

PHILADELPHIA ELECTRIC COMPANY

3921007310

LIMERICK GENERATING STATION

P. O. BOX 2300

POTTSTOWN, PA 19464-0920

(215) 327-1200, EXT. 3000

February 12, 1992

GRAHAM M. LEITCH  
VICE PRESIDENT  
LIMERICK GENERATING STATION

Docket 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 January, 1992 forwarded pursuant to  
Technical Specification 6.9.1.6.

Very truly yours,

*G. A. Hungen, Jr. For G. M. LEITCH*

KWM/dms

Enclosure

cc: T. T. Martin, Administrator, Region I, USNRC  
T. J. Kenny, USNRC Senior Resident Inspector

9202210122 990131  
PDR ADOCK 05000352  
R PDR

*JE24*

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

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

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 1 began the month of January at 15% of rated thermal power. On Wednesday, January 1 at 0619 hours, the main turbine generator was synchronized to the grid. Power ascension from the forced outage to repair the High Pressure Coolant Injection (HPCI) inboard isolation valve HV-55-1F002 continued and 100% of rated thermal power was achieved on January 3. On Sunday, January 5, reactor power was reduced to 84% of rated to support condensate filter demineralizer outages. Power was returned to 100% of rated early on January 6. On January 13 reactor power was briefly reduced to 92% of rated to facilitate a control rod pattern adjustment. Reactor power was briefly reduced to approximately 97% on January 14 due to low condenser vacuum brought on by severe weather conditions. On Tuesday, January 21, several reactor feed-water heaters isolated. This loss of feed-water heating, per procedure, required a reduction in power to approximately 80%. Due to computer problems, power was further reduced to 60%. Following resolution of the computer problems and investigation of the feed-water heating by the System Engineers, power was restored to 100% of rated on January 22. On Thursday, January 23, power was allowed to decrease (due to xenon build in) to approximately 98%, but was restored to 100% later that day. On January 24, reactor power was briefly reduced to 95% of rated to perform a control rod pattern adjustment. On January 30, reactor power was briefly reduced to 92% of rated to perform a rod pattern adjustment and Main Turbine Control Valve testing. 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 of January.

# AVERAGE DAILY UNIT POWER LEVEL

3921007310

DOCKET NO. 352  
 UNIT LIMERICK  
 DATE FEBRUARY 10, 1992  
 COMPANY PHILADELPHIA ELECTRIC COMPANY  
 WARD MECK  
 REPORTS SUPERVISOR  
 BUSINESS UNIT  
 LIMERICK GENERATING STATION  
 TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH JANUARY 1992

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	106	17	1056
2	711	18	1054
3	1018	19	1055
4	1045	20	1055
5	996	21	803
6	104	22	1035
7	1055	23	1044
8	1053	24	1052
9	1054	25	1054
10	1053	26	1057
11	1055	27	1050
12	1052	28	1059
13	1048	29	1054
14	1044	30	1033
15	1059	31	1053
16	1056		

# OPERATING DATA REPORT

DOCKET NO. 52 852

3921007310

DATE: JANUARY 13, 1992

CONSULTED 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: JANUARY, 1992  
3. LICENSED THERMAL POWER (MWT): 3253  
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:

NOTES: THERE WAS ONE LOAD  
REDUCTION TO 60% DUE TO  
LOSS OF FEEDWATER HEATING.

