

MAINE YANKEE NUCLEAR POWER STATION  
MONTHLY STATISTICAL REPORT 80-05  
FOR THE MONTH OF MAY, 1980

8006170696 : R

OPERATING DATA REPORT

DOCKET NO. 50-309  
 DATE 800612  
 COMPLETED BY F. C. Beers  
 TELEPHONE 617-366-9011 X2215

OPERATING STATUS

- 1. Unit Name: Maine Yankee
- 2. Reporting Period: May, 1980
- 3. Licensed Thermal Power (MWt): 2630
- 4. Nameplate Rating (Gross MWe): 864
- 5. Design Electrical Rating (Net MWe): 825
- 6. Maximum Dependable Capacity (Gross MWe): 850
- 7. Maximum Dependable Capacity (Net MWe): 810
- 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

Notes Power level restricted by steam flow through the LP turbines.

- 9. Power Level To Which Restricted, If Any (Net MWe): 864 MWe (~97%)
- 10. Reasons For Restrictions, If Any: See Notes

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744	3,647.00	---
12. Number Of Hours Reactor Was Critical	640.03	2,120.53	53,330.53
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	631.00	1,981.06	51,498.87
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	1,449,738.00	4,187,013.00	109,429,096.00
17. Gross Electrical Energy Generated (MWH)	483,080.00	1,384,450.00	35,957,630.00
18. Net Electrical Energy Generated (MWH)	459,925.00	1,315,200.00	34,142,387.00
19. Unit Service Factor	84.81	54.32	77.71
20. Unit Availability Factor	84.81	54.32	77.71
21. Unit Capacity Factor (Using MDC Net)	76.32	44.52	66.84
22. Unit Capacity Factor (Using DER Net)	74.93	43.71	64.59
23. Unit Forced Outage Rate	3.62	4.45	6.80
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: June 13, 1980
  - 26. Units In Test Status (Prior to Commercial Operation):
- |                      | Forecast | Achieved |
|----------------------|----------|----------|
| INITIAL CRITICALITY  | _____    | _____    |
| INITIAL ELECTRICITY  | _____    | _____    |
| COMMERCIAL OPERATION | _____    | _____    |

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-309

UNIT Maine Yankee

DATE 800612

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MONTH May, 1980

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>713</u>	17	<u>760</u>
2	<u>701</u>	18	<u>760</u>
3	<u>26</u>	19	<u>236</u>
4	<u>0</u>	20	<u>745</u>
5	<u>138</u>	21	<u>748</u>
6	<u>662</u>	22	<u>765</u>
7	<u>808</u>	23	<u>310</u>
8	<u>818</u>	24	<u>485</u>
9	<u>819</u>	25	<u>801</u>
10	<u>819</u>	26	<u>806</u>
11	<u>818</u>	27	<u>675</u>
12	<u>818</u>	28	<u>671</u>
13	<u>817</u>	29	<u>669</u>
14	<u>817</u>	30	<u>403</u>
15	<u>796</u>	31	<u>0</u>
16	<u>758</u>		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

UNIT SHUTDOWNS AND POWER REDUCTIONS

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REPORT MONTH May, 1980

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
L.R. to 75%	4-24-80 thru 5-2-80	S	208.67	H	1	N/A	RC	ZZZZZ	Load reduction due to increasing core D/P. NH <sub>4</sub> OH was added to help remove the apparent buildup of crud on core surfaces.
5-80-5	5-3-80	S	57.58	H	1	N/A	RC	ZZZZZ	Plant shut down and cooldown for core crud cleanup. H <sub>2</sub> O <sub>2</sub> was added to attempt to remove the apparent buildup of crud on core surfaces.
L.R. to 90%	5-15-80 thru 5-19-80	S	84.92	H	1	N/A	RC	ZZZZZ	Load reduction to reduce heat flux in consideration to increasing core D/P.
6-80-5	5-19-80	F	9.25	A	3	N/A	IA	INSTRU-X	Spurious electrical spike resulted in TM/LP trip on RPS channels C & D. Investigation did not reveal cause of spikes.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance of Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

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REPORT MONTH May, 1980

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No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
7-80-5	5-23-80 5-24-80	F	14.47	A	3	N/A	IA	INSTRU-X	Spurious electrical spike results in TM/LP trip on RPS channels C & D. Investigation indicates possible interaction from the annunciator test circuitry.
L.R. to 80%	5-27-80 thru 5-30-80	F	88.30	H	1	N/A	RC	ZZZZZ	Load reduction to reduce heat flux in consideration to increased core D/P.
8-80-5	5-30-80 thru 6-1-80	S	31.20 plus	H	1	N/A	RC	ZZZZZ	Shutdown to accomplish chemical clean of the RCS to remove core crud.

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SUMMARY OF OPERATING EXPERIENCES

At the beginning of the month, the plant was operating at 85% of full load due to an increase in the pressure drop across the core. This increase in D/P is believed to be caused by crud buildup on core surfaces. On May 3rd the plant was shut down and the reactor coolant system cooled down to facilitate core crud cleanup operations by the addition of hydrogen peroxide. Following the cleanup operations the plant was brought back on-line and returned to full power.

On May 19th and again on May 23rd, the plant experienced spurious TM/LP trips due to electrical spikes which affected the temperature inputs to the TM/LP circuitry. The cause of the electrical spikes was traced back to the test circuitry of one section of MCB annunciators. The output spike has been filtered out, but the root cause of the spike generation has not yet been determined. The plant returned to full load following both these trips.

On May 27th a load reduction to 80% was performed in response to the again increasing core D/P. The load reduction was to reduce the heat flux in the core pending further evaluation of the crud buildup situation. The decision was made to place the plant in the hot shutdown condition over the upcoming week-end and perform additional core crud cleanup using a hydrazine solution instead of hydrogen peroxide. By using hydrazine, the plant would not have to be cooled down.

On May 30th the plant was taken off the line and core cleanup operations commenced. At the end of the month, core crud cleanup operations were underway with the plant scheduled to be back on-line on June 1st.