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October 13, 1992
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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 September 1992

Enclosed are two copies of the September 1992 Monthly Operating Report for
Three Mile Island Nuclear Station, Unit 1.

Sincerely,

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

WGH

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector

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PDR ADCK 05000289
R PDR

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OPERATIONS SUMMARY
SEPTEMBER 1992

The plant entered the month operating at 50% power producing 372 MWe. The power reduction initiated on August 31 was required to permit main condenser tube and water box cleaning. In late August, fouling caused by Asiatic clams caused higher than normal main condenser inlet water box pressure. Upon completion of the cleaning effort, the unit returned to full power operation on September 6. Power remained at that level until September 18, when an automatic shutdown occurred. The "A" side circulating water pumps tripped, causing a subsequent reduction in main condenser vacuum and resulted in a turbine generator and reactor trip. The circulating water pump trip occurred while personnel were isolating the condenser circulating water inlet water box high pressure trips. The action was taken in an effort to reduce the risk of an unnecessary shutdown caused by gradual increased fouling of the condenser tube sheets by Asiatic clam shells. The plant returned to full power operation on September 21.

During the brief shutdown period, the condenser tube sheets were cleaned and maintenance personnel took advantage of plant conditions to perform tasks that can be completed only while the plant is shutdown.

MAJOR SAFETY RELATED MAINTENANCE

During September, the following major safety related maintenance was performed:

Emergency Diesel Generators EG-Y-1 A and B

Emergency Diesel Generator EG-Y-1A was removed from service to perform the scheduled annual inspection. Various preventative and corrective maintenance tasks were completed as well as a modification replacing the frequency transducer and the frequency, amp, and kilovolt meters. The synchronizing system volt meter and synchronizing generator volt meters were also replaced. All inspections/maintenance tasks were completed as scheduled and upon satisfactory completion of the two hour test run, EG-Y-1A was returned to service.

The scheduled annual inspection of EG-Y-1B was also accomplished during the month. The maintenance tasks and meter replacement modification were performed as scheduled and EG-Y-1B was returned to service upon the satisfactory completion of the two hour test run.

Off-line Safety Related Maintenance Activities

The maintenance items completed while the plant was off-line following the circulating water pump/main condenser inlet water box high pressure trip are listed:

- 1) The trip function leads for the main condenser inlet water box high pressure trip (CW-PS-740A/B/C and CW-PS-741A/B/C) were lifted.
- 2) The Main Condenser water boxes were opened to permit cleaning of the tubesheets and tubes. A tapered plug in the condenser's "A" side was replaced with a mechanical expansion type plug.
- 3) Maintenance on the "A" Main Feedwater Pump included adjustment of the limit switch turbine turning gear, replacement of the turbine low vacuum trip switch and the lube oil transfer valve. The turbine lube oil filter elements were also cleaned.
- 4) Lug connectors associated with CRD Group 5 phase "A", phase "B" and the "A" bus cable and a cable associated with CRD Group 7 in the interface cabinet were modified to correct "Hot Spot" conditions.
- 5) Valve maintenance included adjustment of the torque switch setting on the RC-V-1 limit torque operator, replacement of IA-V-1091, repair of a two to pipe fitting leak on RC-V-1037.
- 6) A leaking fitting was identified and repaired on a snubber on RC-P-1B.
- 7) A Ray-Chem connection on NI-12 was repaired.

OPERATING DATA REPORT

DOCKET NO. 50-289
 DATE October 13, 1992
 COMPLETED BY W G HEYSEK
 TELEPHONE (717) 948-8191

OPERATING STATUS

- 1. UNIT NAME: THREE MILE ISLAND UNIT 1
- 2. REPORTING PERIOD: SEPTEMBER 1992
- 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)	720.0	6575.0	158496.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	681.8	6536.8	87267.8
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	38.2	38.2	2283.8
14. HOURS GENERATOR ON-LINE	(HRS)	679.0	6534.0	82190.2
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1591955	16607359	200476404
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	517272	5489451	67483710
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	484577	5179107	63336432
19. UNIT SERVICE FACTOR	(%)	94.3	95.4	51.9
20. UNIT AVAILABILITY FACTOR	(%)	94.3	99.4	51.9
21. UNIT CAPACITY FACTOR (USING MDC NET)		85.6	100.2	50.8
22. UNIT CAPACITY FACTOR (USING DER NET)		82.2	96.2	48.8
23. UNIT FORCED OUTAGE RATE	(%)	5.7	0.6	42.5
UNIT FORCED OUTAGE HOURS	(HRS)	41.0	41.0	60689.7
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 October 13, 1992
 COMPLETED BY W G HEYSEK
 TELEPHONE (717) 948-8191

MONTH: SEPTEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)	DAY	AVERAGE DAILY POWER LEVEL (MWe-NET)
1	334	17	776
2	340	18	555
3	378	19	-39
4	344	20	160
5	688	21	782
6	791	22	787
7	788	23	804
8	783	24	809
9	783	25	807
10	776	26	800
11	789	27	793
12	797	28	799
13	795	29	804
14	793	30	809
15	788	31	NA
16	779		

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH September 1992

DOCKET NO. 50-289
 UNIT NAME TMI-1
 DATE October 13, 1992
 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
92-01	8/31/92	F	0	B	4	NONE	HF	HTEXCH	Condenser macrofouling (Asiatic clams) led to a 50% power reduction for nearly five days beginning 8/31/92 to accomplish tube and water box cleaning. The subsequent preventative actions include installation of smaller mesh screens in the cooling water system and increased frequency of "clam kill" chemistry treatment of the system. The unit returned to full power operation on 9/6/92.
92-02	9/18/92	F	41.0	B	3	92-002	HF	INSTRU	While isolating the condenser circulating water inlet water box high pressure trips, they actuated, causing three of six circulating water pumps to trip. The resulting low vacuum condition caused an immediate turbine/reactor trip.

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 & 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 17, 1993 (10R)
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? NA

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)?

If no such review has taken place, when is it scheduled?

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:

B&W Fuel Company (BWFC) and GPUN are now performing the fuel cycle design for cycle 10, which is scheduled for startup in October 1993. This design incorporates reload fuel that contains uranium-gadolinia. Use of this type of fuel will require changes to the plant Technical Specifications. These changes will need to be supported by approval of BWFC topical reports on reload design methods revisions that account for the Gd effects in the analyses; i.e., BAW-10180, Rev 1, "NEMO - Nodal Expansion Method Optimized" and BAW-0184P, "GDTACO - Uranium Gadolinium Fuel pin Thermal Analysis Code." To ensure that no delays occur to reload analyses, fuel manufacturing and plant startup schedules, approval of these topicals is needed by April 1, 1993.

7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 521
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 1496. Reracking of spent fuel pool 'A' to attain the licensed capacity 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:

The 9R (1991) refueling discharge was the last to allow full core off-load capacity (177 fuel assemblies). Upon completion of the reracking project, full core off-load is assured through the end of the current operating license and beyond.