

DATE 07/11/91 12:18

NRMS DOCUMENT CONTROL FORM

SEQUENCE # 3913099970

NRC MONTHLY OPERATING REPORT
STATION LGS

```
*****
*MGR LIMERICK          LGS/A5-1      01 I**CORRESP RELEASE PT  LGS/340      01 I*
*SR. VP NUC            CB/52C-7      01 I**DEPT ENVIR RES - PA  OUTGOING      01 I*
*VP. LIMERICK          LGS-200       01 I**DIR. LICENSING SECT  CB/52A-5      01 I*
*VP. NUC ENG/SERVICES  CB/63C-1      01 I**INPO                OUTGOING      01 I*
*VP. PBAPS             PB/SMO-1       01 I**LGS ENGR. TECHNICAL  LGS/C4-1      01 I*
*MGR. INSURANCE DIV.   MO/S15-3      01 I**HARTFIELD, R.       OUTGOING      01 I*
*MGR. NUC ADMIN DIV    CB-51A-13     01 I**MGR. PUBLIC INFO    MO/S13-1      01 I*
*MGR. QA PERF ASSESS   CB/53A-1      01 I**REGULATORY ENGR-LGS  LGS/SB3-4     01 I*
*MGR. RATE DIV         MO/S21-1      01 I**REPORTING SUPVR.-LGS  LGS/338       01 I*
*NRC RES OFFICE        LGS/A2-5      01 I**SHERMAN, D.         OUTGOING      01 I*
*SUPT. ISEG - LGS     LGS/336       01 I**MGR. FUEL MGMT       CB/52A-3      01 I*
*ASST. OPER. ENGR.    LGS/A5-1      01 I**YOST, F.           OUTGOING      01 I*
*BHATTACHARYYA, A.    LGS/335       01 I**-----*
*BUSINESS UNIT        CB/52B-7      01 I**-----*
*BUTROVICH, R. M.     LGS-17        01 I**-----*
*COLTER, S.           OUTGOING      01 I**-----*
*****
```

REQUESTS FOR CHANGES TO THIS DISTRIBUTION LIST MUST BE ADDRESSED TO THE ORGANIZATION RESPONSIBLE FOR ORIGINATING THE ATTACHED DOCUMENT (SEE NUCLEAR RELATED DOCUMENT REGISTER (NRDR) FOR RESP. ORG.). THE RESP. ORG. WILL AUTHORIZE THE LOCAL DAC SUPERVISOR TO MAKE THE NECESSARY CHANGES.

ATTACHED IS A COPY OF:

DOCTYPE NRC MONTHLY OPERATING REPORT

DATE 07/09/91

MAKE TWO ADDITIONAL COPIES: 1 - T.T. MARTIN, 1 - NRMS

JUL 11 1991

LPM

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

P. O. BOX A

SANATOGA, PENNSYLVANIA 19464

(215) 327-1200, EXT. 3000

GRAHAM M. LEITCH
VICE PRESIDENT
LIMERICK GENERATING STATION

July 9, 1991

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 June, 1991 forwarded pursuant to Technical
Specification 6.9.1.6.

Very truly yours,

J. D. Davis
for G.M.

KWM/dwc

Enclosure

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

100012

TECH 11

Docket No. #50-352
Attachment to Monthly
Operating Report for
June 1991

LIMERICK GENERATING STATION
UNIT 1
JUNE 1 THROUGH JUNE 30, 1991

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 1 began the month of June at a nominal 100% of rated thermal power. On June 1, a high drywell leakage rate caused reactor operators to decrease power to 85%, then 45% and then 26%. The cause was identified as a problem with the '1B' Reactor Recirculation Pump mechanical seal, prompting a management decision to shut the Unit down at 0027 hours on June 2 to perform repairs. The Unit entered OPGON 4 at 1031 hours on June 2 for outage activities. On June 10 at 0002 hours the Unit commenced startup, achieving initial criticality at 0314 hours. On June 13 at 0305 hours, the main generator was synchronized to the grid and achieved 100% power on June 17. On June 21, reactor power was reduced to 85% to allow regeneration of condensate filter demineralizers with a return to 100% on June 22. On June 28, power was reduced to 99% due to high turbine backpressure, followed by a reduction to 80% for a Control Rod pattern adjustment. On June 29 and 30, four minor reductions to as low as 95% were taken due to high turbine backpressure. Unit 1 ended the month of June at 100% of rated thermal power.

