



PECO NUCLEAR

A UNIT OF PECO ENERGY

PECO Energy Company
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T.S.6.9.1.6

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NPF-85

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

Subject: Limerick Generating Station
Monthly Operating Report For Units 1 and 2

Enclosed are the monthly operating reports for Limerick Units 1 and 2 for the month of December 1996 forwarded pursuant to Technical Specification 6.9.1.6.

Very truly yours,

Edward F. Sproat, III
Director - Site Engineering

drh

Enclosures

cc: H. J. Miller, Administrator, Region I, USNRC
N. S. Perry, USNRC Senior Resident Inspector LGS
W. G. MacFarland, Vice President, LGS

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Limerick Generating Station
Unit 1
December 1 through December 31, 1996

I. Narrative Summary of Operating Experiences

Unit 1 began the month of December 1996 at a nominal 100% of rated thermal power (RTP).

On December 8, 1996 at 0040 hours, power was reduced to 98% of RTP for main turbine valve testing. Power was restored to 100% RTP at 0149 hours.

On December 14, 1996 at 0200 hours, power was reduced to 90% RTP for rod pattern adjustment and main turbine valve testing. Power was restored to 100% RTP at 0500 hours.

On December 21, 1996 at 0206 hours, power was reduced to 97.5% of RTP for main turbine valve testing. Power was restored to 100% RTP at 0324 hours.

On December 23, 1996 at 1120 hours, power was reduced to 25% RTP due to a failed main generator stator cooling water temperature control valve. Power was restored to 100% RTP on at 1945 hours.

On December 24 at 0034 hours, power was reduced to 97% RTP for control rod pattern adjustment. Power was restored to 100% RTP at 0053 hours.

On December 24, 1996 at 2354 hours, power was reduced to 95% RTP for control rod pattern adjustment. Power was restored to 100% RTP on December 25, 1996 at 0037 hours.

Unit 1 ended this month operating at 100% RTP.

II. Challenges to Main Steam Safety Relief Valves

There were no challenges to the Main Steam Safety Relief Valves during the month of December.

AVERAGE DAILY POWER LEVEL

DOCKET NO. 50 - 352
 UNIT LIMERICK UNIT 1
 DATE JANUARY 7, 1997
 COMPANY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

MONTH DECEMBER, 1996

DAY AVERAGE DAILY POWER LEVEL
 (MWE-NET)

1	1103
2	1119
3	1119
4	1119
5	1123
6	1135
7	1088
8	1118
9	1115
10	1111
11	1115
12	1103
13	1110
14	1099
15	1110
16	1106

DAY AVERAGE DAILY POWER LEVEL
 (MWE-NET)

17	1102
18	1109
19	1115
20	1116
21	1116
22	1117
23	889
24	1101
25	1111
26	1116
27	1118
28	1119
29	1106
30	1123
31	1123

OPERATING DATA REPORT

DOCKET NO. 50 - 352
 DATE JANUARY 7, 1997
 COMPLETED BY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 1
 2. REPORTING PERIOD: DECEMBER, 1996
 3. LICENSED THERMAL POWER(MWT): 3458
 4. NAMEPLATE RATING (GROSS MWE): 1160
 5. DESIGN ELECTRICAL RATING (NET MWE): 1105
 6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1145
 7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1105

NOTES: THERE WAS ONE LOAD DROP
 GREATER THAN 20% THIS MONTH
 DUE TO FAILED TEMPERATURE
 CONTROL VALVE ON THE STATOR
 WATER COOLING SYSTEM.

