GPU Nuclear

GPU Nuclear Corporation
Route 441 South
P.O. Box 480
Middletown, Pennsylvania 17057-0480
(717) 944-7621
Writer's Direct Dial Number:

(717) 948-8005

June 12, 1995
C311-95-2269

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 May 1995

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

Sincerely,

T. G. Broughton
Vice President and Director, TMI

WGH

Attachments

cc: Administrator, Region I
TMI Senior Resident Inspector
T95001

IE24
1

OPERATIONS SUMMARY
May 1995

The plant entered the month operating at 100% power and remained at that level throughout the entire month. Net unit electrical output averaged approximately 807 MWe during May.

MAJOR SAFETY RELATED MAINTENANCE

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

Fire Service Hydrant FS-H-22

Fire Service Hydrant FS-H-22 was removed from service because the valve could not be operated. After excavating the hydrant, the valve was disassembled and the stem nut was found to be stripped. Based on the condition of the valve components upon inspection, it was decided to rebuild the valve using a new stem, disc, and stem nut. After reassembly, FS-H-22 was retested, backfilled, and returned to service.

Precoat Filter Relief Valves WDL-V-386/387

Precoat Filter Relief valves WDL-V-386/387 were replaced during the scheduled Precoat Filter System Outage. The valves were replaced because they were socket welded to the system piping and could not be easily removed for periodic set point testing. They were also of an obsolete design with no repair parts available. After the piping was rerouted to accommodate the new flanged valve design, the new valves were installed, leak tested and returned to service with other system components at the completion of the Precoat Filter System Outage.

OPERATING DATA REPORT

DOCKET NO. 50-289
DATE June 12, 1995
COMPLETED BY W G HEYSEK
TELEPHONE (717) 948-8191

OPERATING STATUS

1.	UNIT NAME:	THREE MILE ISLAND UNIT 1
2.	REPORTING PERIOD:	MAY 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	3623.0	181848.0
12.	NUMBER OF HOURS REACTOR WAS CRITICAL	(HRS)	744.0	3623.0	105211.7
13.	REACTOR RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	2284.0
14.	HOURS GENERATOR ON-LINE	(HRS)	744.0	3623.0	104078.1
15.	UNIT RESERVE SHUTDOWN HOURS	(HRS)	0.0	0.0	0.0
16.	GROSS THERMAL ENERGY GENERATED	(MWH)	1908127	9295338	255211609
17.	GROSS ELECTRICAL ENERGY GENERATED	(MWH)	634852	3131794	85815048
18.	NET ELECTRICAL ENERGY GENERATED	(MWH)	599986	2959020	80614438
19.	UNIT SERVICE FACTOR	(%)	100.0	100.0	57.2
20.	UNIT AVAILABILITY FACTOR	(%)	100.0	100.0	57.2
21.	UNIT CAPACITY FACTOR	(USING MDC NET)	102.6	103.9	56.4
22.	UNIT CAPACITY FACTOR	(USING DER NET)	98.5	99.7	54.1
23.	UNIT FORCED OUTAGE RATE	(%)	0.0	0.0	36.8
	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 June 12, 1995
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	814	17	802
2	813	18	798
3	811	19	809
4	811	20	807
5	812	21	805
6	812	22	808
7	813	23	802
8	815	24	789
9	812	25	794
10	811	26	801
11	808	27	805
12	808	28	808
13	809	29	796
14	813	30	803
15	806	31	801
16	807		

REPORT MONTH May 1995

DOCKET NO. 50-289
UNIT NAME TMI-1
DATE June 12, 1995
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 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 plans 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. Use of the cladding requires NRC acceptance of an exemption request regarding 10CFR50.46 which was submitted as Attachment II to Technical Specification Change Request number 251. Exemption approval was requested no later that July 21, 1995 to support final fuel delivery schedules for the 11R Outage.**

d) **GPUN submitted Technical Specification Change Request number 252 to relocate the volume and boron concentration requirements of TS section 2.3 for the chemical addition system boric acid mix tank and reclaimed boric acid storage tanks to the existing TMI-1 Core Operating Limits Report (COLR). The proposed change is consistent with the intent of NRC Generic Letter 88-16 guidance. The change will preclude the need for a TSCR to revise the parameters to meet Cycle 11 specific requirements.**

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 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.