

VERMONT YANKEE NUCLEAR POWER STATION

MONTHLY STATISTICAL REPORT 81-12

FOR THE MONTH OF DECEMBER, 1981

8211100027 820112
PDR ADOCK 05000271
R PDR

OPERATING DATA REPORT

DOCKET NO. 50-271
 DATE 820112
 COMPLETED BY F. J. Burger
 TELEPHONE (802)257-7711
 Ext 137

OPERATING STATUS

1. Unit Name: Vermont Yankee
2. Reporting Period: December 1981
3. Licensed Thermal Power(MWt): 1593
4. Nameplate Rating(Gross MWe): 540
5. Design Electrical Rating(Net MWe): 514(oc) 504 (cc)
6. Maximum Dependable Capacity(Gross MWe): 535
7. Maximum Dependable Capacity(Net MWe): 504

Notes

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):

10. Reasons For Restrictions, If Any:

	This Month	Yr-to-Date	Cumulative
11. Hours In Reporting Period	744.00	8760.00	-----
12. Number Of Hours Reactor Was Critical	651.42	7542.37	65,078.15
13. Reactor Reserve Shutdown Hours	0.00	0.00	0.00
14. Hours Generator On-Line	576.73	7409.61	63,011.19
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated(MWH)	806,141.50	11,312,243.50	89,915,760.50
17. Gross Electrical Energy Generated(MWH)	267,155.00	3,759,124.00	29,871,971.00
18. Net Electrical Energy Generated(MWH)	256,031.00	3,568,707.00	28,316,286.00
19. Unit Service Factor	77.52	84.58	77.47
20. Unit Availability Factor	77.52	84.58	77.47
21. Unit Capacity Factor(Using MDC Net)	68.28	80.83	69.07
22. Unit Capacity Factor(Using DER Net)	66.95	79.26	67.73
23. Unit Forced Outage Rate	15.95	2.78	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:

26. Units In Test Status(Prior to Commercial Operation):

Forecast

Achieved

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

AVERAGE DAILY UNIT POWER LEVEL

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UNIT Vermont Yankee

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MONTH December 1981

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1.	<u>0</u>
2.	<u>0</u>
3.	<u>28</u>
4.	<u>61</u>
5.	<u>29</u>
6.	<u>0</u>
7.	<u>82</u>
8.	<u>295</u>
9.	<u>352</u>
10.	<u>396</u>
11.	<u>481</u>
12.	<u>517</u>
13.	<u>511</u>
14.	<u>518</u>
15.	<u>518</u>
16.	<u>518</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17.	<u>518</u>
18.	<u>518</u>
19.	<u>519</u>
20.	<u>497</u>
21.	<u>519</u>
22.	<u>520</u>
23.	<u>520</u>
24.	<u>482</u>
25.	<u>520</u>
26.	<u>482</u>
27.	<u>0</u>
28.	<u>70</u>
29.	<u>365</u>
30.	<u>398</u>
31.	<u>488</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

REPORT MONTH December 1981DOCKET NO 50-271UNIT NAME Vermont YankeeDATE 820112COMPLETED BY F. J. BurgerTELEPHONE (802) 257-7711 ext 137

1 of 2

No.	Date	Typed 1	Duration (Hours)	Reason 2	Method of Shutting Down Reactor 3	License Event Report#	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
81-19 (cont)	811016	S	57.80	C	N/A	N/A	ZZ	ZZ	Refueling outage in progress
81-20	811203	F	17.38	A	N/A	N/A	HA	TURBIN	Turbine rotor out of balance. Rebalanced rotor.
81-21	811205	F	56.90	A	2	N/A	CB	PUMPXX	Shutdown to replace degraded reactor recirculation pump seal.
81-22	811209	S	0	B	4 (Power Reduct)	N/A	RB	CONROD	Power reduction for control rod pattern adjustment.
81-23	811220	S	0	B	4 (Power Reduct)	N/A	HA RB	TURBIN CONROD	Power reduction for main turbine and control rod surveillance

¹ F: Forced
S: Scheduled

² Reason:
A-Equipment Failure (Explain)
B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License 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 I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December 1981

DOCKET NO 50-271

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No.	Date	Typed ¹	Duration (Hours)	Reason ²	Method of Shutting ³ Down Reactor	License Event Report#	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
81-24	811224	F	0	A	4 (Power Reduct)	N/A	HG	DEMINX	Power reduction to precoat the "C" condensate demineralizer. Spare demineralizer already out of service
81-25	811226	F	35.18	A	3	N/A	HB	MECFUN	Main turbine pressure regulator failed resulting in a high flux scram. Failure caused by sticky mechanical linkage which was cleaned, lubricated, and adjusted.
81-26	811230	S	0	B	4 (Power Reduct)	N/A	RB CB	CONROD PUMPXX	Power reduction for a control rod pattern adjustment and maintenance of the "B" reactor recirculation pump speed control circuit.