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 (MWh)  
17. GROSS ELECTRICAL ENERGY GENERATED (MWh)  
18. NET ELECTRICAL ENERGY GENERATED (MWh)

THIS MONTH	YR-TO-DATE	CUMULATIVE
744	744	52,584
744.0	744.0	42,052.8
0.0	0.0	0.0
737.7	737.7	41,179.6
0.0	0.0	0.0
744.0	744.0	124,026,508
744.0	744.0	40,277,580
743.049	743.049	38,554,505

	DATE PERIOD	THIS MONTH	VS. 12-MO. DATE	CUMULATIVE
19. UNIT SERVICE FACTOR		99.2	99.2	78.2
20. UNIT AVAILABILITY FACTOR		99.2	99.2	78.3
21. UNIT CAPACITY FACTOR (USING MOC NET)		94.7	94.7	69.5
22. UNIT CAPACITY FACTOR (USING DER NET)		94.7	94.7	69.5
23. UNIT FORCED OUTAGE RATE		0.8	0.8	4.4
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 END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

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

INITIAL CRITICALITY  
INITIAL ELECTRICITY  
COMMERCIAL OPERATION

FORECAST

12/19/84  
MID APRIL 85  
1ST QTR 86

ACHIEVED

12/22/84  
2/17/85  
2/01/86

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352

3921007310

UNIT NAME LIMERICK UNIT 1

DATE FEBRUARY 10, 1992

RELEASED BY JANUARY 1, 1992

COMPLETED BY DMC ADLER, LIMERICK ELECTRIC COMPANY

KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNITLIMERICK GENERATING STATION  
TELEPHONE (215) 327-1200 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 REURRENCE
67	920101	F	006.3	B	4	N/A	ZZ	ZZZZZZ	STARTUP TESTING IN PROGRESS.
1	920105	F	000.0	B	4	N/A	WC	DEMIX	LOAD WAS REDUCED 18% TO SUPPORT CONDENSATE FILTER DEMINERALIZER OUTAGES.
2	920113	S	000.0	B	4	N/A	RB	CONROD	LOAD WAS REDUCED 8% FOR CONTROL ROD PATTERN ADJUSTMENT.
3	920114	F	000.0	H	4	N/A	HC	HTEXCH	LOAD WAS REDUCED 3% DUE TO THE LOW CONDENSER VACUUM CONDITION CAUSED BY SEVERE WEATHER CONDITIONS.
4	920121	F	000.0	D	4	N/A	CH	HTEXCH	LOAD WAS REDUCED 20% DUE TO LOSS OF FEEDWATER HEATING AND LOAD WAS REDUCED ANOTHER 20% DUE TO COMPUTER PROBLEMS.
5	920124	S	000.0	B	4	N/A	RB	CONROD	LOAD WAS REDUCED 5% FOR CONTROL ROD PATTERN ADJUSTMENT.
6	920130	S	000.0	B	4	N/A	RB	CONROD	LOAD WAS REDUCED 8% FOR CONTROL ROD

(1)

F - FORCED  
S - SCHEDULED

(2)

REASON  
A - EQUIPMENT FAILURE (EXPLAIN)  
B - EXHAUSTION OF FUEL  
C - REFUELLING  
D - REGULATORY RESTRICTION  
E - OPERATOR TRAINING + LICENSE EXAMINATION  
F - ADMINISTRATIVE  
G - OPERATIONAL ERROR (EXPLAIN)  
H - OTHER (EXPLAIN)

(3)

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

(4)

EXHIBIT G - INSTRUCTIONS  
FOR PREPARATION OF DATA  
ENTRY SHEETS FOR LICENSEE  
EVENT REPORT (LER)  
FILE (N095-0161)

(5)

EXHIBIT I - SAME SOURCE



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

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

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of January at a nominal 100% of rated thermal power. On Saturday, January 4, reactor power was briefly reduced to 99% to comply with a Technical Specification shutdown statement due to High Pressure Coolant Injection (HPCI) valve repair. Power was restored when the Limiting Condition for Operations (LCO) requirements were satisfied. On January 6, reactor power was briefly reduced to 88% to support a control rod pattern adjustment and Main Turbine Control Valve testing. On Saturday, January 11, the '2A' Reactor Feed Pump (RFP) control circuit failed and the operators reduced power to 65% of rated. After investigation by the System Engineers, the '2A' RFP was placed in manual and reactor power was restored to 100% later the same day. On January 23, power was reduced to 80% to perform scram time testing and a control rod pattern adjustment. Power was restored to 100% early on January 24. 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 of January.



