

PHILADELPHIA ELECTRIC COMPANY

3917057670

LIMERICK GENERATING STATION

P. O. BOX A

SAKATOGA, PENNSYLVANIA 19466

(215) 327-1200, EXT. 3000

GRAHAM W. LEITCH  
VICE PRESIDENT  
LIMERICK GENERATING STATION

April 10, 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 March, 1991 forwarded pursuant to Technical Specification 6.9.1.6. Also enclosed is Revision 1 to the January, 1991 and February, 1991 for Limerick Unit 1 which corrects the year-to-date and cumulative figures for generator on line and forced outage hours. This error occurred as a result of a computational error for January forced outage hours which has been corrected. We regret any inconvenience this error may have caused.

Very truly yours,

*Jay Deering* to GNL

KWM/cmb

Enclosures: (1) March Operating Reports  
(2) January and February Unit 1 Operating  
Reports, Revision 1

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

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LIMERICK GENERATING STATION  
UNIT 1  
MARCH 1 THROUGH MARCH 31, 1991

I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 1 began the month of March at a nominal 100% of rated thermal power. There were four (4) brief power reductions and one (1) extended power reduction during the month. On March 1, 14, 19, and 27, reactor power was reduced to approximately 85% to perform main turbine stop and control valve tests. Additionally, on March 8, reactor power was reduced to 80% to perform main turbine stop and control valve testing. Upon completion of testing, reactor power remained reduced due to high reactor water conductivity. Reactor power was gradually increased following corrective action, achieving 100% on March 14. Unit 1 ended the month 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 March.

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50 - 352

UNIT LIMERICK UNIT 1

DATE APRIL 2, 1991

COMPANY PHILADELPHIA ELECTRIC COMPANY

KARL MECK

REPORTS SUPERVISOR

BUSINESS UNIT

LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH MARCH 1991

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1028	17	1037
2	1028	18	1022
3	1037	19	1033
4	1031	20	1020
5	1042	21	1039
6	1032	22	1037
7	1039	23	1028
8	1015	24	1036
9	835	25	1035
10	896	26	1037
11	1003	27	1021
12	1005	28	1030
13	985	29	1045
14	968	30	1050
15	1029	31	1052
16	1033		

# OPERATING DATA REPORT

DOCKET NO. 50 - 352

DATE APRIL 2, 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 1  
2. REPORTING PERIOD: MARCH, 1991  
3. LICENSED THERMAL POWER(MWT): 3293  
4. NAMEPLATE RATING (GROSS MWE): 1138  
5. DESIGN ELECTRICAL RATING (NET MWE): 1055  
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWT): 1092  
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE): 1055

NOTES: THERE WAS ONE LOAD

REDUCTION TO 80% DUE TO  
REACTOR WATER HIGH  
CONDUCTIVITY.

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	744	2,160	45,240
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	2,160.0	35,291.6
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	744.0	2,166.5	34,553.5
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,401,922	6,925,408	102,007,540
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	785,970	2,272,220	33,318,120
18. NET ELECTRICAL ENERGY GENERATED (MWH)	756,809	2,199,346	31,866,953

3917057670

OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 352

3917057670

DATE APRIL 2, 1991

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	99.8	76.4
20. UNIT AVAILABILITY FACTOR	100.0	99.8	76.4
21. UNIT CAPACITY FACTOR (USING MDC NET)	96.4	96.1	66.8
22. UNIT CAPACITY FACTOR (USING DER NET)	96.4	96.1	66.8
23. UNIT FORCED OUTAGE RATE	0.0	0.2	3.3
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 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

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352

3917057670

UNIT NAME LIMERICK UNIT 1

DATE APRIL 2, 1991

REPORT MONTH MARCH, 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) (2)	REASON (3)	METHOD OF SHUTTING DOWN REACTOR (4)	LICENSEE EVENT REPORT #	SYSTEM CODE (5)	COMPONENT CODE (6)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
13	910301	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 15% TO PERFORM MAIN TURBINE STOP AND CONTROL VALVE TESTS.
14	910308	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 20% TO PERFORM MAIN TURBINE CONTROL AND STOP VALVE TESTS. AND REMAINED AT REDUCED POWER DUE TO REACTOR WATER HIGH CONDUCTIVITY.
15	910314	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 15% TO PERFORM MAIN TURBINE STOP AND CONTROL VALVE TESTS.
16	910319	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 15% TO PERFORM MAIN TURBINE STOP AND CONTROL VALVE TESTS.
17	910327	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 15% TO PERFORM MAIN TURBINE STOP AND CONTROL VALVE TESTS.

