

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-289  
 Unit TMI-1  
 Date 7-13-78  
 Completed By D. G. Mitchell  
 Telephone (215) 929-3601 Ext. 169

MONTH June 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>764</u>	17	<u>784</u>
2	<u>763</u>	18	<u>774</u>
3	<u>771</u>	19	<u>773</u>
4	<u>776</u>	20	<u>777</u>
5	<u>772</u>	21	<u>732</u>
6	<u>777</u>	22	<u>-21</u>
7	<u>770</u>	23	<u>-13</u>
8	<u>764</u>	24	<u>-10</u>
9	<u>774</u>	25	<u>-10</u>
10	<u>779</u>	26	<u>-10</u>
11	<u>687</u>	27	<u>-24</u>
12	<u>612</u>	28	<u>-33</u>
13	<u>781</u>	29	<u>-33</u>
14	<u>678</u>	30	<u>-19</u>
15	<u>789</u>	31	<u>-</u>
16	<u>787</u>		

1482 100

7910250 *J/9 R*

OPERATING DATA REPORT

cket No. 50-289

Date 7-13-78

Completed By D. G. Mitchell

Telephone (215) 929-3601 Ext. 16

OPERATING STATUS

1. Unit Name: Three Mile Island Unit 1
2. Reporting Period: June 1978
3. Licensed Thermal Power (MWt): 2535
4. Nameplate Rating (Gross MWe): 871
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): \_\_\_\_\_
  10. Reasons for Restrictions, If Any: \_\_\_\_\_

	<u>This Month</u>	<u>Yr.-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	<u>720</u>	<u>4343</u>	<u>33.552</u>
12. No. of Hours Reactor was Critical	<u>513.5</u>	<u>3128.5</u>	<u>26186.8</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>838.5</u>
14. Hours Generator On-Line	<u>506.5</u>	<u>3041.9</u>	<u>25639.4</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1244178</u>	<u>7273422</u>	<u>62666987</u>
17. Gross Elect. Energy Generated (MWH)	<u>405151</u>	<u>2406031</u>	<u>20899833</u>
18. Net Electrical Energy Generated (MWH)	<u>377006</u>	<u>2243822</u>	<u>19562221</u>
19. Unit Service Factor	<u>70.3</u>	<u>70.0</u>	<u>76.4</u>
20. Unit Availability Factor	<u>70.3</u>	<u>70.0</u>	<u>76.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>66.1</u>	<u>65.2</u>	<u>73.6</u>
22. Unit Capacity Factor (Using DER Net)	<u>63.9</u>	<u>63.1</u>	<u>71.2</u>
23. Unit Forced Outage Rate	<u>29.7</u>	<u>6.6</u>	<u>5.7</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

- 
25. If Shut Down at End of Report Period, Estimated Date of Startup: \_\_\_\_\_

26. Units In Test Status (Prior to Commercial Operation):	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

1482 101

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH June

Docket No. 50-289

Unit Name TMI-1

Date 7-13-78

Completed By D. G. Mitchell

Telephone 929-3601 Ext.169 (215)-AC

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report Number	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause and Corrective Action to Prevent Recurrence
7	6-11-78	F	0	A					Repair block orifice on feedwater pump
8	6-14-78	F	0	A		LER #78/20	CRDRVE		Dropped 7 Group 3 control rods due to a shorted diode in the DC Hold Secondary Power Supply
9	6-22-78	F	213.5	A					Failure of the #2 seal on Reactor Coolant Pump 1C

<sup>1</sup>F: Forced  
S: Scheduled

<sup>2</sup>Reason:  
A-Equipment Failure (Explain)  
B-Maintenance or Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training & Licensee Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Other (Explain)

<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

1482 102

## TMI-1 OPERATING SUMMARY

JUNE 1978

### Unit Performance

The Unit operated at essentially 100% power except for the reductions described below.

### Significant Power Reductions

On 6-11-78, the Unit reduced to 95% power for approximately ½ hour to perform the scheduled physics testing. Approximately 7 hours after returning to 100% power on 6-11-78, a severe gasket steam leak developed on FE-7 (FW-PIA Flow Nozzle) forcing the Unit down to 75% power. The gasket was replaced and the Unit escalated back to 100% power in 30 hours.

On 6-14-78 while at 100% power, 7 of the 9 Group 3 Control Rods dropped forcing the Unit down to 30% power. Surveillance testing of the CRDM power supply breakers was being performed at the time and because of an undetected low voltage condition in the redundant power source to the CRDMs, momentary interruption (in accordance with the surveillance procedure) of the normal CRDM holding power caused the rods to drop. The two rods in Group 3 which remained latched were driven to the bottom of the core and then the entire group 3 was withdrawn to their normal 100% withdrawn position. The Unit returned to 100% power within 12 hours after the rods dropped.

On 6-21-78 the Unit was shutdown and cooled down to repair the #2 and #3 seals on the "C" reactor coolant pump. Evaluation of this seal failure indicates incorrect installation of the #2 seal during the 1978 Refueling Outage caused a chip out of the #3 seal to lodge between the #2 seal faces, thus causing the failure. Both the #2 and #3 seals have been replaced. On the heatup from this outage, a RC-V1 (Pressurizer Spray Valve) body to bonnet valve leak was discovered and the heatup delayed in order to make repairs. The Unit was placed back on line June 30, 1978. We achieved 100% power on July 2 and have remained there except for (1) 2 hour and (1) 4 hour period at 90% as required by system.

### Major Safety Related Maintenance

While operating at 100% power on June 21, 1978, RC-PI1 #1 seal leak off went to zero (0) gallons per minute, RC-PI1 #2 seal back pressure alarmed, the Reactor Coolant drain tank level increased, and the makeup tank level decreased. The symptoms listed above indicated a problem with RC-PI1. Preparations were made to take the unit off line and repair RC-PI1. On June 21/22, 1978, the plant was shutdown for repairs on RC-PI1. The Reactor Coolant System was depressurized and drained to permit disassembly of RC-PI1. The repair work included:

- 1) Installation of seal removal rails
- 2) Uncoupling of motor from pump
- 3) Removal/Inspection of the #3 seal and the #2 seal
- 4) Replacement of damaged parts
- 5) Installation of the #2 seal and the #3 seal
- 6) Installation of the motor to pump coupling

1482 103

Inspection of the #2 and the #3 seals revealed that the #3 seal graphite ring was cracked. Chips were located under the #2 seal. These chips prevented the #2 seal from seating properly. Upon completion of the RC-PlC work, the unit was returned to service.

1482 104