LRAGE DAILY UNIT POWER LEVEL

Docket No.	50-289
Unit	TMI-1
Date	5-3-78
Completed By	D. G. Mitchell
Telephone	(215)929-3601 Ext. 169

April
AVERAGE DAILY POWER LEVEL (MWe-Net)
-5
-5
~6
-6
-5
-6
-5
-5
-6
-6
-6
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-5
-5
-5
-5

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	-6
18	-9
19	-9
20	-9
21	-10
22	-9
23	-9
24	-10
25	-13
26	-32
27	-35
28	-38
29	-39
30	-39
31	

7910310 688

		Date 5-	3-78
	C	Telephone 21	5-929-3601 E
TING STATUS			
Jnit Name: Three Mile Island Unit 1			
Reporting Period: April, 1910			
Licensed Thermal Power (Mwt):	2		
Nameplate Rating (Gross Mwe):	9		
Design Electrical Rating (Net Mme).	0		
Max. Dependable Capacity (Net MWe): 70	2		
If Changes Occur in Capacity Ratings () Give Reasons:	tems No. 3 throu	Ign () Since Last	
	/		
Power Level to which Restricted. If Any	(Net MWe):	2311 Mwt	Small
Reasons for Restrictions, If Any:NR Break LOCA Analysis.	C MUST FEVIEW IC	cter from ban on	
	This Month	Yrto-Date	Cumulativ
	719	2879	32.088
Hours in Reporting Period	719 47	2879	32.088
Hours in Reporting Period No. of Hours Reactor was Critical	<u>719</u> 47	2879 1,871 0	32.088 24,929.3 838.5
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours	<u>719</u> 47 0 0	2879 1,871 0 1824	32.088 24,929.3 838.5 24,421.5
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line	<u>719</u> 47 0 0	2879 1,871 0 1824	32,088 24,929.3 838.5 24,421.5
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours	<u>719</u> 47 0 0 0	2879 1,871 0 1824 0 4,469,915	32.088 24,929.3 838.5 24,421.5 0 59,863,4
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH)	$     \frac{719}{47}     0 $	2879 1,871 0 1824 0 4,469,915 1,491,977	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH)	719       47       0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271	32.088 24,929.3 838.5 24,421.5 0 59,863,45 19,985,77 18,710,67
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH)		2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63,4	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77 18,710,67 76.1
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor	719       47       0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4	32.088 24,929.3 838.5 24,421.5 0 59,863,45 19,985,77 18,710,67 76.1 76.1
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor	719       47       0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 63.4 61.1	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77 18,710,67 76.1 76.1 76.1 73.6
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net)	719       47       0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0	32.088 24,929.3 838.5 24,421.5 0 59,863,45 19,985,77 18.710,67 76.1 76.1 76.1 73.6 71.2
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net)	$     \begin{array}{r}                                     $	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0 0	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77 18,710,67 76.1 76.1 76.1 73.6 71.2 5.2
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0 0 0 d Duration of Eac	32.088 24,929.3 838.5 24,421.5 0 59,863,4 19,985,7 18,710,6 76.1 76.1 76.1 73.6 71.2 5.2 h):
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Morths	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0 0 d Duration of Eac	32.088 24,929.3 838.5 24,421.5 0 59,863,44 19,985,77 18,710,67 76.1 76.1 76.1 73.6 71.2 5.2 h):
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Morths	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0 0 d Duration of Eac	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77 18,710,67 76.1 76.1 76.1 73.6 71.2 5.2 h):
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Morths	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 61.1 59.0 0 d Duration of Eac	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,7 18,710,6 76.1 76.1 76.1 73.6 71.2 5.2 h):
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Morths	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 63.4 61.1 59.0 0 d Duration of Eac	32.088 24,929.3 838.5 24,421.5 0 59,863,49 19,985,77 18,710,67 76.1 76.1 76.1 76.1 73.6 71.2 5.2 h):
Hours in Reporting Period No. of Hours Reactor was Critical Reactor Reserve Shutdown Hours Hours Generator On-Line Unit Reserve Shutdown Hours Gross Thermal Energy Generated (MWH) Gross Elect. Energy Generated (MWH) Net Electrical Energy Generated (MWH) Unit Service Factor Unit Availability Factor Unit Capacity Factor (Using MDC Net) Unit Capacity Factor (Using DER Net) Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Morths If Shut Down at End of Report Period,	719 47 0 0 0 0 0 0 0 0 0 0 0 0 0	2879 1,871 0 1824 0 4,469,915 1,491,977 1,392,271 63.4 61.1 59.0 0 d Duration of Eac f Startup; 	32.088 24,929.3 838.5 24,421.5 0 59,863,45 19,985,77 18.710,67 76.1 76.1 76.1 76.1 73.6 71.2 5.2 h): May 2, 15