(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

LIMERICK GENERATING STATION  
UNIT 2  
MARCH 1 THROUGH MARCH 31, 1991I. NARRATIVE SUMMARY OF OPERATING EXPERIENCES

Limerick Unit 2 began the month of March at a nominal 100% of rated thermal power. On March 1, reactor power was reduced to 88% for a control rod pattern adjustment and to perform main turbine stop and control valve testing. On March 8, reactor power was reduced to 87% to perform main turbine stop and control valve testing. On March 14, at 0200 hours, reactor power was reduced to 48% due to a loss of cooling to the isophase bus. At 0704 hours, reactor power was reduced to 20% and the turbine generator tripped with main steam bypassed to the condenser. Upon completion of inspection and corrective actions, on March 15 at 0430 hours the generator was synchronized to the grid. Reactor power achieved 100% on March 15, but gradually decreased to 88% over the next several days due to the control rod pattern. On March 17, reactor power was reduced to 80% and all remaining partially inserted control rods were fully withdrawn and a power level of 97% was achieved and end of cycle fuel coast down then began. On March 22 at 1219 hours, the main turbine generator was tripped and the reactor scrammed from 96% to begin the first refueling outage. Unit 2 entered Operational Condition (OPCCN) 4 on March 22, OPCON 5 on March 26, and OPCON 5\* on March 30. Unit 2 ended the month of March in OPCON 5\* with fuel unloading in progress, in day 9 of a 75 day refueling outage. NOTE: OPCON 5\* equates to fuel movement.

Operational events that occurred during the month of march included:

- On March 22, a manual Main Turbine trip on Unit 2 was initiated per procedures SP-T-007, Unit 2 Main Turbine Trip and SP-099 Unit 2 Main Steam Piping Dynamic Loading During Main Turbine Stop Valve and Control Valve Closures. The reactor scrammed due to Main Turbine Stop Valve Fast Closure. The reactor scram was successful and the Feedwater Level Control System responded in automatic to restore reactor water level to normal without operator action per SP-T-007. The test was satisfactorily completed and a normal plant cooldown commenced in preparation for the first refueling outage.
- On March 24, during the performance of the Division III 125 VDC Safeguard Battery 18 Month Inspection, a 300 amp fuse blew during load testing, causing an undervoltage condition on the bus. This caused the '2A' RPS Breaker Panel (2PC248) shunt trip coil relay to trip one of the series output breakers due to an apparent undervoltage condition. This condition caused the deenergization of the '2A' RPS and UPS Distribution Panel, which resulted in numerous NSSSS isolation signals and an 'A' channel scram signal. This event resulted in isolations of shutdown cooling, RWCU, instrument gas, drywell chilled water, and reactor enclosure ventilation. The RPS series breaker was reclosed and the '2B' loop of shutdown cooling was returned to service within 24 minutes. Reactor coolant temperature increased from 124 deg. F to 141 deg. F and reactor level increased from 85 inches to 92 inches during this event. It was determined that the event was initiated by faulty test equipment. A 4-hour notification was made to the NRC.
- On March 24, during the installation of a Temporary Circuit Alteration (TCA) in the Redundant Reactivity Control System (RRCS) cabinet in the Auxiliary Equipment Room (AER), RRCS initiated a Division I Alternate Rod Insertion (ARI) due to a false low-low (-38 inches) reactor level signal. The ARI initiation caused the Scram Discharge Volume (SDV) vent and drains to close. The SDV level increased to the SDV high level scram setpoint and a full scram signal was generated. The scram signal was subsequently reset. A 4-hour notification to the NRC was made.

II. Challenges to Main Steam Safety Relief Valves

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

AVERAGE DAILY UNIT POWER LEVEL

3917057670

DOCKET NO. 50 - 353

UNIT LIMERICK UNIT 2

DATE APRIL 2, 1991

COMPANY PHILADELPHIA ELECTRIC COMPANY

KARL MECK  
REPORTS SUPERVISOR  
BUSINESS UNIT  
LIMERICK GENERATING STATION

TELEPHONE (215) 327-1200 EXTENSION 3320

MONTH MARCH 1991

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	1052	17	983
2	1047	18	1038
3	1053	19	1023
4	1048	20	1018
5	1057	21	1020
6	1049	22	516
7	1054	23	0
8	1039	24	0
9	1052	25	0
10	1059	26	0
11	1052	27	0
12	1048	28	0
13	1044	29	0
14	156	30	0
15	707	31	0
16	955		

OPERATING DATA REPORT

DOCKET NO. 50 - 353

3917057670

DATE APRIL 2, 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: MARCH, 1991  
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: MAIN TURB-GEN WAS TRIPPED  
DUE TO LOSS OF ISOPHASE  
BUS COOLING, WITH REACTOR  
AT 20%. TURB-GEN WAS  
TRIPPED AND REACTOR  
SCRAMMED TO START THE  
FIRST REFUELING OUTAGE.

