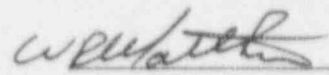


VIRGINIA POWER COMPANY
NORTH ANNA POWER STATION
MONTHLY OPERATING REPORT

MONTH: July YEAR: 1997

Approved:


Station Manager

9708190298 970811
PDR ADDCK 05000338
R PDR

OPERATING DATA REPORT

DOCKET NO.: 50-336
 DATE: August 5, 1997
 CONTACT: W. R. Matthews
 PHONE: (540) 894-2101

OPERATING STATUS

1. Unit Name: North Anna 1
 2. Reporting Period: July 1997
 3. Licensed Thermal Power (MWT): 2,893
 4. Nameplate Rating (Gross MWe): 994
 5. Design Electrical Rating (Net MWe): 907
 6. Maximum Dependable Capacity (Gross MWe): 940
 7. Maximum Dependable Capacity (Net MWe): 893

8. If changes occur to Capacity Ratings (Items 3 thru 7) since last report, give reasons: N/A

9. Power level to which restricted, if any (Net MWe): N/A

10. Reasons for restrictions, if any: N/A

	This Month	Y-t-D	Cumulative
11. Hours in Reporting Period	744.0	5,087.0	167,507.0
12. Number of Hours Reactor was Critical	744.0	4,364.8	129,582.0
13. Reactor Reserve Shutdown Hours	0.0	49.0	7,095.0
14. Hours Generator On-Line	744.0	4,320.6	126,494.4
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2,105,831.9	12,336,623.9	339,917,160.5
17. Gross Electrical Energy Generated (MWH)	691,960.0	4,046,309.0	148,688,995.0
18. Net Electrical Energy Generated (MWH)	656,401.0	3,847,191.0	105,833,845.0
19. Unit Service Factor	100.0%	84.9%	75.5%
20. Unit Availability Factor	100.0%	84.9%	75.5%
21. Unit Capacity Factor (using MDC Net)	98.8%	84.7%	70.7%
22. Unit Capacity Factor (using DER Net)	97.2%	83.4%	69.7%
23. Forced Outage Rate	0.0%	0.0%	8.6%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, Duration): N/A

25. If Shutdown at end of Report Period, estimated time of Start: N/A

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-338
 Unit: NA-1
 Date: August 5, 1997
 Contact: W. R. Matthews
 Phone: (540) 894-2101

MONTH: July 1997

DAY AVERAGE DAILY POWER
LEVEL (MWe-Net)

1	<u>879</u>
2	<u>882</u>
3	<u>883</u>
4	<u>884</u>
5	<u>883</u>
6	<u>883</u>
7	<u>883</u>
8	<u>883</u>
9	<u>882</u>
10	<u>882</u>
11	<u>792</u>
12	<u>902</u>
13	<u>902</u>
14	<u>901</u>
15	<u>900</u>
16	<u>900</u>

DAY AVERAGE DAILY POWER
LEVEL (MWe-Net)

17	<u>900</u>
18	<u>898</u>
19	<u>847</u>
20	<u>786</u>
21	<u>815</u>
22	<u>895</u>
23	<u>898</u>
24	<u>901</u>
25	<u>900</u>
26	<u>899</u>
27	<u>898</u>
28	<u>898</u>
29	<u>898</u>
30	<u>898</u>
31	<u>898</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.

NORTH ANNA POWER STATION

UNIT NO.: 1
MONTH: July

SUMMARY OF OPERATING EXPERIENCE

Page 1 of 3

Listed below in chronological sequence is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

<u>Date</u>	<u>Time</u>	<u>Data</u>
July 01, 1997	0000	Began month in Mode 1 at 97% power, 923 Mwe.
July 01, 1997	1310	Commence throttling Moisture Separator Re-heater steam supply valves for data collection, power at 96.5%, 921 Mwe.
	1355	Secured MSR throttling, unit stable at 96% power, 915 MWe.
	1510	Commence ramp up to 100% power after MSR data collection.
	1558	Suspended ramp at 98% power, 930 Mwe for Nuclear Instrument (NI) calibration.
	1602	Commenced ramp up to 100% power after NI calibration.
	1645	Unit stable at 100% power, 950 Mwe.
	1808	Commenced ramping down to 97% power due to governor valve vibration.
	1830	Unit stable at 97.5% power, 930 Mwe.
July 11, 1997	0310	Commence ramp down to 62% power for governor valve control maintenance.
	0541	Stopped ramp at 54% power, 592 Mwe.
	0936	Commence ramp up to 850 Mwe for Turbine Valve Freedom Test (TVFT).
	1220	Commence TVFT.