Operational events that occurred during the month of June included:

On June 10, while performing startup activities, reactor pressure was increased above 150 psig without demonstrating RCIC operability per Technical Specification LCO 3.7.3 due to a personnel error. This failure resulted in a violation of Technical Specification LCO 3.0.4 which prohibits entering a specified operating condition without conforming to the limiting conditions for operation when the associated action statement requires a shutdown. A Licensee Event Report is being prepared for this event.

On June 18, the DC inductor on the '1B' RPS/UPS static inverter failed. This caused the series output breakers to open. As a result, a 'B' channel half scram, various NSSSS isolations, and an SGTS initiation occurred. All systems were verified to have operated as designed. The static inverter was bypassed, power was restored, and all systems were restored to their normal alignments per procedure. A four hour notification was made pursuant to 10CFR50.72.

II. Challenges to Main Steam Safety Relief Valves

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

3913099970

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 352

UNIT LIMERICK UNIT 1

DATE JULY 1, 1991

COMPANY PHILADELPHIA ELECTRIC COMPANY

 KARL MECK
 REPORTS SUPERVISOR
 BUSINESS UNIT
 LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH JUNE 1991

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	867	17	941
2	0	18	1027
3	0	19	1025
4	0	20	1017
5	0	21	950
6	0	22	992
7	0	23	1026
8	0	24	1031
9	0	25	1038
10	0	26	1016
11	0	27	1024
12	0	28	995
13	254	29	953
14	770	30	996
15	911		
16	914		

3913099970

OPERATING DATA REPORT

DOCKET NO. 50 - 352

DATE JULY 1, 1991

COMPLETED BY PHILADELPHIA ELECTRIC COMPANY

KARL MECK
REPORTS SUPERVISOR
BUSINESS UNITLIMERICK GENERATING STATION
TELEPHONE (215) 327-1200 EXTENSION 3320

OPERATING STATUS

1. UNIT NAME: LIMERICK UNIT 1

2. REPORTING PERIOD: JUNE, 1991

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:

NOTES: THE UNIT WAS MANUALLY

SCRAMMED TO PERFORM REACTOR

RECIRC PUMP SEAL REPAIRS;

THERE WAS ONE OTHER LOAD

REDUCTION APPROX 40%.

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	VR-TO-DATE	CUMULATIVE
720	4,343	47,423
525.2	4,044.5	37,176.1
0.0	0.0	0.0
453.4	3,944.0	36,341.0
0.0	0.0	0.0
1,384.994	12,551.898	119,624,030
443.240	4,088.900	35,134,800
422.578	3,929.174	33,506,761

OPERATING DATA REPORT (CONTINUED)

DATE JULY 3, 1991

	THIS MONTH	VE-TG DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	63.0	90.8	76.6
20. UNIT AVAILABILITY FACTOR	63.0	90.8	76.6
21. UNIT CAPACITY FACTOR (USING MDC NET)	55.6	85.8	67.2
22. UNIT CAPACITY FACTOR (USING DER NET)	55.6	85.8	67.2
23. UNIT FORCED OUTAGE RATE	37.0	9.2	4.2

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
MID-CYCLE OUTAGE SEPTEMBER 07, 1991; 21 DAYS

25. IF SHUTDOWN AT E/O OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

	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

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352

UNIT NAME LIMERICK UNIT 1

DATE JULY 1, 1991

REPORT MONTH JUNE, 1991

COMPLETED 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) (1)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE	
26	910601	S	000.0	F	4	N/A	CC	VALVE	LOAD WAS REDUCED 10% TO PERFORM MAIN TURBINE STOP AND CONTROL VALV TESTS.	
27	910601	F	000.0	F	4	N/A	XX	XXXXXX	LOAD WAS REDUCED 15%, THEN AN ADDITIONAL 40%. THEN AN ADDITIONAL 14% DUE TO HIGH DRYWELL LEAKAGE RATE.	
28	910602	F	266.6	A	2	N/A	CB	XXXXXX	REACTOR WAS MANUALLY SCRAMMED FROM 26% TO PERFORM REPAIRS TO 18" REACTOR RECIRC PUMP MECHANICAL SEAL.	
29	910621	S	000.0	F	4	N/A	HG	DEMIX	LOAD WAS REDUCED 15% TO PERFORM DEMINERALIZER REGENERATION.	
30	910626	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 20% TO PERFORM CONTROL ROD PATTERN ADJUSTMENT.	
31	910629	F	000.0	F	4	N/A	HA	TURBIN	LOAD WAS REDUCED 5% DUE TO HIGH TURBINE BACK PRESSURE.	
32	910630	F	000.0	F	4	N/A	H4	TURBIN	LOAD WAS REDUCED 4% DUE TO HIGH TURBINE BACK PRESSURE.	
			266.6							

