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December 14, 1990  
C311-9J-2153

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 November 1990

Enclosed are two copies of the November, 1990 Monthly Operating Report for  
Three Mile Island Nuclear Station, Unit 1.

Sincerely,

H. D. Bakill  
Vice President & Director, TMI-1

HDH/WGH:

cc: Administrator, Region I  
TMI Senior Resident Inspector  
Attachments

9012210160 901130  
PDR ADOCK 05000289  
R PDR

210073

GPU Nuclear Corporation is a subsidiary of General Public Utilities Corporation

TE24

OPERATIONS SUMMARY  
NOVEMBER 1990

The unit entered the month operating at ~95% power producing ~820 MWe gross electrical generation. The unit continued at this power level until November 28th, when a power reduction was commenced as a result of a degrading low pressure feedwater heater tube leak. Plant power was reduced to 75%. The plant closed the month operating at 75% producing 600 MWe. The "B" high pressure and low pressure feed water heater strings were isolated to support repairs to the "10B" low pressure feedwater heater.

MAJOR SAFETY RELATED MAINTENANCE

During November, the following major safety related maintenance activity was performed:

Control Building Chiller "A" (AH-C-4A)

The Control Building "A" Chiller (AH-C-4A) work performed during November included both the monthly and annual inspection activities. The required preventative and minor corrective maintenance items were completed. A Hot Gas Bypass Valve Kit was installed as a modification to eliminate short cycling of the chillers during low-load operation. The modification was made on the recommendation of the equipment vendor. The chiller was run at low-load conditions to check the operation of the completed Hot Gas Bypass Valve installation and satisfactory results were achieved.

# OPERATING DATA REPORT

DOCKET NO. 50-289  
 DATE 11-30-90  
 COMPLETED BY W.G. Heysek  
 TELEPHONE 717-948-8191

## OPERATING STATUS

		NOTES
1. UNIT NAME:	THREE MILE ISLAND UNIT 1	
2. REPORTING PERIOD:	NOVEMBER, 1990	
3. LICENSED THERMAL POWER (MWT):	2568	
4. NAMEPLATE RATING (GROSS MWE):	871	
5. DESIGN ELECTRICAL RATING (NET MWE):	819	
6. MAXIMUM DEPENDABLE CAPACITY (GROSS MWE):	856	
7. MAXIMUM DEPENDABLE CAPACITY (NET MWE):	808	

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	720.	8016.	142417.
12. NUMBER OF HOURS REACTOR WAS CRITICAL	720.0	6421.6	68420.2
13. REACTOR RESERVE SHUTDOWN HOURS	0.0	242.8	2245.6
14. HOURS GENERATOR ON-LINE	720.0	6379.6	67375.7
15. UNIT RESERVE SHUTDOWN HOURS	0.0	0.0	0.0
16. GROSS THERMAL ENERGY GENERATED (MWH)	1721998.	15142982.	164714877.
17. GROSS ELECTRICAL ENERGY GENERATED (MWH)	578961.	5059535.	55366204.
18. NET ELECTRICAL ENERGY GENERATED (MWH)	545254.	4743349.	51929838.
19. UNIT SERVICE FACTOR	100.0	79.6	47.3
20. UNIT AVAILABILITY FACTOR	100.0	79.6	47.3
21. UNIT CAPACITY FACTOR (USING MDC NET)	93.7	73.2	46.5
22. UNIT CAPACITY FACTOR (USING DER NET)	92.5	72.3	44.5
23. UNIT FORCED OUTAGE RATE	0.0	3.6	47.4

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 11-30-90  
COMPLETED BY W.G. Heysek  
TELEPHONE 777-948-8191

MONTH: NOVEMBER

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
1	768.
2	768.
3	770.
4	772.
5	768.
6	771.
7	779.
8	778.
9	779.
10	775.
11	775.
12	777.
13	777.
14	779.
15	775.
16	769.

DAY	AVERAGE DAILY POWER LEVEL (MWE-NET)
17	774.
18	777.
19	777.
20	773.
21	773.
22	776.
23	775.
24	774.
25	771.
26	768.
27	767.
28	722.
29	555.
30	555.
31	N/A

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH November 1990

DOCKET NO. 50-289  
 UNIT NAME TM1-1  
 DATE 12/15/90  
 COMPLETED BY W. G. Heysek  
 TELEPHONE (717) 948-8191

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down <sup>3</sup> Reactor	Licensee Event Report#	System Code 4 & 6	Component Code 5 & 6	Cause & Corrective Action to Prevent Recurrence
90- 05	11/28 - 11/30/90	F	52.8	B	4	NA	SD	HTEXCH	Power was reduced due to high level in the 10B feedwater heater. The "B" side high/low pressure feedwater strings were isolated to perform repairs. 18 tubes were identified as damaged and 13 of these tubes were found to be complete breaks.

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: October 4, 1991 (9R)
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.

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)? No.

If no such review has taken place, when is it scheduled? 6/1/91.

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: GPU Nuclear intends to install four Westinghouse Lead Test Assemblies during the reload of the TMI-1 core for cycle 9 operation. Westinghouse fuel technology will be utilized to the extent possible.
7. The number of fuel assemblies (a) in the core, and (b) in the spent fuel storage pool: (a) 177 (b) 441
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 752. Planning to increase licensed capacity through fuel pool reracking 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:

1991 is the last refueling discharge which allows full core off-load capacity (177 fuel assemblies).