8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS 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	8,784	95,688
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	7,903.7	80,127.4
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	744.0	7,760.1	78,760.0
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,555,047	25,613,268	245,754,163
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	853,100	8,437,300	80,071,780
18. NET ELECTRICAL ENERGY GENERATED (MWH)	822,583	8,141,625	76,933,097

OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 352

DATE JANUARY 7, 1997

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0 %	89.3 %	82.3 %
20. UNIT AVAILABILITY FACTOR	100.0 %	88.3 %	82.3 %
21. UNIT CAPACITY FACTOR (USING MDC NET)	100.1 %	84.2 %	75.9 %
22. UNIT CAPACITY FACTOR (USING DER NET)	100.1 %	84.2 %	75.9 %
23. UNIT FORCED OUTAGE RATE	.0 %	3.3 %	4.2 %
24. SHUTDOWNS SCHEDULED OVER THE NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):			
25. IF SHUTDOWN AT THE END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:			
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATIONS):	FORECAST	ACHIEVED	
INITIAL CRITICALITY	12/19/84	12/22/84	
INITIAL ELECTRICITY	MID APRIL 85	04/13/85	
COMMERCIAL OPERATION	1ST QTR 86	02/01/86	

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352
 UNIT NAME LIMERICK UNIT 1
 DATE JANUARY 7, 1997
 COMPLETED BY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

REPORT MONTH DECEMBER, 1996

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
166	961208	S		B	4	N/A	HA	VALVEX	REACTOR POWER WAS REDUCED TO 98% DUE TO MAIN TURBINE VALVE TESTING.
167	961214	S		B	4	N/A	RB	CONROD	REACTOR POWER WAS REDUCED TO 90% DUE TO CONTROL ROD PATTERN ADJUSTMENT AND MAIN TURBINE VALVE TESTING.
168	961221	S		B	4	N/A	HA	VALVEX	REACTOR POWER WAS REDUCED TO 97.5% DUE TO MAIN TURBINE VALVE TESTING.
169	961223	F		A	4	N/A	HA	VALVEX	REACTOR POWER WAS REDUCED TO 25% DUE TO A FAILED TEMPERATURE CONTROL VALVE ON THE STATOR WATER COOLING SYSTEM.
170	961224	F		B	4	N/A	RB	CONROD	REACTOR POWER WAS REDUCED TO 97% DUE TO MINOR CONTROL ROD PATTERN ADJUSTMENT.
171	961224	S		B	4	N/A	RB	CONROD	REACTOR POWER WAS REDUCED TO 55% DUE TO CONTROL ROD PATTERN ADJUSTMENT.

TOTAL HOURS

(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

Limerick Generating Station
Unit 2
December 1 through December 31, 1996

I. Narrative Summary of Operating Experiences

Unit 2 began the month of December 1996 at a nominal 92% of rated thermal power (RTP) in end of cycle coastdown.

On December 6, 1996 at 2338 hours, the reactor was manually shut down and the main turbine was taken off line due to EHC pressure switch tubing failure and fluid leak.

On December 13, 1996 at 1628 hours the reactor was taken critical and on December 14, 1996 at 1621 hours the main turbine was synchronized to the grid. Power was restored to 48% RTP on December 18, 1996 at 1614 hours.

On December 18, 1996 at 2150 hours, the reactor was manually shut down due to longitudinal cracking in the main condenser neck seal gasket. On December 22, 1996 at 1618 hours the reactor was taken critical and on December 23, 1996 at 1625 hours the main turbine was synchronized to the grid. Power was restored to 37% RTP on December 24, 1996 at 0605 hours.

On December 24, 1996 at 0613 hours, the reactor was manually shut down due to a tripping of the "B" reactor recirculation pump resulting in entry into the exclusion region of the Unit 2 power flow map. On December 24, 1996 at 2114 hours the reactor was taken critical and on December 25, 1996 at 1256 hours the main turbine was synchronized to the grid. Power was restored to 17% RTP on December 25, 1996 at 1400 hours.

On December 25, 1996 at 1409 hours the main turbine was tripped due to high vibration. On December 26, 1996 at 0345 hours the main turbine was synchronized to the grid. Power was restored to 87% RTP on December 27, 1996 at 0644 hours.

Unit 2 ended this operating period at 87% of RTP in end of cycle coast down.

II. Challenges to Main Steam Safety Relief Valves

There were no challenges to the Main Steam Safety Relief Valves during the month of December.