(1)

F - FORCED
S - SCHEDULED

(2)

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)

(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. #50-353
Attachment to Monthly
Operating Report for
June 1991

LIMERICK GENERATING STATION
UNIT 2
JUNE 1 THROUGH JUNE 30, 1991

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of June in OPCIION 4, Cold Shutdown, in day 70 of its first refueling outage with preparations for startup in progress. The Unit entered OPCIION 2 on June 2 at 1035 hours and initial criticality was achieved at 1612 hours. The Unit entered OPCIION 1 on June 5 at 0525 hours and the main turbine generator was synchronized to the grid at 1358 hours. The main turbine generator was tripped at 1818 hours, as part of main turbine overspeed testing, and was resynchronized to the grid at 1854 hours. Unit 2 achieved 100% power on June 10 following power ascension testing. The Unit maintained 100% for the remainder of the month with the exception of the following brief power reductions for Control Rod pattern adjustments: June 12 - 80%, June 15 - 94%, June 20 - 90%. On June 27, there was a brief power reduction to 92% to perform Main Turbine Control Valve testing. Unit 2 ended the month of June at 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 June.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 353
UNIT LIMERICK UNIT 2
DATE JULY 1, 1991
COMPANY PHILADELPHIA ELECTRIC COMPANY
KARL MECH
REPORTS SUPERVISOR
BUSINESS UNIT
LIMERICK GENERATING STATION
TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH	JUNE 1991	
DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	0	1033
2	0	1048
3	0	1045
4	0	1035
5	39	1053
6	144	1025
7	141	1048
8	213	1047
9	734	1054
10	992	1035
11	1010	1037
12	997	1033
13	1046	1030
14	1045	1031
15	1037	
16	1033	

OPERATING DATA REPORT

DOCKET NO. 50 - 353

DATE JULY 1, 1991

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 2
2. REPORTING PERIOD: JUNE, 1991
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:

NOTES: THE UNIT ENDED THE REFUEL

OUTAGE: THERE WAS ONE
OTHER LOAD REDUCTION
APPROXIMATELY 20%.

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	4,343	12,935
12. NUMBER OF HOURS REACTOR WAS CRITICAL	679.7	2,612.0	10,171.3
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	609.4	2,504.6	9,682.2
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,776,242	7,940,596	30,798,386
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	575,080	2,607,500	10,130,516
18. NET ELECTRICAL ENERGY GENERATED (MWH)	550,063	2,599,809	9,742,405

DATE JULY 1, 1991

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	84.6	57.7	74.9
20. UNIT AVAILABILITY FACTOR	84.6	57.7	74.9
21. UNIT CAPACITY FACTOR (USING MDC NET)	72.4	54.8	71.4
22. UNIT CAPACITY FACTOR (USING DER NET)	72.4	54.8	71.4
23. UNIT FORCED OUTAGE RATE	0.0	1.5	8.3
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	09/01/89	09/01/89
COMMERCIAL OPERATION	02/01/90	01/08/90

3913099970

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO 50 - 353

UNIT NAME LIMERICK UNIT 2

DATE JULY 1, 1991

REPORT MONTH JUNE, 1991

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
18	910601	S	110.0	C	2	N/A	ZZ	ZZZZZZ	THE UNIT REMAINED IN THE FIRST REFUELING OUTAGE UNTIL JUNE 5 AT 1358.
19	910605	S	000.6	B	4	N/A	HA	TURB14	THE MAIN TURBINE-GENERATOR WAS TRIPPED AS PART OF MAIN TURBINE OVERSPEED TESTING.
20	910612	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 20% TO PERFORM CONTROL ROD PATTERN ADJUSTMENT.
22	910615	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 6% TO PERFORM CONTROL ROD PATTERN ADJUSTMENT.
23	910620	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 10% TO PERFORM CONTROL ROD PATTERN ADJUSTMENT.
24	910627	S	000.0	F	4	N/A	CC	VALVEK	LOAD WAS REDUCED 8% TO PERFORM MAIN TURBINE STOP AND CONTROL VALVE TESTS.
			----- 110.6						

(1)

F - FORCED
S - SCHEDULED

(2)

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)

(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