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April 11, 1997

6710-97-2149

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 March 1997

Enclosed are two copies of the March 1997 Monthly Operating Report for Three Mile Island Nuclear Station, Unit 1.

Sincerely,

J. W. Langenbach
Vice President and Director, TMI

WGH

cc: Administrator, Region I
TMI Senior Resident Inspector
97001

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9704240015 970331
PDR ADOCK 05000289
R PDR



OPERATIONS SUMMARY

March 1997

The plant entered the month operating at 100% power and remained at that power level for the remainder of the month. Net unit electrical output averaged approximately 820 MWe during March.

MAJOR SAFETY RELATED MAINTENANCE

The major safety related maintenance items completed during the month involved the following equipment:

Auxiliary and Fuel Handling Building Fan AH-E-14C

Repair of the Auxiliary and Fuel Handling Building Ventilation Exhaust Fan AH-E-14C was continued from last month. The work accomplished during March included completion of the fan/motor rigging assembly, installation of the fan blades onto the motor and test running/balancing the fan assembly. Reinstallation of the fan assembly into the duct is in progress and will continue in April.

Screen House Ventilation Fan AH-E-27B

Screen House Ventilation Fan AH-E-27B was removed from service because the unit was becoming noisy. Investigation revealed that the pillow block bearings were worn and required replacement. New bearings were installed and AH-E-27B returned to service.

Reactor Building Fan AH-E-1A

Reactor Building Ventilation Fan AH-E-1A was removed from service after the unit tripped two times. The unit was meggered and bridged from the MCC with unsatisfactory results. A physical inspection was made and 'T' lead connector (A6) to spark plug connection was found burned causing the unit to trip. Connector A6 and the corresponding spark plug was replaced. All other electrical connections were cleaned and tightened. All testing was found to be satisfactory and AH-E-1A returned to service.

OPERATING DATA REPORT

DOCKET NO. 50-289
 DATE April 11, 1997
 COMPLETED BY W. HEYSEK
 TELEPHONE (717) 948-8191

OPERATING STATUS

NOTES:

1. UNIT NAME: THREE MILE ISLAND UNIT 1
2. REPORTING PERIOD: MARCH 1997
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

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	2,160.0	197,929.0
12. NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	2,160.0	120,487.1
13. REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2,283.9
14. HOURS GENERATOR ON LINE	(HRS)	744.0	2,160.0	119,325.3
15. UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED	(MWH)	1,908,743.0	5,541,333.1	294,147,008.5
17. GROSS ELECTRICAL ENERGY GENERATED	(MWH)	645,393.0	1,876,439.0	98,840,985.1
18. NET ELECTRICAL ENERGY GENERATED	(MWH)	610,350.0	1,774,106.0	92,917,770.1
19. UNIT SERVICE FACTOR	(%)	100.0	100.0	60.3
20. UNIT AVAILABILITY FACTOR	(%)	100.0	100.0	60.3
21. UNIT CAPACITY FACTOR	(MDC NET)	104.4	104.5	59.7
22. UNIT CAPACITY FACTOR	(DER NET)	100.2	100.3	57.3
23. UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	33.7
UNIT FORCED OUTAGE HOURS	(HRS)	0.0	0.0	60,761.2

24. SHUTDOWNS SCHEDULED OVER THE NEXT SIX MONTHS (TYPE, DATE AND DURATION OF EACH):

The unit will shutdown for a refueling outage scheduled to begin on September 5, 1997 with a duration of 55 days.

25. IF SHUTDOWN AT THE END OF THE REPORT PERIOD, ESTIMATE DATE OF STARTUP: _____

AVERAGE DAILY UNIT POWER LEVEL

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 TELEPHONE (717) 948-8191

MONTH: MARCH

DAY	AVERAGE DAILY POWER LEVEL (MWe NET)	DAY	AVERAGE DAILY POWER LEVEL (MWe NET)
1	820	16	826
2	814	17	824
3	823	18	820
4	823	19	824
5	821	20	822
6	818	21	820
7	824	22	818
8	821	23	825
9	825	24	825
10	821	25	821
11	820	26	816
12	823	27	814
13	824	28	813
14	821	29	812
15	823	30	813
		31	820

REPORT MONTH March 1997

DOCKET NO. 50-289
 UNIT NAME TMI-1
 DATE April 11, 1997
 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 & ⁵	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/G 0161

REFUELING INFORMATION REQUEST

1. Name of Facility: **Three Mile Island Nuclear Station, Unit 1**
2. Scheduled date for next refueling shutdown: **September 5, 1997**
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. To support GPU Nuclear's independent reload analyses for Cycle 12 as discussed in response to Question 6 below, T.S. 6.9.5.2 will require revision to include references to the GPU Nuclear analysis methods applied to the reload.**
5. Scheduled date(s) for submitting proposed licensing action and supporting information: **A Technical Specification Change Request for the changes as discussed above will be submitted once the GPU Nuclear topicals are approved.**
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) GPU Nuclear Letter 6710-96-2092, dated March 28, 1996 confirmed plans to perform independent reload design evaluations for Cycle 12, the next operation cycle, based on NRC approved methods described in GPU Nuclear Topical Reports TR-091-A (core physics), TR-087-A (core thermal hydraulics), TR-078-A (FSAR safety analyses) and TR-092P-A (design and setpoints methodology) submitted to the NRC. The NRC has approved all of the associated topical reports.

The GPU Nuclear Cycle 12 reload program and results are expected to be available for NRC review in the May to June 1977 time frame.

b) Cycle 12 fuel rod performance calculations (e.g. internal pin pressure) will be performed by Framatome Cogema Fuels Company (FCF) using the approved TACO3 (BAW-10162P-A) and GDTACO (BAW-10184P-A) fuel codes. Results require minor changes to the Mark B9 fuel rod design (lower fill gas prepressure, increased plenum volume). The new design will meet all fuel criteria in the latest approved revision of BAW-10179P-A, Safety Criteria and Methodology for Acceptable Cycle Reload Analyses. Fuel rod cladding corrosion calculations for all Cycle 12 fuel are being done by FCF using the COROS2 methodology now under review by the NRC. Approval is expected soon. The TACO calculations are being done using power histories generated with the GPU Nuclear approved core physics codes CASMO-3/SIMULATE-3 (TR-091A). Use of the SIMULATE-3 power peaking uncertainty of 5.5% with the TACO methodologies, rather than the current FCF NEMO physics code (BAW-10180A, Rev 1) uncertainty of 4.8%, was approved by NRC on October 4, 1995 for application to TMI-1 only.

7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 864
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. 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 and beyond the end of the current operating license.