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June 12, 1991
C311-91-2062

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 May 1991

Enclosed are two copies of the May, 1991 Monthly Operating Report for Three Mile Island Nuclear Station, Unit 1.

Sincerely,

T. G. Broughton
Vice President & Director, TMI-1

WGH:

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector

IE24

OPERATIONS SUMMARY
MAY 1991

TMI Unit 1 operated the entire month of May at ~93% power producing ~780 MWe gross electrical generation. Reactor power continues to be limited by high OTSG level caused by secondary side fouling on the "B" loop. As of May 31, 1991 the turbine had been on-line continuously for 476 days. Plant personnel continue to to closely monitor several off normal conditions. The A Reactor Coolant Pump #1 Seal Leakoff flow has continued to increase. Monitoring and evaluation o this condition are continuing. Primary/Secondary leakrate has increased to ~0.057 gpm but remains below the administrative limit of 6 gph above baseline.

MAJOR SAFETY RELATED MAINTENANCE

During May, the following major Safety Related maintenance items were completed:

Makeup System Seal Injection Filter MU-F-4A

Based on the need to control increasing #1 seal leak-off, Reactor Coolant Pump seal injection filter MU-F-4A was replaced with a different style filter. A new filter housing and 1 micron filter element replaced the old housing which held a 5 micron filter element. Elimination of the larger particles from the seal water supply system by the smaller sized filter is expected to positively effect seal performance. All welds passed required inspections and a hydrostatic test of the modified system piping was satisfactorily completed prior to MU-F-4A being turned over for operation.

Nuclear Service River Water Check Valve NR-V-20B

Nuclear Service River Water Pump discharge check valve NR-V-20B was removed from service and disassembled to determine the cause of the disc sticking in the open position. Upon inspection, it was found that swing arm wear allowed the disc to become cocked and wedge in the open position. After the valve seating surfaces were cleaned, a new disc swing arm was installed and the valve reassembled. Post maintenance testing was satisfactorily completed and the valve returned to service.

OPERATING DATA REPORT

DOCKET NO. 50-289
DATE June 12, 1991
COMPLETED BY W G HEYSEK
TELEPHONE (717) 948-8191

OPERATING STATUS

1. UNIT NAME: THREE MILE ISLAND UNIT 1
2. REPORTING PERIOD: MAY 1991
3. LICENSED THERMAL POWER: 2568
4. NAMEPLATE RATING (GROSS MWe): 871
5. DESIGN ELECTRICAL RATING (NET MWe): 819
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWe): 856
7. MAXIMUM DEPENDABLE CAPACITY (NET MWe): 808

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	146784.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	3623.0	72787.2
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2245.6
14. HOURS GENERATOR ON-LINE	(HRS)	744.0	3623.0	71742.7
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1770687	8620468	175090800
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	581189	2902653	58863557
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	546615	2731319	55220739
19. UNIT SERVICE FACTOR	(%)	100.0	100.0	48.9
20. UNIT AVAILABILITY FACTOR	(%)	100.0	100.0	48.9
21. UNIT CAPACITY FACTOR	(USING MDC NET)	90.9	93.3	47.9
22. UNIT CAPACITY FACTOR	(USING DER NET)	89.7	92.0	45.9
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	45.8

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):
Cycle 9 Refueling Outage, scheduled to begin on 9/27/91, with a nominal 8 to 10 week duration.

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 12, 1991
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	740	17	729
2	745	18	739
3	747	19	747
4	748	20	747
5	744	21	739
6	743	22	732
7	745	23	729
8	744	24	728
9	745	25	723
10	743	26	720
11	742	27	720
12	732	28	718
13	730	29	721
14	734	30	720
15	733	31	717
16	733		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH May 1991

DOCKET NO. 50-289
UNIT NAME TMI-1
DATE June 12, 1991
COMPLETED BY W. G. Heysek
TELEPHONE (717) 948-8191

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report#	System Code 4 & 6	Component Code 5 & 6	Cause & Corrective Action to Prevent Recurrence
						NONE			

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 27, 1991 (9R)**

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.**

   If answer is yes, in general, what will these be?

   If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload (Ref. 10 CFR Section 50.59)? **No.**

   If no such review has taken place, when is it scheduled? 6/91.

5. Scheduled date(s) for submitting proposed licensing action and supporting information:

   None planned.

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:

   GPU Nuclear plans to install four Westinghouse Lead Test Assemblies during the reload of the TMI-1 core for cycle 9 operation. Westinghouse fuel technology will be utilized to the extent possible.

7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) **177** (b) **441**

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 752. Planning to increase licensed capacity through fuel pool reracking is in progress.

9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity:

   1991 is the last refueling discharge which allows full core off-load capacity (177 fuel assemblies).