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June 13, 1994  
C311-94-2084

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Gentlemen:

Subject: Three Mile Island Nuclear Station, Unit I (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
Monthly Operating Report for May 1994

Enclosed are two copies of the May 1994 Monthly Operating Report for Three Mile Island Nuclear Station, Unit 1.

Sincerely,

T. G. Broughton  
Vice President and Director, TMI

WGH

Attachments

cc: Administrator, Region I  
TMI Senior Resident Inspector

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PDR ADDCK 05000289  
R PDR

OPERATIONS SUMMARY  
May 1994

The plant entered the month operating at approximately 100% power until 0104 on May 30. At that time, power reduction to 50% was initiated in support of efforts to locate and repair main condenser tube leaks. At approximately 0200, power was stabilized at 50% and remained at that level through the end of the month. Unit electrical output averaged approximately 777 MWe during May.

MAJOR SAFETY RELATED MAINTENANCE

The following is a summary of major safety related maintenance items accomplished during the month.

Emergency Diesel Generators EG-Y-1A/B

Emergency Diesel Generators EG-Y-1A and B were removed from service to perform the scheduled annual overhaul. Work performed included instrument calibrations, circuit breaker tests, motor inspections, check and relief valve testing, and the engine overhaul and inspection. The EG-Y-1A engine inspection was completed with no major discrepancies. The engine was test run satisfactorily and returned to service.

Inspection of the EG-Y-1B engine revealed a cracked #8 lower piston which required replacement. Six additional piston pairs were inspected with no other deficiencies found. During the post maintenance run on EG-Y-1B, the generator recorded only 2.82 MWE instead of the required 3.0 MWE. Fuel rack and governor inspections were performed and the engine loaded to 2.95 MWE during the subsequent test run. The engine was determined to be operational and returned to service. Further diesel operation and testing were performed with a gage installed on the engine governor to monitor oil pressure. EG-Y-1B was test run for approximately 4.5 hours while oil pressure, MWE, governor temperature, and limit position indication readings were taken. The test run verified the engine was capable of carrying its required load. Plant Engineering is evaluating the need for governor replacement.

Emergency Diesel Air Start Compressor EG-P-1B

Emergency Diesel Air Start Compressor EG-P-1B was removed from service when it failed to start off the battery. Inspection of the batteries found them maintaining insufficient charge to start the compressor. After new batteries were installed and tested, the compressor was returned to service.

OPERATING DATA REPORT

DOCKET NO. 50-289  
 DATE June 13, 1994  
 COMPLETED BY W G HEYSEK  
 TELEPHONE (717) 948-8191

OPERATING STATUS

- 1. UNIT NAME: THREE MILE ISLAND UNIT 1
- 2. REPORTING PERIOD: MAY 1994
- 3. LICENSED THERMAL POWER: 2568
- 4. NAMEPLATE RATING (GROSS MWe): 871
- 5. DESIGN ELECTRICAL RATING (NET MWe): 819
- 6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWe): 834
- 7. MAXIMUM DEPENDABLE CAPACITY (NET MWe): 786

NOTES:

8. IF CHANGES OCCUR IN (ITEMS 3-7) 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    CUMMULATIVE

11. HOURS IN REPORTING PERIOD	(HRS)	744.0	3623.0	173088.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	3411.2	96637.4
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2283.8
14. HOURS GENERATOR ON-LINE	(HRS)	744.0	3407.9	95512.6
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1848344	8550207	233416859
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	612078	2865181	78551964
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	577775	2694296	73758815
19. UNIT SERVICE FACTOR	(%)	100.0	94.1	55.2
20. UNIT AVAILABILITY FACTOR	(%)	100.0	94.1	55.2
21. UNIT CAPACITY FACTOR	(USING MDC NET)	98.8	94.6	54.2
22. UNIT CAPACITY FACTOR	(USING DER NET)	94.8	90.8	52.0
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	38.8
UNIT FORCED OUTAGE HOURS	(HRS)	0.0	0.0	60759.4

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, & DURATION OF EACH): The plant is scheduled to shutdown on June 1, 1994 for 9 days.

25. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-289  
UNIT TMI-1  
DATE June 13, 1994  
COMPLETED BY W G HEYSEK  
TELEPHONE (717) 948-8191

MONTH: MAY

DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)
1	803	17	809
2	812	18	809
3	812	19	810
4	810	20	810
5	807	21	807
6	807	22	800
7	811	23	794
8	808	24	797
9	805	25	795
10	806	26	798
11	806	27	808
12	805	28	807
13	810	29	803
14	810	30	373
15	801	31	342
16	800		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH May 1994

DOCKET NO. 50-289  
 UNIT NAME TMI-1  
 DATE June 13, 1994  
 COMPLETED BY W. G. Heysek  
 TELEPHONE (717) 948-8191

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report#	System Code <sup>4</sup> & 6	Component Code <sup>5</sup> & 6	Cause & Corrective Action to Prevent Recurrence
94-04	5-30-94	S	0	B	4	None	SG	COND	The unit was reduced to 50% power on May 30 in support of efforts to locate and repair main condenser tube leaks. Sequentially, the "A" and "B" sides of the condenser were removed from service, leak tested and repaired. The power reduction continued into the next month.

1

F Forced  
 S Scheduled

2

Reason  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & Licensing 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 1 same source

6

Actually used exhibits F & H NUREG 0161

REFUELING INFORMATION REQUEST

1. Name of Facility: Three Mile Island Nuclear Station, Unit 1
2. Scheduled date for next refueling shutdown: September 8, 1995
3. Scheduled date for restart following current refueling: NA
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? NO
5. Scheduled date(s) for submitting proposed licensing action and supporting information: NA
6. Important licensing considerations associated with refueling, e.g. new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:
  - a) TMI will use the new Mark B10 fuel assembly in the Cycle 11 reload batch which is an upgraded design of the Mark B9 assembly used in Cycle 10. The Mark B9 provides a leaf-type cruciform assembly holddown spring to replace the previous coil spring designs that has experienced random failures during operation and requires visual inspection each outage. The Mark B10 design meets all current BWFC fuel design criteria and is in use at other B&W 177 FA plants.
7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 601
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies:

The present licensed capacity is 1990. Phase I of the reracking project to increase spent fuel pool storage capacity permits storage of 1342 assemblies. Upon completion of Phase II of the reracking project, the full licensed capacity will be attained.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:

Completion of Phase I of the reracking project permits full core off-load (177 fuel assemblies) through the end of Cycle 14 and on completion of the rerack project full core off-load is assured through the end of the current operating license and beyond.