AVERAGE DAILY POWER LEVEL

DOCKET NO. 50 - 353
 UNIT LIMERICK UNIT 2
 DATE JANUARY 7, 1997
 COMPANY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

MONTH DECEMBER, 1996

DAY AVERAGE DAILY POWER LEVEL
(MWE-NET)

1	1000
2	1005
3	1005
4	992
5	987
6	996
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	114
16	181

DAY AVERAGE DAILY POWER LEVEL
(MWE-NET)

17	263
18	293
19	0
20	0
21	0
22	0
23	75
24	93
25	0
26	145
27	910
28	957
29	952
30	956
31	964

OPERATING DATA REPORT

DOCKET NO. 50 - 353
 DATE JANUARY 7, 1997
 COMPLETED BY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 2
2. REPORTING PERIOD: DECEMBER, 1996
3. LICENSED THERMAL POWER(MWT): 3458
4. NAMEPLATE RATING (GROSS MWE): 1163
5. DESIGN ELECTRICAL RATING (NET MWE): 1115
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1155
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1115
8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS:
9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE):
10. REASONS FOR RESTRICTIONS, IF ANY:

NOTES: THERE WAS ONE LOAD DROP
 GREATER THAN 20% THIS MONTH
 DUE TO AN EHC LEAK.

	THIS MONTH	YR-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	744	8,784	61,200
12. NUMBER OF HOURS REACTOR WAS CRITICAL	477.4	8,494.4	56,027.2
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	400.1	8,347.3	54,939.1
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	942,031	28,079,011	176,424,744
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	296,600	9,312,400	58,390,280
18. NET ELECTRICAL ENERGY GENERATED (MWH)	283,072	9,001,100	56,304,731

OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 353

DATE JANUARY 7, 1997

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	53.8 %	95.0 %	89.8 %
20. UNIT AVAILABILITY FACTOR	53.8 %	95.0 %	89.8 %
21. UNIT CAPACITY FACTOR (USING MDC NET)	34.1 %	91.9 %	85.8 %
22. UNIT CAPACITY FACTOR (USING DER NET)	34.1 %	91.9 %	85.8 %
23. UNIT FORCED OUTAGE RATE	46.2 %	5.0 %	3.6 %
24. SHUTDOWNS SCHEDULED OVER THE NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH): REFUELING OUTAGE SCHEDULED FOR 1/31/97 LASTING 25 DAYS.			
25. IF SHUTDOWN AT THE END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:			
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATIONS):	FORECAST	ACHIEVED	
INITIAL CRITICALITY	08/12/89	08/12/89	
INITIAL ELECTRICITY	09/01/89	09/01/89	
COMMERCIAL OPERATION	02/01/90	01/08/90	

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 353
 UNIT NAME LIMERICK UNIT 2
 DATE JANUARY 7, 1997
 COMPLETED BY PECO ENERGY COMPANY
 ROBERT A. BAXLEY
 REPORTS ENGINEER
 SITE ENGINEERING
 LIMERICK GENERATING STATION
 TELEPHONE (610) 718-3767

REPORT MONTH DECEMBER, 1996

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
158	961206	F	185.0	A	2	2-96-007	HA	INSTRU	REACTOR WAS SHUTDOWN DUE TO A FAILED PRESSURE SWITCH ON THE EHC SYSTEM.
159	961218	F	114.6	A	2	N/A	HC	HTEXCH	REACTOR WAS SHUTDOWN DUE TO CRACK IN THE MAIN CONDENSER NECK SEAL GASKET.
160	961224	F	30.7	A	2	2-96-009	CB	MECFUN	REACTOR WAS SHUTDOWN DUE TO A FAILED SCOOP TUBE POSITIONER ON THE 2B MG SET.
161	961225	F	13.6	A	4	N/A	HA	TURBIN	REACTOR POWER WAS REDUCED TO 15% DUE TO HIGH VIBRATION ON THE MAIN TURBINE.
TOTAL HOURS			343.9						

(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
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 ENTRY SHEETS FOR LICENSEE
 EVENT REPORT (LER)
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(5)
 EXHIBIT I - SAME SOURCE