YANKEE ATOMIC NUCLEAR POWER STATION

MONTHLY STATISTICAL REPORT 78-9

FOR THE MONTH OF SEPTEMBER, 1978

## OPERATING DATA REPORT

DOCKET NO. 50-29

DATE 781006

COMPLETED BY R.M. Sjogren

TELEPHONE (617) 366-9011

Ext. 2281

OPERATING STATUS

15. Unit Reserve Shutdown Hours		OF EIGHTH TO STATES								
2. Reporting Period: September, 1978 3. Licensed Thermal Power (MWt): 600 4. Nameplate Rating (Gross Wey: 185 5. Design Electrical Rating (Net MWe): 175 6. Maximum Dependable Capacity (Gross Mwey: 180 7. Maximum Dependable Capacity (Net MWe): 175 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  9. Power Level To Which Restricted, If Any (Net MWe): 599 MWt 10. Reasons For Restrictions, If Any: Maximum Allowable Linear Heat Generation Rate Reduc  11. Hours In Reporting Period 720 6,551 12. Number Of Hours Reactor Was Critical 715,23 6,383,42 130,377.2 12. Number Of Hours Reactor Was Critical 714,08 6,363,06 126,147.1 13. Reactor Reserve Shutdown Hours 714,08 6,363,06 126,147.1 14. Hours Generator On-Line 714,08 6,363,06 126,147.1 15. Unit Reserve Shutdown Hours 0 0 0 0 10 10. Unit Assimate Senerated (MWH) 125,362.1 1,152,920.3 20,643,267.0 17. Gross Thermal Energy Generated (MWH) 17,619.115 1,083,465.915 19,323,967.8 19. Unit Service Factor 100.0 100	1	Unit Name: Yankee Rowe	Notes							
3. Licensed Thermal Power (MWt): 600 4. Nameplate Rating (Gross MWe): 185 5. Design Electrical Rating (Net MWe): 175 6. Maximum Dependable Capacity (Gross MWe): 175 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  9. Power Level To Which Restricted, If Any (Net MWe): 599 MWt 10. Reasons For Restrictions, If Any: Maximum Allowable Linear Heat Generation Rate Reduce  This Month Yr. to-Date Cumulative  This Month Yr. to-Date Cumulative  11. Hours In Reporting Period 720 6,551 — 12. Number of Hours Reactor Was Critical 715.23 6,383.42 130,377.2 13. Reactor Reserve Shutdown Hours 0 0 0 0 14. Hours Generator On-Line 714.08 6,363.06 126,147.1 15. Unit Reserve Shutdown Hours 0 0 0 0 16. Gross Thermal Energy Generated (MWH) 125,362.1 1,152,920.3 20,643,267.0 17. Gross Electrical Energy Generated (MWH) 125,362.1 1,152,920.3 20,643,267.0 18. Net Electrical Energy Generated (MWH) 99.2 97.1 79.4 19. Unit Service Factor 100.0										
4. Nameplate Rating (Gross MWe): 185 5. Design Electrical Rating (Net MWe): 175 6. Maximum Dependable Capacity (Gross MWe): 175 8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  9. Power Level To Which Restricted, If Any (Net MWe): 599 MWt 10. Reasons For Restrictions, If Any: Maximum Allowable Linear Heat Generation Rate Reduc  This Month Yr. to-Date Cumulative  11. Hours In Reporting Period 720 6,551 —— 12. Number Of Hours Reactor Was Critical 715.23 6,383.42 130,377.2 13. Reactor Reserve Shutdown Hours 0 0 0 0 14. Hours Generator On-Line 714.08 6,363.06 126,147.1 15. Unit Reserve Shutdown Hours 0 0 0 0 16. Gross Thermal Energy Generated (MWH) 125,362.1 1,152,920.3 20,643,267.0 17. Gross Electrical Energy Generated (MWH) 125,362.1 1,152,920.3 20,643,267.0 18. Net Electrical Energy Generated (MWH) 799.2 97.1 79.4 19. Unit Service Factor 100.0		(00	(00							
5. Design Electrical Rating (Net MWe): 175  6. Maximum Dependable Capacity (Gross Mwe): 175  8. If Changes Occur in Capacity (Net MWe): 175  9. Power Level To Which Restricted, If Any (Net MWe): 599 MWt  10. Reasons For Restrictions, If Any: Maximum Allowable Linear Heat Generation Rate Reduce      This Month   Yr. to-Date		Licensed Incinial Lower (mins).								
1. Hours In Reporting Period   720   6,551   10.		175		0.777						
7. Maximum Dependable Capacity (Net MWe): 175  8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  9. Power Level To Which Restricted, If Any (Net MWe): 599 MWt  10. Reasons For Restrictions, If Any: Maximum Allowable Linear Heat Generation Rate Reduce  This Month Yrto-Date Cumulative  This Month Yrto-Date Cumulative  11. Hours In Reporting Period 720 6,551  12. Number Of Hours Reactor Was Critical 715.23 6,383.42 130,377.2  12. Number Of Hours Reactor Was Critical 714.08 6,363.06 126,147.1  13. Reactor Reserve Shutdown Hours 0 0 0 0  14. Hours Generator On-Line 714.08 6,363.06 126,147.1  15. Unit Reserve Shutdown Hours 0 0 0 0  16. Gross Thermal Energy Generated (MWH) 419,988.1 3,769,149.4 67,184,788.3  17. Gross Electrical Energy Generated (MWH) 125,362.1 1,152,920.3 20,643,267.0  18. Net Electrical Energy Generated (MWH) 117,619.115 1,083,465.915 19,323,967.8  19. Unit Service Factor 99.2 97.1 79.4  10. Unit Availability Factor 100.0 100.										
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  9. Power Level To Which Restricted, If Any (Net MWe):			175	Marine Marine 1 Nove						
This Month   Yr.to-Date   Cumulative										
This Month   Yrto-Date   Cumulative	_									
