

Docket No. #50-352  
Attachment to Monthly  
Operating Report for  
July 1992

LIMERICK GENERATING STATION  
UNIT 1  
JULY 1 THROUGH JULY 31, 1992

I. NARRATIVE & ANALYSIS OF OPERATING EXPERIENCES

Limerick Unit 1 began the month, in OPCON 4 (Cold Shutdown). At 0945 hours on Saturday, July 4, Unit 1 entered OPCON 2 (Startup) and criticality was achieved at 1450 hours. On July 8, the mode switch was placed in RUN and OPCON 1 was entered at 1500 hours. Power was increased to approximately 11% on July 9, and at 1153 hours the Main Generator was synchronized to the grid. Power was increased to approximately 20% to perform Main Turbine testing, a trip performed at 1826 hours and the generator re-synchronized to the grid at 1911 hours. Power ascension continued and on July 13, the unit reached 90% of rated thermal power. On July 13, a fire was reported on the '1B' Reactor Feed Pump insulation and power was reduced to 75% so that the feed pump could be removed from service. The fire was extinguished within 30 minutes. An Unusual Event was declared and one hour and ten minutes following the report of the fire, the Unusual Event was terminated. On July 14, power was increased to 90% with two feed pumps in operation. Power was reduced to 83% on July 15 to place the '1B' Reactor Feed Pump back in service. Unit 1 achieved 100% of rated thermal power on July 15 at 1500 hours. On July 17, power was briefly reduced to 95% to support a Control Rod pattern adjustment. On July 25, power was briefly reduced to 90% to support a Control Rod pattern adjustment. Unit 1 ended this operating period at a nominal 100% of rated thermal power.

II. CHALLENGES TO MAIN STEAM SAFETY RELIEF VALVES

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

oprtgexl



# OPERATING DATA REPORT

DOCKET NO. 50-850

DATE AUGUST 10, 1991

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECH  
REPORTS SUPERVISOR  
BUSINESS UNIT

LIMERICK GENERATING STATION  
TELEPHONE (215) 327-1200 EXTENSION 3320

## OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 1  
2. REPORTING PERIOD: JULY, 1992  
3. LICENSED THERMAL POWER(MWT): 3293  
4. NAMEPLATE RATING (GROSS MWE): 1138  
5. DESIGN ELECTRICAL RATING (NET MWE): 1055  
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1092  
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

NOTES: THE UNIT WAS IN A REFUEL

OUTAGE UNTIL JULY 9TH.

8. IF CHANGES OCCUR IN CAPACITY OR RINGS (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	5,111	56,851
12. NUMBER OF HOURS REACTOR WAS CRITICAL	657.2	2,567.4	43,876.2
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	539.4	2,443.3	42,885.2
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,562,659	7,725,904	129,714,829
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	490,430	2,523,730	42,024,670
18. NET ELECTRICAL ENERGY GENERATED (MWH)	468,841	2,419,311	40,230,767

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	THIS MONTH	YE-TO-DATE	CUMULATIVE
19. UNIT 1 - 2 FACTOR	72.5	47.8	75.3
20. UNIT AVAILABILITY FACTOR	72.5	47.8	75.3
21. UNIT CAPACITY FACTOR (USING MDC NET)	59.7	44.9	67.0
22. UNIT CAPACITY FACTOR (USING DER NET)	59.7	44.9	67.0
23. UNIT FORCED OUTAGE RATE	27.4	24.6	5.9
24. SHUTDOWNS SCHEDULED ON 4 NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

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

	FORECAST	ACHIEVED
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):		
INITIAL CRITICALITY	12/19/84	12/22/84
INITIAL ELECTRICITY	MID APRIL 85	4/13/85
COMMERCIAL OPERATION	1ST QTR 86	2/01/86

14)

EXHIBIT 5 - INSTRUCTIONS  
FOR PREPARATION OF DATA  
ENTRY SHEETS FOR LICENSE  
EVENT REPORT (LER)  
FILE (NUREG-D161)

(5)

EXHIBIT 1 - SAME SOURCE

(3)

