

3921057970

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

P. O. BOX 2300

SANATOGA, PA 19464-2300

(215) 327-1200, EXT. 3000

November 13, 1992

DAVID R. HELWIG  
VICE PRESIDENT  
LIMERICK GENERATING STATION

Pocket Nos. 50-352  
50-353  
License Nos. NPF-39  
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 October, 1992 forwarded pursuant to  
Technical Specification 6.9.1.6.

Very truly yours,

*J. Doer*  
for DRH

KWM/dtc

Enclosures

cc: T. T. Martin, Administrator, Region I, USNRC (w/enclosures)  
T. J. Kenny, USNRC Senior Resident Inspector LGS  
(w/enclosures)

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

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

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 1 began the month of October at 100% of rated thermal power. On Friday, October 2, reactor power was reduced to 85% to support the regeneration of two condensate filter demineralizers. On Tuesday, October 6, power was reduced to 81% due to the indication of high winding temperature on the "1A" Reactor Recirculation Motor Generator Set, power was returned to 100% the same day following repairs to the defective Resistance Temperature Detector (RTD). On Friday, October 9, power was briefly reduced to 90% to support Main Turbine Control Valve Testing. On Friday, October 16, reactor power was reduced to 90% to support Combined Intercept Valve (CIV) stroke and Reactor Feed Pump Turbine (RFPT) Trip Testing. During RFPT trip testing a Reactor Recirculation Pump runback signal was received, further reducing power to 75%. Testing was completed, the runback was reset and power was returned to 100% the same day. 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.

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 352

UNIT LIMERICK UNIT 1

DATE NOVEMBER 13, 1992

COMPANY PHILADELPHIA ELECTRIC COMPANY

 KARL MECK  
 REPORTS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH OCTOBER 1992

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1058	17	1057
2	1025	18	1052
3	1046	19	1064
4	1048	20	1053
5	1052	21	1056
6	1006	22	1057
7	1053	23	1049
8	1051	24	1055
9	1035	25	1049
10	1048	26	1058
11	1051	27	1053
12	1051	28	1055
13	1053	29	1053
14	1054	30	1047
15	1045	31	1052
16	1017		

DOCKET NO. 50 - 352  
 DATE NOVEMBER 13, 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: OCTOBER, 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: THERE WAS ONE LOAD DROP  
 GREATER THAN 20% DUE TO  
 A REACTOR RECIRC PUMP  
 RUNBACK SIGNAL.

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	VR-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	145	7,320	59,160
12. NUMBER OF HOURS REACTOR WAS CRITICAL	745.0	4,776.4	46,085.2
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	745.0	4,652.3	45,094.2
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,439,576	14,980,475	136,969,391
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	808,500	4,896,540	44,397,480
18. NET ELECTRICAL ENERGY GENERATED (MWH)	781,097	4,707,850	42,519,306

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT AVAILABILITY FACTOR	100.0	63.6	76.2
20. UNIT AVAILABILITY FACTOR	100.0	63.6	76.2
21. UNIT CAPACITY FACTOR (USING MDC NET)	87.4	61.0	68.1
22. UNIT CAPACITY FACTOR (USING DLR NET)	90.4	61.0	68.1
23. UNIT FORCED OUTAGE RATE	0.0	12.7	5.4
24. OUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):			

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

26. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	12/19/84	12/22/84
INITIAL ELECTRICITY	MID APRIL 85	4/13/85
COMMERCIAL OPERATION	1ST QTR 86	2/01/86



3921057973

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 352  
UNIT NAME LIMERICK UNIT 1  
DATE NOVEMBER 12, 1992  
COMPLETED BY PHILADELPHIA ELECTRIC COMPANY  
KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNIT  
LIMERICK GENERATING STATION  
TELEPHONE (215) 327-1200 EXTENSION 3320