11. Hours In Reporting Period   720   6,551		No. of the contract of the con	MWe): 599 MWt m Allowable Lines	ar Heat Generatio	on Rate Reduce					
11. Hours In Reporting Period   720   6,551	-									
12. Number Of Hours Reactor Was Critical			This Month	Yrto-Date	Cumulative					
12. Number Of Hours Reactor Was Critical   0	11	Hours In Reporting Period	720							
13   Reactor Reserve Shutdown Hours   0   0   0     14   Hours Generator On-Line   714.08   6,363.06   126,147.1     15   Unit Reserve Shutdown Hours   0   0   0     16   Gross Thermal Energy Generated (MWH)   419,988.1   3,769,149.4   67,184,788.3     17   Gross Electrical Energy Generated (MWH)   125,362.1   1,152,920.3   20,643,267.0     18   Net Electrical Energy Generated (MWH)   117,619.115   1,083,465.915   19,323,967.8     19   Unit Service Factor   99.2   97.1   79.4     10   Unit Availability Factor   100.0   100.0   -     20   Unit Capacity Factor (Using MDC Net)   93.3   94.5   73.0     21   Unit Capacity Factor (Using DER Net)   93.3   94.5   73.0     22   Unit Capacity Factor (Using DER Net)   82   2.7   1.6     23   Unit Forced Outage Rate   82   2.7   1.6     24   Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):   Refueling October 20, 1978 for a duration of 6 weeks.     25   If Shut Down At End Of Report Period, Estimated Date of Startup:   26   Units In Test Status (Prior to Commercial Operation):   Forecast   Achieved   INITIAL CRITICALITY			715.23	6,383.42						
14. Hours Generator On-Line			0	0						
15. Unit Reserve Shutdown Hours			714.08	6,363.06						
16. Gross Thermal Energy Generated (MWH)   419,988.1   3,769,149.4   67,184,788.3     17. Gross Electrical Energy Generated (MWH)   125,362.1   1,152,920.3   20,643,267.0     18. Net Electrical Energy Generated (MWH)   99.2   97.1   79.4     19. Unit Service Factor   100.0   100.0     10.0   93.3   94.5   73.0     10.0   93.3   94.5		Chicago Charles (Control of Control of Contr	0	0	0					
17. Gross Electrical Energy Generated (MWH)   125,362.1   1,152,920.3   20,643,267.0     18. Net Electrical Energy Generated (MWH)   117,619.115   1,083,465.915   19,323,967.8     19. Unit Service Factor   99.2   97.1   79.4     20. Unit Availability Factor   100.0   100.0     21. Unit Capacity Factor (Using MDC Net)   93.3   94.5   73.0     22. Unit Capacity Factor (Using DER Net)   93.3   94.5   73.0     23. Unit Forced Outage Rate   .82   2.7   1.6     24. Shutdowns Scheduled Over Next 6 Months (Type. Date, and Duration of Each):   Refueling October 20, 1978 for a duration of 6 weeks.     25. If Shut Down At End Of Report Period, Estimated Date of Startup:   26. Units In Test Status (Prior to Commercial Operation):   Forecast   Achieved			419,988.1	3,769,149.4	67.184.788.31					
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20. Unit Availability Factor 21. Unit Capacity Factor (Using MDC Net) 22. Unit Capacity Factor (Using DER Net) 23. Unit Forced Outage Rate 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  Refueling October 20, 1978 for a duration of 6 weeks.  25. If Shut Down At End Of Report Period, Estimated Date of Startup: 26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY  100.0 93.3 94.5 73.0 24.5 73.0 25. If Shut Down At End Of Report Period, Estimated Date of Startup: 26. Units In Test Status (Prior to Commercial Operation):  Forecast Achieved			99.2	97.1	Belleville and the second state of the second					
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23. Unit Forced Outage Rate 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling October 20, 1978 for a duration of 6 weeks.  25. If Shut Down At End Of Report Period, Estimated Date of Startup: 26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY  1.6  2.7  1.6  2.7  1.6  2.7  1.6  2.7  1.6  2.7  1.6  2.7  1.6  2.7  2.7  2.7  2.7  2.7  2.7  2.7  2			93.3	94.5	73.0					
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling October 20, 1978 for a duration of 6 weeks.  25. If Shut Down At End Of Report Period, Estimated Date of Startup: 26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY			NAME OF TAXABLE PARTY.	-	Personal State of the Contract					
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25. If Shut Down At End Of Report Period, Estimated Date of Startup: 26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY  INITIAL CRITICALITY	4.									
26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY  Forecast  Achieved		northern december 20, 2000								
26. Units In Test Status (Prior to Commercial Operation):  INITIAL CRITICALITY  Forecast  Achieved	15	If Shut Down At End Of Report Period Estim	ated Date of Startun							
INITIAL CRITICALITY			Forecast	Achieved						
					40.00					
INITIAL ELECTRICITY										
INITIAL ELECTRICITY  COMMERCIAL OPERATION			NI.	-	7 17					