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

0047-2515/95/0005-0000\$05.00/0

METHOD

1	-	MANUAL	SCRAM.
2	-	MANUAL	SCRAM.
3	-	MANUAL	SCRAM.
4	-	MANUAL	SCRAM.
5	-	MANUAL	SCRAM.
6	-	MANUAL	SCRAM.
7	-	MANUAL	SCRAM.
8	-	MANUAL	SCRAM.
9	-	MANUAL	SCRAM.
10	-	MANUAL	SCRAM.
11	-	MANUAL	SCRAM.
12	-	MANUAL	SCRAM.
13	-	MANUAL	SCRAM.
14	-	MANUAL	SCRAM.
15	-	MANUAL	SCRAM.
16	-	MANUAL	SCRAM.
17	-	MANUAL	SCRAM.
18	-	MANUAL	SCRAM.
19	-	MANUAL	SCRAM.
20	-	MANUAL	SCRAM.
21	-	MANUAL	SCRAM.
22	-	MANUAL	SCRAM.
23	-	MANUAL	SCRAM.
24	-	MANUAL	SCRAM.
25	-	MANUAL	SCRAM.
26	-	MANUAL	SCRAM.
27	-	MANUAL	SCRAM.
28	-	MANUAL	SCRAM.
29	-	MANUAL	SCRAM.
30	-	MANUAL	SCRAM.
31	-	MANUAL	SCRAM.
32	-	MANUAL	SCRAM.
33	-	MANUAL	SCRAM.
34	-	MANUAL	SCRAM.
35	-	MANUAL	SCRAM.
36	-	MANUAL	SCRAM.
37	-	MANUAL	SCRAM.
38	-	MANUAL	SCRAM.
39	-	MANUAL	SCRAM.
40	-	MANUAL	SCRAM.
41	-	MANUAL	SCRAM.
42	-	MANUAL	SCRAM.
43	-	MANUAL	SCRAM.
44	-	MANUAL	SCRAM.
45	-	MANUAL	SCRAM.
46	-	MANUAL	SCRAM.
47	-	MANUAL	SCRAM.
48	-	MANUAL	SCRAM.
49	-	MANUAL	SCRAM.
50	-	MANUAL	SCRAM.
51	-	MANUAL	SCRAM.
52	-	MANUAL	SCRAM.
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55	-	MANUAL	SCRAM.
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64	-	MANUAL	SCRAM.
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66	-	MANUAL	SCRAM.
67	-	MANUAL	SCRAM.
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69	-	MANUAL	SCRAM.
70	-	MANUAL	SCRAM.
71	-	MANUAL	SCRAM.
72	-	MANUAL	SCRAM.
73	-	MANUAL	SCRAM.
74	-	MANUAL	SCRAM.
75	-	MANUAL	SCRAM.
76	-	MANUAL	SCRAM.
77	-	MANUAL	SCRAM.
78	-	MANUAL	SCRAM.
79	-	MANUAL	SCRAM.
80	-	MANUAL	SCRAM.
81	-	MANUAL	SCRAM.
82	-	MANUAL	SCRAM.
83	-	MANUAL	SCRAM.
84	-	MANUAL	SCRAM.
85	-	MANUAL	SCRAM.
86	-	MANUAL	SCRAM.
87	-	MANUAL	SCRAM.
88	-	MANUAL	SCRAM.
89	-	MANUAL	SCRAM.
90	-	MANUAL	SCRAM.
91	-	MANUAL	SCRAM.
92	-	MANUAL	SCRAM.
93	-	MANUAL	SCRAM.
94	-	MANUAL	SCRAM.
95	-	MANUAL	SCRAM.
96	-	MANUAL	SCRAM.
97	-	MANUAL	SCRAM.
98	-	MANUAL	SCRAM.
99	-	MANUAL	SCRAM.
100	-	MANUAL	SCRAM.

