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September 12, 1995
C311-95-2379

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 August 1995

Enclosed are two copies of the August 1995 Monthly Operating Report for Three Mile Island Nuclear Station, Unit 1.

Sincerely,

J. Knubel
Vice President and Director, TMI

WGH

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector
T95001

190136

IE24

OPERATIONS SUMMARY
August 1995

The plant entered the month operating at 100% power and remained at that level for the entire month. Net unit electrical output averaged approximately 789 MWe during August.

MAJOR SAFETY RELATED MAINTENANCE

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

Fuel Receipt Activities

Fuel receipt activities were completed in August. A total of seventy-two fuel assemblies were received and stored in preparation for refueling.

Boric Acid Pumps CA-P-1A/B

The pulsation dampener diaphragms on Boric Acid Injection Pumps CA-P-1A/B were replaced. Failure of the diaphragms was found to result from heat trace maintaining piping temperature at 286°F instead of 160°F. The temperature variance was caused by improperly wrapping the heat trace such that the temperature control capillary was isolated from the trace. The heat trace was reinstalled and correctly reinsulated.

Sodium Hydroxide Recirculation Pump BS-P-2

Sodium Hydroxide Recirculation Pump BS-P-2 was removed from service due to packing leakage. The pump was repacked with 'Slade' leakless packing and adjusted per the manufacturer's instruction. Packing leakoff is being monitored until "run-in" is complete.

Reactor Building Ventilation Fans AH-E-1A/B/C

During Engineered Safeguards (ES) testing, Reactor Building Ventilation Fan AH-E-1A failed. Troubleshooting revealed failure of fast speed relay 24FX due to age. Both the fast and slow speed (24SX) relays were replaced on AH-E-1A. When the fast speed relay on AH-E-1B failed during subsequent ES testing, the fast speed and slow speed relays on fans AH-E-1B and AH-E-1C were replaced. Results of fan testing following the replacement of the components was satisfactory.

11R Refueling Outage Rampup Work

The following activities were completed in preparation for the 11R Outage:

1. Main Steam and Feedwater Heater Safety Valve testing.
2. Preventative maintenance on Reactor Building hoists MIS-A-40A/B and MIS-A-41.
3. Rebuilding of the Reactor Coolant Pump cartridge seals and performance of flow testing.
4. Desilting the Natural Draft Cooling Tower settling basin.

OPERATING DATA REPORT

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

OPERATING STATUS

1. UNIT NAME: THREE MILE ISLAND UNIT 1
2. REPORTING PERIOD: AUGUST 1995
3. LICENSED THERMAL POWER: 2568
4. NAMEPLATE RATING (GROSS MWe): 872
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	5831.0	184056.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	5831.0	107419.7
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2284.0
14. HOURS GENERATOR ON-LINE	(HRS)	744.0	5831.0	106286.1
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1827389	14873651	260789921
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	621282	4978820	87662074
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	586748	4703555	82358973
19. UNIT SERVICE FACTOR	(%)	100.0	100.0	57.7
20. UNIT AVAILABILITY FACTOR	(%)	100.0	100.0	57.7
21. UNIT CAPACITY FACTOR (USING MDC NET)		100.3	102.6	56.9
22. UNIT CAPACITY FACTOR (USING DER NET)		96.3	98.5	54.6
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	36.3
UNIT FORCED OUTAGE HOURS	(HRS)	0.0	0.0	60761.2

24. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE AND DURATION OF EACH):
Re-fueling outage / September 8, 1995 / 45 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
COMPLETED BY W G HEYSEK
TELEPHONE (717) 948-8191

MONTH: AUGUST

DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)
1	777	17	778
2	766	18	786
3	770	19	793
4	775	20	799
5	783	21	790
6	787	22	793
7	797	23	799
8	800	24	792
9	798	25	802
10	790	26	800
11	790	27	793
12	786	28	795
13	788	29	794
14	782	30	792
15	782	31	789
16	783		

REPORT MONTH August 1995

DOCKET NO. 50-289
UNIT NAME TMI-1
DATE
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 * & *	Component Code * & *	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 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? YES. See 6.c and d below.

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 B10 provides a leaf-type cruciform assembly holddown spring to replace the previous coil spring design which 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.

   b) TMI also will use four new Westinghouse Lead Test Assemblies (LTA) in the Cycle 11 reload batch. Their planned operation is for three consecutive cycles with discharge at end-of-Cycle 13.

      The four W LTAs inserted in Cycle 9 were discharged at EOC-9 due to detection of fuel rod failures caused by grid-to-rod fretting similar to that seen in W Vantage 5H fuel designs. The Cycle 11 LTAs will use the generic W recommended design fix of rotated intermediate spacer grids to minimize flow-induced fuel vibrations and thus eliminate fretting. A prototype LTA was flow-tested to demonstrate the effectiveness of the fix. The production LTA will use ZIRLO fuel rod cladding, guide tubes and instrumentation tube and intermediate grids in place of Zircaloy 4 materials used for the Cycle 9 LTAs. Otherwise, the Cycle 11 LTA design is basically the same as the Cycle 9 design.

      The LTAs will meet current W fuel design criteria while operating within TMI core operating limits. LTA enrichment and core location will ensure that an LTA will not be the lead (hot) assembly at any time during the cycle and will not set any safety or operating limits. The LTAs will remain bounded by existing UFSAR safety analyses results.

   c) GPUN will to place two types of BWFC advanced non-zircaloy cladding in TMI-1 Cycle 11; eight rods each. The two types will be equally distributed in two Mark B10 fuel assemblies; one rod of each material

in each of the four peripheral rows per assembly. These cladding materials are also being irradiated in the McGuire reactor and other international reactors with no negative performance observed. Amendment 194 responding to TSCR 251 was issued on July 24, 1995 for the use of those advanced claddings. An exemption to 10CFR50.44 and 10CFR50.46 and Appendix K was determined by the NRC to be unnecessary.

d) GPUN submitted a revised Technical Specification (TS) Change Request No. 252, Rev 1 to eliminate TS 3.2 requirements and bases from the TS. The change precludes the need for changes to the boron storage volume and boron concentration limits for the boric acid mix tank and the reclaimed boric acid storage tanks to meet the requirements of the Cycle 11 reload evaluation before cycle startup. Issuance was requested on or before September 22, 1995.

7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 673

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 1 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. Phase II is expected to be started in 2002.

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.