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-29			
UNIT	YANKEE ROWE			
DATE	781006			
COMPLETED BY	R.M.Sjogren			
TELEPHONE	(617)366-9011x2281			

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)		DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	168.6		17	167.9
2	168.4		18	168.1
3	159.2		19	168.0
4	168.1		20	168.1
5	168.2		21	167.9
6	168.3		22	167.8
7	168.2		23	167.7
8	168.3		24	167.2
9	168.0		25	167.2
10	167.6		26	166.8
11	167.6		27	166.5
12	168.7		28	167.1
13	96.7		29	167.9
14	130.3	J	30	167.8
15	150.1		31	
16	168.4			

# 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

REPORT MONTH September, 1978

50-29 DOCKET NO. YANKEE ROWE UNIT NAME DATE 781006 COMPLETED BY R M Singren (617)366-9011x2281 TELEPHONE

No.	Date	Type1	Duration (Hours)	Reason 2	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
11	9/13/78	F	5.92	н	3	None	N/A	N/A	Spurious reactor protection system scram signal. No corrective action possible.

F: Forced S: Scheduled

Reason:

A-Equipment Failure (Explain) 8-Maintenance of Test

C-Refueling

D-Regulatory Restriction E-Operator Training & License Examination

F-Administrative

G-Operational Error (Explain) H-Other (Explain)

Method:

I-Manual

2-Manual Scram.

3-Automatic Scrain.

4-Other (Explain)

Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

Exhibit 1 - Same Source

(9/77)

DOCKET NO. 50-29

UNIT YANKEE ROWE

DATE 781006

COMPLETED BY R. M. Sjogren

TELEPHONE (617) 366-9011x2281

REPORT MONTH September, 1978

### SUMMARY OF OPERATING EXPERIENCES

- 9/3 At 0300 hours a load reduction for throttle and control valve exercises was commenced. At 0530 hours, with plant load at 130 MWe, the throttle valve exercise was begun. At 0630 hours the throttle valve exercise was completed and plant load escalation was started. At 1145 hours the plant was operating at full load.
- 9/13 At 1135 hours a reactor scram and turbine trip occurred, from 179.5 MWe, as a result of a spurious scram signal. At 1621 hours the reactor was brought critical and at 1730 hours, the generator was phased to the grid.
- 9/14 At 0900 hours, with the Group "C" control rods at 75 inches, a 24-hour hold was begun to allow Xenon equilibrium.
- 9/15 At 0900 hours plant load escalation was commenced. At 1800 hours the plant was operating at the maximum allowable power (600 MWt).
- 9/25 At 1600 hours the maximum allowable power level was reduced to 599 MWt due to the reduction in the allowable linear heat generation rate.