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	744	2,160	10,752
12. NUMBER OF HOURS REACTOR WAS CRITICAL	516.3	1,932.3	9,491.6
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	494.9	1,895.2	9,072.8
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1,604,587	6,164,354	29,022,144
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	523,340	2,032,420	9,555,436
18. NET ELECTRICAL ENERGY GENERATED (MWH)	505,040	1,965,392	9,197,988

OPERATING DATA REPORT (CONTINUED)

DOCKET NO. 50 - 353

3917057670

DATE APRIL 2, 1991

	THIS MONTH	VR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	66.5	87.7	84.4
20. UNIT AVAILABILITY FACTOR	66.5	87.7	84.4
21. UNIT CAPACITY FACTOR (USING MDC NET)	64.3	86.2	81.1
22. UNIT CAPACITY FACTOR (USING DER NET)	64.3	86.2	81.1
23. UNIT FORCED OUTAGE RATE	4.1	1.9	8.8

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):  
REFUELING OUTAGE; MARCH 22, 1991; 75 DAYS

25. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: 06/05/91

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 - 353

3917057670

UNIT NAME LIMERICK UNIT 2

DATE APRIL 2, 1991

REPORT MONTH MARCH, 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)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
14	910301	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 12% TO PERFORM A CONTROL ROD PATTERN ADJUSTMENT AND MAIN TURBINE STOP AND CONTROL VALVE TEST.
15	910308	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 13% TO PERFORM MAIN TURBINE CONTROL VALVE TESTS.
16	910314	F	021.4	A	4	N/A	HA	HTECH	LOAD WAS REDUCED 80% AND THE MAIN TURBINE TRIPPED; THE REACTOR REMAINED AT 20% IN BYPASS DUE TO A LOSS OF COOLING TO THE ISOPHASE BUS.
17	910317	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 20% TO PERFORM A CONTROL ROD PATTERN ADJUSTMENT.
18	910322	S	227.7	C	2	N/A	ZZ	ZZZZZZ	THE TURBINE WAS TRIPPED AND THE REACTOR SCRAMMED FROM 96% TO START THE REFUEL OUTAGE.
			249.1						

(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 REPORT (LER)  
 FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE

# OPERATING DATA REPORT

3917057670

DOCKET NO. 50 - 352

DATE FEBRUARY 4, 1991

Rev. 1

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: JANUARY, 1991
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 TURBINE TRIP  
THIS REPORT PERIOD DUE TO  
AN EHC LEAK AND THERE WERE  
THREE LOAD REDUCTIONS  
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	744	43,824
12. NUMBER OF HOURS REACTOR WAS CRITICAL	744.0	744.0	33,875.6
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	740.5	740.5	33,137.5
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,319,847	2,319,847	98,401,979
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	761,760	761,760	31,807,660
18. NET ELECTRICAL ENERGY GENERATED (MWH)	733,774	733,774	30,411,381

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352

3917057670

UNIT NAME LIMERICK UNIT 1

Rev. 1

DATE FEBRUARY 4, 1991

REPORT MONTH JANUARY, 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)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
1	910101	F	000.0	F	4	N/A	WC	DEMINX	LOAD WAS REDUCED 15% TO PERFORM REGENERATION OF THE CONDENSATE FILTER DEMINERALIZERS.
2	910103	S	000.0	B	4	N/A	CC	VALVEX	LOAD WAS REDUCED 16% TO PERFORM MAIN TURBINE CONTROL VALVE TESTING, CONTROL ROD PATTERN ADJUSTMENTS AND CONDENSATE FILTER DEMINERALIZER REGENERATION.
3	910108	F	000.0	D	4	1-91-001	SD	PENERA	LOAD WAS REDUCED 35% DUE TO LOSS OF SECONDARY CONTAINMENT, WHEN A BLOWOUT PANEL RUPTURED.
4	910108	F	003.5 $\Delta$	A	4	N/A	HA	PIPEXX	LOAD WAS REDUCED TO 24% DUE TO AN EHC LEAK, THE MAIN TURBINE WAS TRIPPED AND THE REACTOR REMAINED AT 18% IN BYPASS.
5	910112	S	000.0	F	4	N/A	RB	CONROD	LOAD WAS REDUCED 20% TO PERFORM A CONTROL ROD PATTERN ADJUSTMENT.
6	910119	S	000.0	A	4	N/A	CC	VALVEX	LOAD WAS REDUCED 14% TO PERFORM MAIN TURBINE CONTROL VALVE TESTING.

