENERATED (MWH)	681,983	6,010,295	73,852,863

DATE OCTOBER 15, 1990

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	93.8	58.3
20. UNIT AVAILABILITY FACTOR	100.0	93.8	58.3
21. UNIT CAPACITY FACTOR (USING MDC NET)	91.5	88.6	51.6
22. UNIT CAPACITY FACTOR (USING DER NET)	88.9	86.1	50.2
23. UNIT FORCED OUTAGE RATE	0.0	6.2	12.8

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
MID-CYCLE MAINTENANCE OUTAGE STARTING OCTOBER 27,
SCHEDULED FOR 21 DAYS.

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 OCTOBER 15, 1990

REPORT MONTH SEPTEMBER, 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
15	900901	F	116.3	A	2	2-90-21	ID	INSTRU	REACTOR LEVEL INSTRUMENTATION THAT USES 2B REFERENCE LEG DETERMINED TO BE INOP. REACTOR WAS SHUT DOWN.
16	900906	F	77.3	A	2	N/A	CC	VALVOP	EHC OIL LEAK. REACTOR WAS SHUT DOWN.
17	900913	F	0.0	H	4	N/A	HH	ZZZZZZ	HIGH COPPER CONTENT IN THE CONDENSATE. REACTOR WAS NOT SHUT DOWN.
18	900922	F	0.0	H	4	N/A	HH	PUMPXX	"2C" CONDENSATE PUMP TAKEN OUT OF SERVICE FOR PUMP PACKING PROBLEMS.
			193.6						

(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 - 278

UNIT NAME PEACH BOTTOM UNIT 3

DATE OCTOBER 15, 1990

REPORT MONTH SEPTEMBER, 1990

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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
14	900906	S	0.0	H	4	N/A	HC	HTEXCH	"A1" WATERBOX INSPECTION. REACTOR WAS NOT SHUT DOWN.
15	900907	S	0.0	H	4	N/A	HC	HTEXCH	"A2" WATERBOX INSPECTION. REACTOR WAS NOT SHUT DOWN.
16	900910	F	0.0	H	4	N/A	HH	ZZZZZZ	POWER REDUCTION DUE TO HIGH COPPER CONTENT IN THE CONDENSATE. REACTOR WAS NOT SHUT DOWN.

(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