COMMERCIAL OPERATION

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1978

Docket	No.	50-289
Unit	Name	TMI-1
	Date	5-3-78
Completed	By	D. G. Mitchell
Tele	phone	215-929-3601 Ext. 169

No.	Date	Typel	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor3	Licensee Event Report Number	System Code 4	Component Code 5		Cause and Corrective Action to Prevent Recurrence	
<b>O</b> 4	4-1-78	S	719	c	1						32
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		P.S.									
•											
	1000					1.1					
l <sub>F:</sub> S:	Forced Scheduled	a 1 21	Reason A-Equi B-Main C-Refu D-Regu E-Oper	; pment tenanc eling lator; ator '	Failure ce or Tes y Restric Fraining	(Explain) st ction & Licensee	Examination	<sup>3</sup> Method: 1-Manual 2-Manual S 3-Automati 4-Other (E	cram. c Scram. Cxplain)	<sup>4</sup> Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)	
		1	F-Admi G-Oper H-Othe	nistro ation r (Exp	ative al Error plain)	(Explain)				<sup>5</sup> Exhibit 1 - Same Source	

## OPERATING SUMMARY

The Unit remained shutdown for the entire month for the 1978 Refueling Outage. The Refueling Outage Milestones which were completed this month are as follows:

04/04/78	Replaced Reactor Vessel Head
04/10/78	Completed Local Leak Rate Testing
04/16/78	Completed Integrated Leak Rate Testing
04/24/78	Vacuum on Main Condenser

## MAINTENANCE SUMMARY

The refueling outage continued throughout the month with breakers being closed on May 2, 1978. The refueling outage work performed included:

- (1) Fuel transfer canal drained and decontaminated
- (2) Upper plenum installed
- (3) Reactor vessel head installed
- (4) New incores installed
- (5) CRDM's and APSR's coupled
- (6) Reactor vessel head tensioned
- (7) Reactor vessel head cables connected
- (8) Reactor vessel head fans installed

Other maintenance activities performed during the refueling outage are outlined below:

Local leak rate testing of containment isolation valves was performed satisfactorily with the tocal leakage below the acceptance level. Integrated leak rate test of the reactor building was performed with satisfactory results.

Eddy current inspection of OTSG "A" and "B" resulted in the tube plugging of one (1) tube in OTSG "A" and one (1) tube in OTSG "B" as preventive measures only.

RC-P-1B #2 and #3 seal inspection was completed with the installation of these seals and the coupling of motor to pump.

RC-P-1C #1, #2, and #3 seals were installed and the motor and pump coupled. Attempts to rotate the pump and motor by hand, after the satisfactory completion of the Integrated Leak Rate test of the reactor building, failed. The RC-P-1C was again disassembled. A bolt (5/8" diameter x 4" long) was found on top of the pump radial bearing. The following precautions were taken: (1) pump shaft was lifted approximately 1" off of backseat to verify that no other foreign material was lodged in the pump cavity, (2) the shaft alley was flushed with demineralized water. The pump was assembled with no problems noted.

The Decay Heat pumps 1A and 1B were disassembled, one at a time, to replace the pump shafts. Disassembly of pumps included:

- Uncoupling of motor from pump
- (2) Disassembly of pump parts
- (3) Inspection and cleanup of pump parts
- (4) Replacement of pump shaft and worn parts
- (5) Reassembly of pump parts
- (6) Modification to pump stuffing box cooling water lines and drain water lines

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- (7) Alignment of motor to pump
- (8) Installation of coupling
- (9) Satisfactory testing of pump

The pump shaft replacement completed an NRC committment.

CA-V-13 was inspected, after an initial leak rate test of the valve passed satisfacorily, to fulfill a NRC committment. The valve was disassembled, valve parts inspected/cleaned, worn parts replaced, and reassembled. After the valve was reassembled, another leak rate test was performed satisfactorily.

The snubber test program was performed satisfactorily during the month. Snubber work included:

Removal, testing, repair/adjustment of bleed rates, installation, and Tech. Spec. surveillance

MU-V-74A&B repacks were performed to complete an NRC committment. Valves were repacked and tested satisfactorily.

