Docket No. #50-352 Attachment to Monthly Operating Report for April 1993

# LIMERICK GENERATING STATION UNIT 1 APRIL 1 THROUGH APRIL 30, 1993

## I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 1 was in the fourth refuel tage throughout the month. On Friday, April 10, Unit 1 reactor core offload was completed to support shuffling of control rod blades, HCU and CRD maintenance, replacement of all LPRM strings and maintenance and testing on Emergency Core Cooling Systems. On Tuesday, April 28, Unit 1 entered OPCON 5 and began reactor core reload. Unit 1 ended this reporting period on day 42 of the Refueling Outage with reactor core reload in progress.

Operational events that occurred during the month of April included:

The 'B' ESW loop was declared Inoperable to support isolation valve installation on the 'B' loop ESW piping in the Unit 1 HPCI room. Unon completion of valve installation and testing on Monday, April 27 (54 hours and 55 minutes had elapsed) 'B' '3W was declared operable.

## II. CHALLENGES TO MAIN STEAM SAFETY RELIEF VALVES

There were no challenges to the Main Sterm Safety Relief Valves during the month of Apri.

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CORPANY PHILADELPAIA ELECTRIC COMPAN

KARL MECK REPORTS SUPERVISOR BUSINESS UNIT LIMERICK GENERATING STATION TELEPHONE (215) 227-1200 EXTENSION 3320

MONTH APRIL 199

2 4 6		DAV	AVERAGE DAILY POWER LEV
	(MWE-NET)		(MWE-NET)
	0	17	0
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DOCKET NO. 50 - 352

DATE MAY 8, 1993

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK CENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

#### OPERATING STATUS

1. UNIT NAKE: LIMERICK UNIT 1 ! NOTES: THE UNIT WAS IN A REFUEL 2. REPORTING PERIOD: APRIL, 1992 DUTAGE THE ENTIRE PERIOD. 3. LICENSED THERMAL POWER (MWT): 4. NAMEPLATE RATING (GROSS MWE): 1138 5. DESIGN ELECTRICAL RATING (NET MWE): 1055 6. MAXIMUM DEPENDABLE CAPACITY (GRASS 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 (NFT MWE):
- 10. PEASONS FOR RESTRICTIONS, IF ANY:

	THIS MONTH	VR-TO-DATE	CUMULAT? VE
11. FOURS IN REPORTING PERIOD	719	2,903	54,743
12. NUMBER OF HOURS REACTOR WAS CRITICAL	0	1,910.2	43,219.0
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	0.0	1,903.9	42,345.8
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERALED (MWH)	0	6,163,245	128,152,161
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	0	2,033,300	41.534,240
18. NET ELECTRICAL ENERGY GENERATED (MWH)	* -878	1,980,170	39,771,626

	∩A7E	MAY 8, 1992	
	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	0.0	65.6	77.4
20. UNIT AVAILABILITY FACTOR	0.0	65.6	77.4
21. UNIT CAPACITY FACTOR (USING INC NET)	0.0	64.0	68.9
22. UNIT CAPACITY FACTOR (USING JFR NET)	0.0	64.0	68.9
23. UNIT FORCED OUTAGE RATE	0.0	0.3	4.3
24 SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (1 4TH REF. LNG OUTAGE: 03/21/92: 70 DAYS	TYPE, DATE, AND DURA	TION OF EACH):	

25. IF SHUTDO: 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	MIL APRI 85	4/13/85
COMMERCIAL OPERATION	15T QTP 86	2/01/86

<sup>\* -</sup> NEGATIVE VALUE REPORTED FOR CONSISTENCY WITH FEDERAL ENERG REGULATORY COMMISSION REPORTS.

APEIL, 1992

REPORT MONTH

DOCKET NO. 50 - 352

UNIT NAME LIMERICK UNIT 1

DATE TAY 8, 10 ...

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REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

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TELEPHONE (215) 327-1200 EXTENSION 3320

NO.	DATE	TYPE (1)	DURATION (HOURS)	REAS	SHUTTING	DOWN!	EVENT	CODE	CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE	
13	920401	S	719.0	C	2		N/A	22		THE UNIT REMAINED IN THE REFUELING OUTAGE THE EN	

(1)

(2)

(3)

(4)

F - FORCED

REASON

S - SCHEPULED A - EQUIPTENT FAILURE (EXPLAIN)

B - MAINTENANCE OF TEST

C - REFUELING

D - REGULATORY RESTRICTON

E - OPERATOR TRAINING . . ICENSE EXAMINATION

F - ADMINISTRATIVE

G - OPERATIONAL ERROR (EAPLAIN)

H - OTHER (EXPLAIN)

METHOD

T - MANUAL

4 - OTHER (EXPLAIN)

EXHIBIT G - INSTRUCTIONS 1 - MANUAL FOR PREPARATION OF 2 - MANUAL SCRAM. ENTRY SHEETS FOR LI 3 - AUTOMATIC SCRAM. EVENT REPORT (LER) FOR PREPARATION OF DATA ENTRY SHEETS FOR LICENSEE FILE (NUREG-0161)

(5)

EXHIBIT 1 - SAME SOURCE

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

# LIMERICK GENERATING STATION UNIT 2 APRIL 1 THROUGH APRIL 30, 1992

### I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of April at a nominal 100% of rated thermal power. On Wednesday, April 8, reactor power was briefly reduced to 90% to support a control rod pattern adjustment and Main Turbine Control valve testing. On Saturday April 25, reactor power was reduced to 95% to support isolation of a condenser waterbox because of a leaking condenser tube. On Sunday April 26, reactor power was returned to 100% of rated thermal power - adequate condenser vacuum was able to be maintained with one waterbox isolated. On Thursday April 30, reactor power was reduced to 98% of rated thermal power due to increasing turbine back pressure due to isolation of a main condenser waterbox. Unit 2 ended this operating period at 93% of rated thermal power.