NORTH ANNA POWER STATION

UNIT NO.: 1
MONTH: July

SUMMARY OF OPERATING EXPERIENCE

Page 2 of 3

	1300	Completed TVFT, ramping to 97.5% power for NI calibration.
	1402	Unit at 97% power for NI calibration.
	1542	Commence ramp up to 100% power.
	1650	Unit at 100% power, 947 Mwe.
July 18, 1997	0815	Load increase to 101.6% power, 953 MWe, due to Valve Position Limiter failure. Ramped unit down to 100% power.
	0830	Unit stable at 99.6% power, 942 Mwe.
	1110	Commence raising power to 100% power.
	1131	Unit power at 100% power, 943 Mwe.
July 19, 1997	1320	Unit lost 105 Mwe due to failure of the turbine Valve Position Limiter, 90% power.
	1444	Unit stable at 89% power, 835 Mwe.
July 21, 1997	1611	Commence ramp up to 98% power. Initial power 86%, 826 Mwe.
	1640	90% calorimetric complete, ramping up to 98% power.
	1740	Holding ramp at 98% power, 930 Mwe per management administrative hold.
	2310	Power restriction lifted, ramping to 100% power from 98%, 920 Mwe.
	2324	Stopped ramp at 99.5%, 940 Mwe due to 10 megawatt swing causing reactor power to swing about 0.5% power. Swing attributed to Valve Position Limiter problem.
July 23, 1997	1330	Load increased to 100.5 % power when turbine control was switched to TURBINE MANUAL.

UNIT NO.: 1
MONTH: July

SUMMARY OF OPERATING EXPERIENCE

Page 3 of 3

	1450	Calorimetric complete. Unit at 100% power, 948 Mwe. July 24, 1997
	1356	Removed turbine control from the Valve Position Limiter and transferred control to IMP OUT mode to maintain the governor valves in a more stable region. Unit at 100% power, 949 Mwe.
July 31, 1937	2400	Ended month in Mode 1 at 100% power, 949 MWe.

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-338

Report Month July Unit Name: NA-1

Year: 1997 Date: August 5, 1997

Contact: W. R. Matthews

* No entries this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: July 1997

DOCKET NO.: 50-338

UNIT NAME: NA-1

DATE: August 5, 1997

CONTACT: W. R. Matthews

PHONE: (540) 894-2101

No.	Date	1 Type	2 Duration (hrs)	3 Reason	4 Method of Shutting Down Reactor	5 Licensee Event Report #	6 System Code	7 Component Code	8 Cause & Corrective Action to Prevent Recurrence

* No entries this month.

1: Type	2: Reason	3: Method	4:
F=Forced	A=Equipment Failure (explain)	1=Manual	Exhibit F - Instruction
S=Scheduled	B=Maintenance or Test	2=Manual Scram	for preparation of Data
	C=Refueling	3=Automatic Scram	Entry Sheets for Licens
	D=Regulatory Restriction	4=Continuations	Event Report (LER) File
	E=Operator Training & License Examination	5=Load Reduction	(NUREG-0161)
	F=Administrative	9=Other	
	G=Operational Error		5:
	H=Other (explain)		Exhibit H - Same Source

OPERATING DATA REPORT

DOCKET NO.: 50-339
 DATE: August 5, 1997
 CONTACT: W. E. Matthews
 PHONE: (540) 894-2101

OPERATING STATUS

1. Unit Name: North Anna 2
 2. Reporting Period: July 1997
 3. Licensed Thermal Power (MWT): 2,891
 4. Nameplate Rating (Gross MWe): 979
 5. Design Electrical Rating (Net MWe): 907
 6. Maximum Dependable Capacity (Gross MWe): 944
 7. Maximum Dependable Capacity (Net MWe): 897