REPORT MONTH OCTOBER, 1992

NO.	DATE	TV T (1)	DURATION (HOURS) (2)	REASON SHUTTING DOWN REACTOR (3)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM/COMPONENT CODE (4)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE (5)
27	921002	S	000.0	F	4	N/A	HG	LOAD WAS REDUCED 18% TO REGENERATE THE TC AND 1H CONDENSATE FILTER DEMINERALIZERS.
28	921006	F	000.0	A	4	N/A	CB	LOAD WAS REDUCED 10% DUE TO HIGH TEMPERATURE ON THE 1A REACTOR RECIRC MG SFT WINDINGS.
29	921009	S	000.0	B	4	N/A	HA	LOAD WAS REDUCED 10% TO PERFORM MAIN TURBINE CONTROL VALVE TESTING.
30	921016	S	000.0	B	4	N/A	HA	LOAD WAS REDUCED 9% TO PERFORM MAIN TURBINE CONTROL VALVE TESTING.
31	921016	F	000.0	A	4	N/A	CB	LOAD WAS REDUCED 25% DUE TO RECEIPT OF A 27.5% RUMB. SIGNAL ON THE 1B REACTOR RECIRC PUMP.

- (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 REPJPT (LER)  
FILE (N-EG-0161)
- (5)

EXHIBIT I - SAME SOURCE

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

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

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of October in end-of-cycle coastdown at a nominal 89% of rated thermal power. On Saturday, October 3, reactor power was reduced to 24% to perform Main Turbine Trip Testing, to replace brushes in the "2A" Reactor Recirculation Pump Motor-Generator set, and to remove the 6th stage Feedwater Heaters from service. Power was restored on the same day. On Sunday, October 4, reactor power was briefly reduced to 98% to perform a Control Rod pattern adjustment. On Tuesday, October 6, power was briefly reduced to 97% to support the withdrawal of three remaining Control Rods. On Tuesday, October 27, reactor power was briefly reduced to a nominal 92% when Control Rod 42-07 was inserted to limit offgas activity due to a degraded (leaking) fuel pin. Unit 2 ended the operating period at a nominal 91% of rated thermal power, in end-of-cycle coastdown with core flow maximized.

Unit 2 occurrences during this operating period included:

Reactor Engineering, Operations, and Chemistry personnel continued to monitor condenser offgas radiation levels below stated failed fuel action level limits, with a goal of 80,000 microcuries/sec at scheduled unit shutdown for refueling.

II. CHALLENGES TO MAIN STEAM SAFETY RELIEF VALVES

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

oprtgex2

AVERAGE DAILY UNIT POWER LEVEL

3921057970

DOCKET NO. 50 - 353  
UNIT LIMERICK UNIT 2  
DATE NOVEMBER 13, 1992  
COMPANY PHILADELPHIA ELECTRIC COMPANY  
KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNIT  
LIMERICK GENERATING STATION  
TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH OCTOBER 1992

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1050	17	1025
2	941	18	1020
3	670	19	1017
4	1030	20	1012
5	1033	21	1000
6	1039	22	988
7	1047	23	975
8	1046	24	978
9	1039	25	967
10	1041	26	971
11	1043	27	962
12	1040	28	960
13	1037	29	954
14	1036	30	944
15	1021	31	944
16	1017		



DUCKET NO. 50 - 353

DATE NOVEMBER 12, 1992

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNIT

LIMERICK GENERATING STATION  
TELEPHONE (215) 327-7200 EXTENSION 3320

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 2
2. REPORTING PERIOD: OCTOBER, 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 24% FOR

REACTOR RECIRC MG SET

BRUSH REPLACEMENT, MAIN

TURBINE TRIP TEST, AND 6TH

FEEDWATER HEATER REMOVAL

FROM SERVICE.

8. IF CHANGES OCCUR IN CAPABILITY 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:

11. HOURS IN REPORTING PERIOD
12. NUMBER OF HOURS REACTOR WAS CRITICAL
13. REACTOR RESERVE SHUTDOWN HOURS
14. HOURS GENERATOR ON-LINE
15. UNIT RESERVE SHUTDOWN HOURS
16. GROSS THERMAL ENERGY GENERATED (MMH)
17. GROSS ELECTRICAL ENERGY GENERATED (MMH)
18. NET ELECTRICAL ENERGY GENERATED (MMH)

THIS MONTH	YR-TO-DATE	CUMULATIVE
745	7,320	25,392
745.0	7,320.0	22,449.5
U.0	0.0	0.0
745.0	7,320.0	21,890.4
0.0	0.0	0.0
2,322,259	23,459,258	69,171,383
767,350	7,788,770	22,824,846
738,731	7,500,776	21,972,375

