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July 13, 1994
C311-94-2103

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 June 1994

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

Sincerely,

T. G. Broughton
T. G. Broughton
Vice President and Director, TMI

WGH

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector
T94001

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PDR ADOCK 05000289
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GPU Nuclear Corporation is a subsidiary of General Public Utilities Corporation

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OPERATIONS SUMMARY

June 1994

The plant entered the month operating at 50% power, continuing the derate in power output which began on May 30 to support of efforts to locate and repair main condenser tube leaks. The unit was shutdown at 1655 on June 1 to perform scheduled control rod drop time testing. Three rods exceeded the 3/4 insertion time Technical Specification (TS) limit of 1.66 seconds. The thermal barriers on those control rods and that of an additional rod which had previously been out of spec were replaced. Upon completion of the work, the four control rods were dropped and the times achieved satisfied the TS requirement. On June 9 the unit resumed power operation, achieving 100% full power operation at approximately 0030 on June 10. It remained at that level through the end of the month. Unit electrical output averaged approximately 731 MWe during June.

MAJOR SAFETY RELATED MAINTENANCE

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

Control Rod Drive Mechanism Repair

The plant was shutdown for the purpose of performing control rod drop time testing. Three rods exceeded the Technical Specification 1.66 second time limit for full out to three quarter full insertion. The plant was cooled down and preparations made to remove the three control rod drive mechanisms (CRDMs) and one additional CRDM that met the 1.66 second requirement during this test but had been slow during previous tests. The effort included removal of the CRDM missile shields, closures, PI tubes, 'A' to 'B' cables, and stators. A shielded work platform was installed to reduce radiological exposure to maintenance personnel. The four CRDMs were fitted with new thermal barriers and new flexicarb gaskets before being reinstalled on the reactor vessel head. The plant was returned to a hot shutdown condition and control rod drop time testing of the four CRDMs with the new thermal barriers was performed. The test results were satisfactory.

Reactor Building Polar Crane MIS-A-1 Repairs

With the plant off line for CRDM repairs, the Reactor Building Polar Crane, MIS-A-1 was removed from service to perform inspection and repairs. Work accomplished included cleaning the trolley span wires, replacement of one collector shoe and an auxiliary hoist gearbox oil seal, and repairing various oil piping leaks. The main hoist (185 Ton) mechanical load brake was found to be out of adjustment and was re-adjusted to the manufacturers specification. A 25% (min.) of rated load (46.25 Tons) test was performed after the adjustment by lifting two CRDM missile shields with a spreader bar (total

weight 57.07 Tons) with the solenoid load brake defeated. The test was performed four times with the load at different heights with satisfactory results. Other work items accomplished included removal of the auxiliary hoist oil recirculation pump and motor. The motor will be rewound during the Plant operating cycle and reinstalled in the 11R outage.

Miscellaneous Outage Work Items

The following is a summary of additional maintenance activities accomplished with the plant off-line for CRDM thermal barrier replacement:

- replaced Limitorque Operator grease in valves FW-V-1A and FW-V-2A.
- adjusted Pressure Switches CO-PS-447A/B/C.
- relocated valve IA-V-2366.
- installed grease relief plugs on LO-P-8A/B thrust bearing housings.
- repaired gasket leaks on RC4ATE1 and RC4BTE1, MS-V-56A operator, MU-V-6A bonnet
- installed a modified declutch lever on FW-V-92A operator.
- performed a 'Ring' test on the Main Generator TG-GN-1.
- replaced the levering device on Circuit Breaker E1-02.
- replaced solenoids on FW-V-17A/B operators.
- repaired indicating lights on valves TD-V-10A and TD-V-12A.
- performed troubleshooting of Incore Thermocouple IM-SPND-48 and determined future Incore replacement is necessary.
- replaced check valve IA-V-1424 and relief valve CO-V-161.
- relocated the tubing unions on RC-V-1011.
- replaced 1L-480V switchgear U-2A left racking rail.
- repaired relief valve EHC-V-FV25.
- repaired 'B' Reactor Coolant Pump Coupling vibration probe RC-VE-77A.
- repaired mechanical seal and casing leaks on GN-P-5B.
- replaced the Reactor Building Equipment Hatch inner door seal.
- repacked valves MU-V-1011, MU-V-1012, MU-V-1035, MU-V-1036, MU-V-1037, MU-V-1038, MU-V-1031, MU-V-1032, MU-V-1033, MU-V-1034, MU-V-6B, and EX-V-11A/B.
- replaced Auxiliary Condenser Expansion Joints CW-XJ-3B, CW-XJ-3D, CW-XJ-4B, and CW-XJ-4D.

OPERATING DATA REPORT

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

OPERATING STATUS

1. UNIT NAME:	THREE MILE ISLAND UNIT 1	NOTES:
2. REPORTING PERIOD:	JUNE 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	

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)	720.0	4343.0	173808.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	534.4	3945.7	97171.9
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	-0.0	2283.8
14. HOURS GENERATOR ON-LINE	(HRS)	527.3	3935.2	96039.9
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1328170	9878377	234745029
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	431121	3296302	78983085
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	402980	3097276	74161795
19. UNIT SERVICE FACTOR	(%)	73.2	90.6	55.3
20. UNIT AVAILABILITY FACTOR	(%)	73.2	90.6	55.3
21. UNIT CAPACITY FACTOR (USING MDC NET)		71.2	90.7	54.3
22. UNIT CAPACITY FACTOR (USING DER NET)		68.3	87.1	52.1
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	38.7
UNIT FORCED OUTAGE HOURS	(HRS)	0.0	0.0	60759.4
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: _____

AVERAGE DAILY UNIT POWER LEVEL

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

MONTH: JUNE

DAY AVERAGE DAILY POWER LEVEL
(MWe--NET)

1	220
2	-25
3	-12
4	-12
5	-11
6	-10
7	-13
8	-24
9	94
10	797
11	800
12	793
13	790
14	784
15	784
16	785

DAY AVERAGE DAILY POWER LEVEL
(MWe--NET)

17	787
18	784
19	783
20	790
21	790
22	793
23	793
24	785
25	789
26	793
27	790
28	793
29	789
30	792
31	NA

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH June 1994

DOCKET NO. 50-289
 UNIT NAME TMI-1
 DATE July 13, 1994
 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 & ⁴	Component Code ⁴ & ⁴	Cause & Corrective Action to Prevent Recurrence
94-04	5-30-94	S	0	B	4	None	SG	COND	The unit continued the power derate to 50% initiated 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.
94-05	6-1-94	S	192.7	B	1	94-004	AA	ROD	The unit shutdown from 50% power to perform scheduled control rod drop time testing. Three rods exceeded the TS specified limit of 1.66 seconds. The thermal barriers on those control rods and that of a rod which had been previously out of spec were replaced. Upon completion of the work, the four control rods were dropped and the times achieved satisfied the TS requirement. On June 9 the unit resumed power operation.

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 I same source

6

Actually used exhibits F & II 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.