Operational events that occurred during the month of April included:

The 'B' ESW loop was declared Inoperable to support isolation valve installation on the 'B' loop ESW piping in the Unit 1 HPCI room. A one time revision to the ESW system Technical Specifications allowed a 72 hour relief from the ESW system Technical Specification 3.0.3 required shutdown with the 'B' loop of ESW inoperable. Upon completion of valve installation and Lusting on Monday, April 27 (54 hours and 55 minutes had elapsed) 'B' ESW was declared operable.

### II. CHALLENGES TO MAIN STEAM SAFETY RELIEF VALVES

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

DOCKET NO. 50 - 353

UNIT LIMERICK UNIT 2

DATE MAY 8, 1952

COMPANY PHILADELPHIA FLECTRIC COMPANY 

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH	A^RIL 1992		
DAV	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAV	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1052	17	1058
2	1052	18	1058
3	1062	19	1059
4	1060	20	1064
5	1067		1048
6	1059	22	1050
7	1056	23	1053
8	1051	24	1048
9	:059	25	1033
10	1053	2€	1043
11	1056	27	1051
12	1059	28	.051
13	1061	29	1951
1.4	1064	30	1050
15	1659		
16	1063		

DOCKET NO. 50 - 353

DATE MAY 8, 1992

NOTES: THERE WERE NO LOAD

20% DURING THE MONTH.

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

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REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (2:5) 327-1200 EXTENSION 3320

REDUCTIONS GREATER THAN

#### OPERATING STATUS

1. UNIT NAME, LIMERICK UNIT 2

2 REPORTING PERIOD: APRIL, 1992

3. LICENSED THERMAL POWER (MWT): 3293

4. NAMEPLATE RATING (GROSS MWE):

5. DESIGN ELECTRICAL RATING (NET MWE): 1055

6. MAXIMUM DEPENDIBLE CAPACITY (GROSS MWE): 1092

7. MAXIMUM DEPENDABLE CL'ACITY (NET MWE): 1055

8. IF CHANGES OCCUR IN CAPACI. RATINGS (ITEMS NUMBER 3 THROUGH 7) SINCE LAST REPORT, GIVE REASONS:

1138

- 9. POWER LEVEL TO WHICH RESTRICTED, IF ANY (NET M 5):
- 10. REASONS FOR PESTRICTIONS, IF ANY:

	THIS MONTH	YR-TO-DATE	CUMULATIVE
11. HOURS IN REPORTING PERIOD	719	2,903	20,255
12. NUMBER OF HOURS REACTOR WAS CRITICAL	719.0	2,903.0	17,491.1
13. REACTOR RESERVE SHUTDOW HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	719.0	2,903.0	17,002.2
15. UNIT RESERVE SHUTDOWN HOURS		0.0	0.0
16. GROSS THERMAL ENERGY ( ) (MWH)	2,365,7/8	9,501,396	54,772,792
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	788,760	3,179,080	18,110,716
18. NET ELECTRICAL ENERGY GENERATED (MWH)	758,412	3,065,276	17,439,141

PAGE 1 OF 2

	DATE	Mry 8, 1992	
	THIS MONTH	VR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	100.0	83.9
20. UNIT AVAILABILITY FACTOR	100.0	100.0	83.9
21. UNIT CAPACITY FACTOR (USING MDC NET)	160.0	100.1	81.6
22. UNIT CAPACITY FACTOR (USING DER NET)	190.0	100.1	81.6
23. UNIT FORCED OUTAGE RATE	0.0	e.o	4.9
24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (T	YPE, DATE, AND DUR	ATION 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	00/01/80	09/01/89
COMMERCIAL OPERATION	02/01/90	01/08/90

REPORT MONTH APRIL, 1992

DOCKET NO. 50 - 353

UNIT NAME LIMERICK UNIT 2

DATE MAY 8, 1992

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

DAT					METHOD SHUTTING I	NWOO	LICENSEE EVENT REPORT #	SYSTEM   CODE   (4)	COMPONENT   CODE   (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
9204	408	S	0,000	8	4		N/A	RB	CONROD	LOAD WAS REDUCED 10% FOR CONTROL ROD PATTERN ADJUSTMENT AND TURBINE CONTROL ROD VALVE TESTING.
9204	425	F	000.0	Δ	4		N/A	HC	PIPEXX	LOAD WAS REDUCED 5% TO SUPPORT ISOLATION OF A CONDENSER WATERBOX BECAUSE OF A LEAKING MAIN CONDENSER TUBE.
9204	130	e .	0.00	н	4		N/4	нс	TURBIN	LOAD WAS REDUCED 2% DUE TO INCREASING TURBINE BAC PRESSURE BECAUSE OF THE ISOLATION OF THE MAIN CONJENSER WATERBOX.

(1) F - FORCED

5 - 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 SHEET! / LICENSEE EVENT REPORT \_ER)

FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE

	DATE APRIL 10, 1992			
	THIS MONTH	YR-TO-DATE	CUMULATIVE	
19. UNIT SERVICE FACTOR	63.2	87.2	73.4	
20. UNIT AVAILABILITY FACTOR	83.2	87.2	78.4	
21. UNIT CAPACITY FACTOR (USING MOC NET)	62.0	85.1	69.8	
22. UNIT CAPACITY FACTOR (USING DER NET)	62.0	85.1	69.8	
23. UNIT FORCED DUTAGE RATE	0.0	0.3	4.3	1 1

<sup>2-.</sup> 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 S	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