REASON

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

REASON

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

REASON

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

DOCKET NO. 50 - 35

UNIT NAME LIMERICK

UNIT 1

DATE AUGUST 10, 1992

REPORT MONTH JUL 1992

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 927-1200 EXTENSION 3320

NO.	DATE	TYPE (1)	DURATION (HOURS) (2)	REASON (3)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
14	920701	F	081.7	C	4	N/A	ZZ	ZZZZZZ	THE UNIT REMAINED IN THE FOURTH REFUELING EXTENDED OUTAGE.
15	920704	S	122.2	C	4	N/A	ZZ	ZZZZZZ	THE UNIT CONTINUED IN THE FOURTH REFUELING OUTAGE IN THE STARTUP MODE.
16	920709	S	060.7	B	4	N/A	HA	TURBIN	THE MAIN TURBINE TRIP TEST WAS PERFORMED AND THE GENERATOR SYNCHRONIZED TO THE GRID.
17	920717	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 5% TO SUPPORT CONTROL ROD PATTERN ADJUSTMENT.
18	920725	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 10% TO SUPPORT CONTROL ROD PATTERN ADJUSTMENT.
			-----						
			204.6						

(1)

(2)

(3)

(4)

F - FORCED

S - SCHEDULED

REASON

A - EQUIPMENT FAILURE (EXPLAIN)

B - MAINTENANCE OR TEST

C - REFUELING

D - REGULATOR RESTRICTION

E - OPERATOR TRAINING - LICENSE EXAMINATION

F - ADMINISTRATIVE

G - OPERATIONAL ERROR (EXPLAIN)

H - OTHER (EXPLAIN)

METHOD

1 - MANUAL

2 - MANUAL SCRAM

3 - AUTOMATIC SCRAM

4 - OTHER (EXPLAIN)

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

(5)

EXHIBIT I - SAME SOURCE

Docket No. #50-353  
Attachment to Monthly  
Operating Report for  
July 1992

LIMERICK GENERATING STATION  
UNIT 2  
JULY 1 THROUGH JULY 31, 1992

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of July at 100% of rated thermal power. On Saturday, July 4, reactor power was briefly reduced to 90% to perform Main Turbine Control Valve testing and a Control Rod pattern adjustment. On July 16, power was briefly reduced to 93% to support a Control Rod pattern adjustment. On July 18, power was reduced to 85% for approximately six hours for maintenance personnel to inspect various feed water heater vent line steam leaks. On July 25, power was reduced to 70% for approximately three hours for maintenance personnel to inspect various feed water heater vent line steam leaks. On July 28 power was briefly reduced to 92% to support a Control Rod pattern adjustment. Unit 2 ended this operating period at a nominal 100% of rated thermal power.

II. CHALLENGES TO MAIN STEAM SAFETY RELIEF VALVES

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

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AVERAGE DAILY UNIT POWER LEVEL

3924056010

DOCKET NO. 60 353

UNIT LIMERICK UNIT 2

DATE AUGUST 10 1992

COMPANY PHILADELPHIA ELECTRIC COMPANY

KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNIT  
LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH JULY 1992

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1033	17	1048
2	1053	18	995
3	1051	19	1045
4	1036	20	1041
5	1036	21	1046
6	1040	22	1049
7	1036	23	1041
8	1034	24	1058
9	1028	25	1030
10	1041	26	1046
11	1027	27	1040
12	1039	28	1052
13	1034	29	1049
14	1036	30	1048
15	1038	31	1041
16	1035		



OPERATING DATA REPORT

DOCKET NO. 50 - 353  
 DATE AUGUST 10, 1992  
 COMPLETED BY PHILADELPHIA ELECTRIC COMPANY  
 KARL TICH  
 REPORTS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION  
 TELEPHONE (215) 927-1200 EXTENSION 3320

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 2  
 2. REPORTING PERIOD: JULY, 1992  
 3. LICENSED THERMAL POWER (MW): 3293  
 4. NAMEPLATE RATING (GROSS MWE): 1138  
 5. DESIGN ELECTRICAL RATING (NET MWE): 1055  
 6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1092  
 7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

NOTES: THERE WAS ONE LOAD  
 REDUCTION TO 30% FOR  
 FEEDWATER HEATER MAINT.