AVERAGE DAILY UNIT POWER LEVEL

3921007310

DOCKET NO. 50 - 358

UNIT LIMERICK UNIT 2

DATE FEBRUARY 10, 1992

COMPANY PHILADELPHIA ELECTRIC COMPANY

KARL MEEH

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH JANUARY 1992

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1073	17	1067
2	1067	18	1069
3	1067	19	1068
4	1065	20	1067
5	1067	21	1068
6	1068	22	1068
7	1061	23	1022
8	1060	24	1052
9	1070	25	1068
10	1065	26	1068
11	924	27	1065
12	1067	28	1068
13	1064	29	1068
14	1065	30	1065
15	1070	31	1065
16	1067		

# OPERATING DATA REPORT

3921007310

DOCKET NO. 50 - 353

DATE FEBRUARY 10, 1992

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MEER  
REPORTS SUPERVISOR  
BUSINESS UNIT  
LIMERICK GENERATING STATION  
TELEPHONE (215) 827-1200 EXTENSION 3320

## OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 2
2. REPORTING PERIOD: JANUARY, 1992
3. LICENSED THERMAL POWER (MWT): 3293
4. NAMEPLATE RATING (GR. S 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.

NOTES: THERE WAS ONE LOAD

REDUCTION TO 65% DUE TO  
REACTOR FEEDPUMP TRIP  
AND ONE LOAD REDUCTION  
TO 80% FOR CONTROL ROD  
TESTING.

9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET MWE):
10. REASONS FOR RESTRICTIONS, IF ANY:

	THIS MONTH	YTD-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	744	744	18,096
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	744.0	18,332.3
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	744.0	744.0	14,843.1
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,434,241	2,434,241	47,705,437
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	815,650	815,650	15,747,286
18. NET ELECTRICAL ENERGY GENERATED (MWH)	788,423	788,423	15,162,268

3921007310

DATE FEBRUARY 10, 1992

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	100.0	82.0
20. UNIT AVAILABILITY FACTOR	100.0	100.0	82.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	100.4	100.4	79.4
22. UNIT CAPACITY FACTOR (USING DER NET)	100.4	100.4	79.4
23. UNIT FORCED OUTAGE RATE	0.0	0.0	5.6
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	08/12/89	08/12/89
INITIAL ELECTRICITY	08/01/89	09/01/89
COMMERCIAL OPERATION	02/01/90	01/08/90

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 353

3921007310

UNIT NAME LIMERICK UNIT 2

DATE FEBRUARY 10, 1992

REPORT MONTH JANUARY, 1992

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (715) 327-1200 EXTENSION 3320

NO.	DATE	TYPE (1)	DURATION (HOURS) (2)	REASON (3)	METHOD OF SHUTTING DOWN REACTOR (4)	LICENSEE EVENT REPORT #	SYSTEM CODE (5)	COMPONENT CODE (6)	CAUSE AND CORRECTIVE ACTION TO PREVENT RE-occurrence
1	920104	F	000.0	D	4	2-92-001	SF	VALVEX	LOAD WAS REDUCED 1% FOR HPCI REPAIR.
2	920106	S	100.0	B	4	N/A	RB	CONROD	LOAD WAS REDUCED 12% FOR CONTROL ROD PATTERN ADJUSTMENT AND MAIN TURBINE CONTROL VALVE TESTING.
3	920111	F	000.0	A	4	N/A	CH	INSTRU	LOAD WAS REDUCED 35% DUE TO REACTOR FEEDPUMP TRIP.
4	920123	S	000.0	B	4	N/A	RB	CONROD	LOAD WAS REDUCED 20% FOR CONTROL ROD PATTERN ADJUSTMENT AND CONTROL ROD RAM TIME TEST.

(1)

(2)

(3)

(4)

F - FORCED  
S - SCHEDULED

## 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)

## 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