(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 REPORT (LER)  
 FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE

3917057670

## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50 - 352

UNIT NAME LIMERICK UNIT 1

Rev. 1

DATE FEBRUARY 4, 1991

REPORT MONTH JANUARY, 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)	REASON (2)	METHOD OF SHUTTING DOWN REACTOR (3)	LICENSEE EVENT REPORT #	SYSTEM CODE (4)	COMPONENT CODE (5)	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
7	910122	F	000.0	A	4	N/A	EA	ELECON	LOAD WAS REDUCED 25% DUE TO A 500KV BREAKER FAILURE COINCIDENT WITH REACTOR FEED PUMP CONTROL PROBLEMS.
8	910123	F	000.0	A	4	N/A	CH	INSTRU	LOAD WAS REDUCED 25% DUE TO A REACTOR FEED PUMP CONTROL PROBLEM.
			3.5						

(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 REPORT (LER)  
 FILE (NUREG-0161)

(5)

EXHIBIT I - SAME SOURCE

# OPERATING DATA REPORT

3917057670

DOCKET NO. 50 - 352

DATE MARCH 5, 1991

Rev. 1

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: FEBRUARY, 1991
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  
REDUCTIONS GREATER THAN  
20% THIS MONTH.

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	672	1,416	44,496
12. NUMBER OF HOURS REACTOR WAS CRITICAL	672.0	1,416.0	34,547.6
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
14. HOURS GENERATOR ON-LINE	672.0	1,412.5	33,809.5
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	2,203,639	4,523,486	100,605,618
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	724,490	1,486,250	32,532,150
18. NET ELECTRICAL ENERGY GENERATED (MWH)	698,763	1,432,537	31,110,144

DATE MARCH 5, 1991

Rev. 1

	THIS MONTH	YR-TO-DATE	CUMULATIVE
19. UNIT SERVICE FACTOR	100.0	99.8	76.0
20. UNIT AVAILABILITY FACTOR	100.0	99.8	76.0
21. UNIT CAPACITY FACTOR (USING MDC NET)	98.6	95.9	66.3
22. UNIT CAPACITY FACTOR (USING DER NET)	98.6	95.9	66.3
23. UNIT FORCED OUTAGE RATE	0.0	0.2	3.4
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	MID APRIL 85	4/13/85
COMMERCIAL OPERATION	1ST QTR 86	2/01/86

DATE 04/12/91 11:34

NRMS DOCUMENT CONTROL FORM

SEQUENCE # 3917057670

NRC MONTHLY OPERATING REPORT  
STATION LGS

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*MGR LIMERICK          LGS/A5-1      01 I**BUSINESS UNIT      CB/52B-7      01 I*
*SR. VP NUC           CB/52C-7      01 I**BUTROVICH, R. M.    LGS-17        01 I*
*VP. LIMERICK         LGS-200       01 I**CORRESP RELEASE PT  LGS/340       01 I*
*VP. NUC ENG/SERVICES CB/63C-1      01 I**DEPT ENVIR RES - PA OUTGOING      01 I*
*VP. PBAPS            PB/SMD-1      01 I**DIR. LICENSING SECT  CB/52A-5      01 I*
*Colter, S.           OUTGOING      01 I**INPO              OUTGOING      01 I*
*MGR. INSURANCE DIV.  MD/S15-3      01 I**LGS ENGR. TECHNICAL LGS/C4-1      01 I*
*MGR. NUC ADMIN DIV   CB-51A-13     01 I**HARTFIELD, R.      OUTGOING      01 I*
*MGR. QA PERF ASSESS  CB/53A-1      01 I**REPORTING SUPVR. -LGS LGS/338       01 I*
*MGR. RATE DIV        MD/S21-1      01 I**SHERMAN, D.        OUTGOING      01 I*
*NRC RES OFFICE       LGS/A2-5      01 I**MGR FUEL MGMT      CB/52A-3      01 I*
*SUPT. ISEG - LGS     LGS/336      01 I**MGR PUBLIC INFO    MD/S13-1      *
*ASST. OPER. ENGR     LGS/A5-1      01 I**YOST, E.           OUTGOING      *
*BHATTACHARYYA, A.    LGS/335      01 I**REGULATORY ENG-LGS  SB3-7         *
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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 04/10/91

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

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