¹ F: Forced
S: Scheduled

² Reason:
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B-Maintenance or Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
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SAFETY RELATED MAINTENANCE

1 of 3

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
UPS System Alarms	Corrective MR 79-0873	N/A	Incorrect Wiring at Annunciator Panel	Wrong Alarms Annuciate	Corrected Wiring Errors
CAD Isolation Valve FSO 109-75-D1	Corrective MR 81-0853	N/A	Dirt	Valve Would Not Shut	Disassembled and Cleaned Valve
Recirc Sample Valve, FCU-40, Hanger	Corrective MR 81-1217	N/A	Loose Clevis	Hanger Not Sup- porting Valve	Tightened and Anchored Clevis to Valve
RWCU Valve V12-32B	Corrective MR 81-1456	N/A	Worn Packing	Leakage	Tightened Packing
RWCU Regenerative Heat Ex- change E-15-1C Inter Connecting Piping Construction Leak Off	Corrective MR 81-1458	N/A	Unknown	Leakage	Plugged Leak Off
RHR Heat Exchanger E-14-1B	Corrective MR 81-1459	N/A	Worn Gasket	Leakage	Replaced Gasket
Core Spray Valve V14-11A Motor Operator Breaker	Corrective MR 81-1460	LER 81-35/3L	Faulty Breaker	Breaker Tripped During Operation	Replaced Breaker
Drywell Pressure Indicator PI-16-19-12A	Corrective MR 81-1468	N/A	Failed Amplifier	Erroneous Reading	Replaced Amplifier

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SAFETY RELATED MAINTENANCE

2

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
Reactor Recirculation Pump P18-1A	Corrective MR 81-1470	N/A	Faulty Mechanical Seal	High Seal Temp- erature	Rebuilt seal
Drywell Personnel Access Hatch Outer Door	Corrective MR 81-1475	N/A	Failed Gasket	Air Leakage	Replaced Gasket
Reactor Building Personnel Air Lock Outer Door	Corrective MR 81-1485	N/A	Loose Seal	Air Leakage	Adjusted Seal,Calked Door Casing
Service Water Pump P7-1B	Corrective MR 81-1490	N/A	Worn Packing	Leakage	Adjusted packing.
Service Water Pump P7-1D	Corrective MR 81-1491	N/A	Worn Packing	Leakage	Adjusted packing
Reactor Recirc Valves V2-304A-C and V2-98A, Main Steam Valves V60-72B-F and H	Corrective MR 81-1498	N/A	Worn Packing	Leakage	Adjusted packing
RHR Hanger H-192 Bolting	Corrective MR 81-1521	N/A	Construction	Worn threads, Minimal Thread Engagement	Replaced Bolting
RHR Service Water Valve V70-89B	Corrective MR 81-1530	N/A	Worn Packing	Leakage	Adjusted Packing

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SAFETY RELATED MAINTENANCE

3

EQUIPMENT	NATURE OF MAINTENANCE	LER OR OUTAGE NUMBER	MALFUNCTION		CORRECTIVE ACTION
			CAUSE	RESULT	
SLC Valve V11-25	Corrective MR 81-1572	N/A	Corroded Seat	Valve Leakage	Lapped Seating Surfaces
Service Water Pump P7-1C	Corrective MR 81-1582	N/A	Worn Packing	Leakage	Adjusted Packing
RWCU Valve V12-19B	Corrective MR 81-1604	N/A	Worn Packing	Leakage	Adjusted Packing
RHR Service Water Pump P8-1A Circuit Breaker	Corrective MR 81-1612	LER 81-37/3L	Worn Bushings	Breaker Trips Upon Pump Start	Replaced Bushings

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REPORT MONTH December 1981

SUMMARY OF OPERATING EXPERIENCES

Highlights

Vermont Yankee operated at 68.02% of rated thermal power for the month. Gross electrical generation was 267,155 MWh_e or 66.50% of design electrical capacity.

Operating Summary

The following is a chronological description of plant operations including other pertinent items of interest for the month:

- 12/1/81 At the beginning of the reporting period the plant was shut down for refueling.
At 1949 hours a reactor start up was initiated.
- 12/3/81 At 2010 hours, after completing main turbine overspeed testing, the main turbine was shut down for rotor balancing.
- 12/4/81 At 1333 hours the main turbine was phased into the grid.
- 12/5/81 At 0220 hours a reactor shutdown was initiated to replace a degraded seal in the "A" reactor recirculation pump.
- 12/7/81 At 0152 hours a reactor start up and power ascension was initiated
- 12/9/81 At 1300 hours a power reduction was initiated for a control rod pattern adjustment.
At 1730 hours a return to full power initiated.
- 12/20/81 At 0200 hours a power reduction was initiated for control rod and main turbine surveillance testing.
At 0600 hours a return to full power was initiated.
- 12/24/81 At 0100 hours a power reduction was initiated to remove the "C" condensate demineralizer from service for precoating. The spare demineralizer was already out of service.
At 0610 hours a return to full power was initiated.
- 12/26/81 At 1944 hours the plant was shutdown by a reactor high flux scram caused by a faulty main turbine pressure regulator.
- 12/27/81 At 2035 hours a reactor start up and return to full power was initiated.

Operating Summary (continued)

- 12/30/81 At 0900 hours a power reduction was initiated for a control rod pattern adjustment and maintenance of the "B" reactor recirculation pump speed control circuit.
At 1030 hours a return to full power was initiated.
- 12/31/81 At the end of the reporting period the plant was operating at 99.7% of rated thermal power.