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	5,111	22,463
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	5,111.0	19,699.3
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	744.0	5,111.0	19,210.2
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,442,038	16,555,903	61,827,299
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	805,060	5,508,960	20,440,596
18. NET ELECTRICAL ENERGY GENERATED (MWH)	773,611	5,303,540	19,177,405

	DATE AUGUST 10, 1989	
THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	85.5
20. UNIT AVAILABILITY FACTOR	100.0	85.5
21. UNIT CAPACITY FACTOR (USING MDC NET)	98.6	83.0
22. UNIT CAPACITY FACTOR (USING DER NET)	98.6	83.0
23. UNIT FORCED OUTAGE RATE	0.0	4.4
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):		
COND REFUELING: 01/23/93; 60 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	08/12/89	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 - 352

UNIT NAME LIMERICK UNIT 2

DATE AUGUST 10, 1992

REPORT MONTH JULY 1992

COMPLETD BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

NO.	DATE	TYPE (1)	DURATION (HOURS)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM/COMPONENT CODE (4)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE (5)
23	920704	S	000.0	B	4	N/A	RB	COBROO LOAD WAS REDUCED 10% TO SUPPORT CONTROL ROD PATTERN ADJUSTMENT AND MAIN TURBINE CONTROL VALVE TEST.
24	920716	S	000.0	F	4	N/A	RB	CONROD LOAD WAS REDUCED 7% FOR CONTROL ROD PATTERN ADJUSTMENT.
25	920718	S	000.0	B	4	N/A	CH	HTEXCH LOAD WAS REDUCED 15% TO SUPPORT FEEDWATER HEATER MAINTENANCE.
26	920725	S	000.0	B	4	N/A	CH	HTEXCH LOAD WAS REDUCED 30% TO SUPPORT FEEDWATER HEATER MAINTENANCE.
27	920728	S	000.0	F	4	N/A	RB	CONROD LOAD WAS REDUCED 2% TO SUPPORT CONTROL ROD PATTERN ADJUSTMENT.

(1)

F - FORCED  
S - SCHEDULED

(2)

REASON  
 A - EQUIPMENT FAILURE (EXPLAIN)  
 B - MAINTENANCE OR TEST  
 C - REFUELING  
 D - REGULAR 90% 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

DUPLICATE NO. 50 - 257  
 DATE JULY 8, 1992  
 COMPLETED BY PHILADELPHIA ELECTRIC COMPANY  
 KARL MECK  
 REPORTS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION  
 TELEPHONE (215) 327-1200 EXTENSION 3320

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 1  
 2. REPORTING PERIOD: JUNE, 1992 REV 1  
 3. LICENSED THERMAL POWER (MW): 3293  
 4. NAMEPLATE RATING (GROSS MWE): 1138  
 5. DESIGN ELECTRICAL RATING (NET MWE): 1055  
 6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE): 1092  
 7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

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	4,367	56,207
12. NUMBER OF HOURS REACTOR WAS CRITICAL	0	810.2	43,219.0
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	0.0	1,903.9	42,345.4
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	0	6,163,245	128,152,161
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	0	2,033,300	41,34,240
18. NET ELECTRICAL ENERGY GENERATED (MWH)	* -5,816	1,950,470	39,761,926

	DATE JUL 8 1992		REVI	
	THIS MONTH	YR-TO-DATE	CUMULATIVE	
19. UNIT SERVICE FACTOR	0.0	43.6	75.3	
20. UNIT AVAILABILITY FACTOR	0.0	43.6	75.3	
21. UNIT CAPACITY FACTOR (USING MOC NET)	0.0	42.3	67.1	
22. UNIT CAPACITY FACTOR (SING DER NET)	0.0	42.3	67.1	
23. UNIT FORCED OUTAGE RATE	100.0	23.7	5.6	

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24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):  
4TH REFUELING OUTAGE: 03/21/92: 70 DAYS

25. IF SHUTDOWN AT E. OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 07/05/92	
26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):	
INITIAL CRITICALITY	FORECAST 12/19/84 12/22/84
INITIAL ELECTRICITY	MID APRIL 85 4/13/85
COMMERCIAL OPERATION	1ST QTR 86 2/01/86