8. If changes occur to Capacity Ratings (Items 3 thru 7) since last report, give reasons: N/A

9. Power level to which restricted, if any (Net MWe): N/A

10. Reasons for restrictions, if any: N/A

	This Month	Y-t-D	Cumulative
11. Hours in Reporting Period	744.0	5,087.0	145,775.0
12. Number of Hours Reactor was Critical	744.0	5,087.0	122,042.2
13. Reactor Reserve Shutdown Hours	0.0	0.0	7,162.2
14. Hours Generator On-Line	744.0	5,087.0	120,871.2
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2,151,784.1	14,709,884.4	330,291,802.4
17. Gross Electrical Energy Generated (MWH)	698,371.0	4,809,897.0	108,079,132.0
18. Net Electrical Energy Generated (MWH)	663,472.0	4,578,937.0	103,272,119.0
19. Unit Service Factor	100.0%	100.0%	82.9%
20. Unit Availability Factor	100.0%	100.0%	82.9%
21. Unit Capacity Factor (using MDC Net)	99.4%	100.3%	78.8%
22. Unit Capacity Factor (using DER Net)	98.3%	99.2%	78.1%
23. Forced Outage Rate	0.0%	0.0%	5.2%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, Duration of Each): N/A

25. If Shutdown at end of Report Period, estimated time of Start: N/A

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

	Forecast	Achieved
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-339
 Unit: NA-2
 Date: August 5, 1997
 Contact: W. R. Matthews
 Phone: (540) 894-2101

MONTH: July 1997

DAY AVERAGE DAILY POWER
LEVEL (MWe-Net)

1	<u>893</u>
2	<u>893</u>
3	<u>892</u>
4	<u>892</u>
5	<u>891</u>
6	<u>892</u>
7	<u>892</u>
8	<u>892</u>
9	<u>891</u>
10	<u>891</u>
11	<u>893</u>
12	<u>893</u>
13	<u>892</u>
14	<u>891</u>
15	<u>890</u>
16	<u>890</u>

DAY AVERAGE DAILY POWER
LEVEL (MWe-Net)

17	<u>890</u>
18	<u>889</u>
19	<u>889</u>
20	<u>890</u>
21	<u>890</u>
22	<u>890</u>
23	<u>892</u>
24	<u>893</u>
25	<u>894</u>
26	<u>895</u>
27	<u>893</u>
28	<u>893</u>
29	<u>892</u>
30	<u>893</u>
31	<u>893</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.

NORTH ANNA POWER STATION

UNIT NO.: 2
MONTH: July

SUMMARY OF OPERATING EXPERIENCE

Page 1 of 1

Listed below in chronological sequence is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

<u>Date</u>	<u>Time</u>	<u>Data</u>
July 01, 1997	0000	Began month in Mode 1 at 100% power, 938 MWe.
July 06, 1997	0045	Commence ramp down for Turbine Valve Freedom Test (TVFT). Unit at 100% power, 936 MWe.
	0107	Unit stable at 93% power, 885 Mwe.
	0124	Commence unit ramp up following TVFT. Unit at 93% power, 885 Mwe.
	0147	Unit stable at 100% power, 938 Mwe.
July 31, 1997	2400	Ended month in Mode 1 at 100% power, 938 MWe.

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-339

Report Month July Unit Name: NA-2

Year: 1997 Date: August 5, 1997

Contact: W. R. Matthews

* No entries this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: July 1997

DOCKET NO.: 50-339
UNIT NAME: NA-2
DATE: August 5, 1997
CONTACT: W. R. Matthews
PHONE: (540) 894-2101

No.	Date	1 Type	2 Duration (hrs)	3 Reason	4 Method of Shutting Down Reactor	5 Licensee Event Report #	6 System Code	7 Component Code	8 Cause & Corrective Action to Prevent Recurrence

* No entries this month.

1: Type	2: Reason	3: Method	4:
F=Forced	A=Equipment Failure (explain)	1=Manual	Exhibit F - Instruction
S=Scheduled	B=Maintenance or Test	2=Manual Scram	for preparation of Data
	C=Refueling	3=Automatic Scram	Entry Sheets for Licens
	D=Regulatory Restriction	4=Continuations	Event Report (LER) File
	E=Operator Training & License Examination	5=Load Reduction	(NUREG-0161)
	F=Administrative	9=Other	
	G=Operational Error		5:
	H=Other (explain)		Exhibit H - Same Source