	DATE NOVEMBER 13, 1992	
19. UNIT SERVICE FACTOR	THIS MONTH	VR-TO-DATE
	100.0	100.0
20. UNIT AVAILABILITY FACTOR	100.0	100.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	94.0	97.1
22. UNIT CAPACITY FACTOR (USING DER NET)	94.0	97.1
23. UNIT FORCED OUTAGE RATE	0.0	0.0
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):		
SECOND 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):	FGRECAST	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

BOOKET NO. 50 - 353

UNIT NAME LIMERICK UNIT 2  
 DATE NOVEMBER 13, 1992  
 COMPLETED BY PHILADELPHIA ELECTRIC COMPANY  
 KARL NECK  
 REPAIRS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION  
 TELEPHONE (215) 321-1200 EXTENSION 3320

REPORT MONTH OCTOBER, 1992

NO.	DATE	TYPE (1)	DURATION (HOURS) (2)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
39	921003	S	000.0	B	4	N/A	CB	MOTORX	LOAD WAS REDUCED 76% TO REPLACE REACTOR RECIRC PUMP MG SET BRUSHES. PERFORM MAIN TURBINE TRIP TEST, AND REMOVE 6TH FEEDWATER HEATER FROM SERVICE DUE TO END OF CYCLE COASTDOWN.
40	921004	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 5% FOR CONTROL ROD PATTERN ADJUSTMENT.
41	921006	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 3% FOR CONTROL ROD PATTERN ADJUSTMENT.
42	921027	F	000.0	A	4	N/A	RC	FUELXX	LOAD WAS REDUCED 1% BY INSERTING CONTROL ROD 42-07 TO LIMIT OFFGAS DUE TO A FUEL FAILURE.

- (1)

F - FORCED  
S - SCHEDULED
- (2)

REASON  
A - EQUIPMENT FAILURE (EXPLAIN)  
B - MAINTENANCE OR TEST  
C - REPAIRING  
D - 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

DOCKET NO. 80 - 357  
 DATE AUGUST 10, 1992  
 COMPLETED BY PHILADELPHIA ELECTRIC COMPANY  
 KARL MECK  
 REPORTS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION  
 TELEPHONE (215) 327-1200 EXTENSION 3300

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 1 Rev1  
 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

8. IF CHANGES OCCUR IN CAPACITY RATINGS (ITEMS NUMBER 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS:  
 OUTAGE UNTIL JULY 9TH.

9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE):

10. REASONS FOR RESTRICTIONS, IF ANY:

	THIS MONTH	VF	-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	744		5.11	56.951
12. NUMBER OF HOURS REACTOR WAS CRITICAL	657.2		2.567.4	43.876.7
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)	1,552,659		7,725,904	129,714,820
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

3,2105797.0

DATE AUGUST 10, 1982

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE 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	13.2	21.6	5.7
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	12/19/84	12/22/84
INITIAL ELECTRICITY	FID APRIL 85	4/13/85
COMMERCIAL OPERATION	1ST QTR 86	2/01/85

# OPERATING DATA REPORT

3521057970

DISCRET NO. 50 - 352  
 DATE SEPTEMBER 2, 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 Rev. 1  
 2. REPORTING PERIOD: AUGUST, 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: THERE WERE NO LOAD DROPS

GREATER THAN 20%.


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	5,855	57,695
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	3,311.4	44,620.2
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	744.0	3,187.3	43,629.2
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,447,177	10,173,081	132,161,997
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	794,980	3,318,710	42,819,650
18. NET ELECTRICAL ENERGY GENERATED (MWH)	765,811	3,185,122	40,986,578



	DATE SEPTEMBER 2, 1992	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR		100.0	54.4	75.6
20. UNIT AVAILABILITY FACTOR		100.0	54.4	75.6
21. UNIT CAPACITY FACTOR (USING MOC NET)		97.6	51.6	67.4
22. UNIT CAPACITY FACTOR (USING DER NET)		97.6	51.6	67.4
23. UNIT FORCED OUTAGE RATE		0.0	17.5	5.6
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):				5.6   

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	12/12/84	12/23/84
INITIAL ELECTRICITY	MID APRIL 85	4/12/85
COMMERCIAL OPERATION	1ST QTR 86	2/01/86