AVERAGE DAILY UNIT POWER LEVEL

		1. S.	Docket No. 50-289
			Unit TMI-1
			Date 5-3-78
		Con	mpleted By D. G. Mitchell
			Telephone (215)929-3601 Ext. 16
MONTH	April		
DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	-5	17	-6
2	-5	18	-9
3	-б	19	-9
4	-6	- 20	-9
5	-5	21	-10
6	-6	22	-9
7	-5	23	-9
8	-5	24	-10
9	-6	25	-13
10	-6	26	-32
11	-6	27	-35
12	-5	28	-38
13	-5	29	-39
14	-5	30	-39
15	-5	31	
16	-5		



Date	5-3-78	
eted By.	D. G. Mitchell	
elephone	215-929-3601 Ext.1	

OPERATING STATUS

1.	Unit	Name:	Three	Mile	Island	Unit	1	
				A REAL PROPERTY AND A REAL	the second se	the state of the s		-

- 2. Reporting Period: April, 1978
- 3. Licensed Thermal Power (MWt): 535

871 4. Nameplate Rating (Gross MWe):

- 5. Design Electrical Rating (Net MWe): 819
- 6. Max. Dependable Capacity (Gross MWe) 840
- 7. Max. Dependable Capacity (Net MWe): 792
- 8. If Changes Occur in Capacity Ratings (Items No. 3 through 7) Since Last Report, Give Reasons:

9. Power Level to which Restricted. If Any (Net MWe): 2311 Mut

10. Reasons for Restrictions, If Any: NRC must review letter from B&W on Small Break LOCA Analysis.

11.	Hours in Reporting Period	This Month 719	<u>Yrto-Date</u> 2879	Cumulative 32.088
12.	No. of Hours Reactor was Critical	47	1,871	24,929.3
13.	Reactor Reserve Shutdown Hours	0	0	838.5
14.	Hours Generator On-Line	0	1824	24,421.5
15	Unit Reserve Shutdown Hours	0	0	0
16	Gross Thermal Energy Generated (MWH)	0	4,469,915	59,863,450
17.	Gross Elect. Energy Generated (MWH)	0	1,491,977	19,985,779
18.	Net Electrical Energy Generated (MWH)	0	1,392,271	18,710,670
19.	Unit Service Factor	0	63.4	76.1
20.	Unit Availability Factor	0	63.4	76.1
21.	Unit Capacity Factor (Using MDC Net)	-	61.1	73.6
22.	Unit Capacity Factor (Using DER Net)	-	59.0	71.2
23.	Unit Forced Outage Rate	0	0	5.2
24.	Shutdowns Scheduled Over Next 6 Months	(Type, Date, and	Duration of Each	n):

25. If Shut Down at End of Report Period, Estimated Date of Startup; May 2, 1978 ACHIEVED 6. Units In Test Status (Prior to Commercial Operation): FORECAST INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL C ERATION

## OPERATING SUMMARY

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04/24/78	Vacuum on Main Condenser

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH \_ April 1978

Docket	t No.	50-289					
Unit	Name	'I'MI-1					
	Date	5-3-78					
ompleted	B.'	D. G. Mitchell					
Tele	ephone	215-929-3601 Ext. 169					

No.	Date	Typel	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor3	Licensee Event Report Number	System Code 4	Component Code 5		Cause and Corrective Action to Prevent Recurrence	0 79
•	4-1-78	S	719	C	1						158
<sup>1</sup> F: Forced <sup>2</sup> Reason: S: Scheduled <sup>2</sup> Reason: B-Maintenance or Test <sup>C</sup> -Refueling <sup>D</sup> -Regulatory Restriction <sup>E</sup> -Operator Training & Licensee F F-Administrative <sup>G</sup> -Operational Error (Explain) <sup>H</sup> -Other (Explain)					(Explain) et tion & Licensee (Explain)	Examination	<sup>3</sup> Method; 1-Manual 2-Manual S 3-Automati 4-Other (E	cram. c Scram. Cxplain)	<sup>4</sup> Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161) <sup>5</sup> Exhibit 1 - Same Source		



The refueling outage continued throughout the month with breakers being closed on May 2, 1978. The refueling outage work performed included:

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- (8) Reactor vessel head fans installed

Other maintenance activities performed during the refueling outage are outlined below:

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The Decay Heat pumps 1A and 1B were disassembled, one at a time, to replace the pump shafts. Disassembly of pumps included:

- Uncoupling of motor from pump
   Disassembly of pump parts
- (3) Inspection and cleanup of pump parts
- (4) Replacement of pump shaft and worn parts
- (5) Reassembly of pump parts
- (6) Modification to pump stuffing box cooling water lines and drain water lines

1589 040

- (7) Alignment of motor to pump
- (8) Installation of coupling
- (9) Satisfactory testing of pump

The pump shaft replacement completed an NRC committment.

CA-V-13 was inspected, after an initial leak rate test of the valve passed satisfacorily, to fulfill a NRC committment. The valve was disassembled, valve parts inspected/cleaned, worn parts replaced, and reassembled. After the valve was reassembled, another leak rate test was performed satisfactorily.

The snubber test program was performed satisfactorily during the month. Snubber work included:

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