

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH April YEAR 1982

APPROVED:


STATION MANAGER

8206010 562

OPERATING DATA REPORT

DOCKET NO. 50-338
 DATE 05-05-82
 COMPLETED BY L.L. Rogers
 TELEPHONE (703) 894-5151 X2510

OPERATING STATUS

Notes

1. Unit Name: North Anna 1
2. Reporting Period: April 1982
3. Licensed Thermal Power (Mwt): 2775
4. Nameplate Rating (Gross MWe): 947
5. Design Electrical Rating (Net MWe): 907
6. Maximum Dependable Capacity (Gross MWe): 918
7. Maximum Dependable Capacity (Net MWe): 865
8. If Changes Occur in Capacity Ratings (Items No. 3 thru 7) Since Last Report, Give Reasons:

NA

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>719</u>	<u>2,879</u>	<u>34,200</u>
12. Number of Hours Reactor Was Critical	<u>701.9</u>	<u>2,840.4</u>	<u>26,668.7</u>
13. Reactor Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
14. Hours Generator On-Line	<u>692.2</u>	<u>2,818.4</u>	<u>26,171.4</u>
15. Unit Reserve Shutdown Hours	<u>0</u>	<u>0</u>	<u>0</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,721,526</u>	<u>7,477,775</u>	<u>67,792,027</u>
17. Gross Electrical Energy Generated (MWH)	<u>547,329</u>	<u>2,392,514</u>	<u>21,638,036</u>
18. Net Electrical Energy Generated (MWH)	<u>514,717</u>	<u>2,261,084</u>	<u>20,384,000</u>
19. Unit Service Factor	<u>96.3</u>	<u>97.9</u>	<u>76.5</u>
20. Unit Availability Factor	<u>96.3</u>	<u>97.9</u>	<u>76.5</u>
21. Unit Capacity Factor (Using MDC Net)	<u>82.8</u>	<u>90.8</u>	<u>68.9</u>
22. Unit Capacity Factor (Using DER Net)	<u>78.9</u>	<u>86.6</u>	<u>65.7</u>
23. Unit Forced Outage Rate	<u>3.7</u>	<u>1.9</u>	<u>4.5</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage 05-21-82 thru 07-03-82

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 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 05-07-82

COMPLETED BY L.L. Rogers

TELEPHONE 703-894-5151X2510

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>545</u>	17	<u>289</u>
2	<u>160</u>	18	<u>521</u>
3	<u>413</u>	19	<u>427</u>
4	<u>781</u>	20	<u>380</u>
5	<u>834</u>	21	<u>716</u>
6	<u>836</u>	22	<u>835</u>
7	<u>837</u>	23	<u>834</u>
8	<u>837</u>	24	<u>831</u>
9	<u>839</u>	25	<u>835</u>
10	<u>836</u>	26	<u>837</u>
11	<u>838</u>	27	<u>839</u>
12	<u>839</u>	28	<u>839</u>
13	<u>839</u>	29	<u>838</u>
14	<u>841</u>	30	<u>812</u>
15	<u>844</u>	31	<u></u>
16	<u>530</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

DOCKET NO. 50-338
 UNIT NAME North Anna 1
 DATE 05-07-82
 COMPLETED BY L. L. ROGERS
 TELEPHONE (703) 894-5151 X2510

REPORT MONTH APRIL

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause & Corrective Action to Prevent Recurrence
82-05	820401	F	13.5	G	3	NA	NA	NA	Reactor trip due to voltage spike on N-41 with N-44 in trip.
82-06	820416	F	8.5	G	2	NA	NA	NA	Manual Reactor trip due to loss of circulating water pumps.
82-07	820419	F	4.8	A	3	NA	NA	NA	Reactor trip due to voltage spike while adjusting N-43 with N-44 in trip.

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-Continuations
 5-Load Reduction
 9-Other

⁴
 Exhibit F - Instructions
 for Preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File
 (NUREG-0161)

⁵
 Exhibit H - Same Source

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-338REPORT MONTH April UNIT NAME N-1YEAR 1982 DATE 05-07-82COMPLETED BY L. L. ROGERS

- 82-05 (G) (3) At 1538 on April 1, 1982 with the unit at 100% power the reactor automatically tripped, followed by an automatic turbine trip. The trip was recorded as being high flux rate trip and high flux setpoint trip at the same time. The reactor trip was caused by a short to ground while performing maintenance on instrumentation for the steam generator support heaters. A voltage dip caused by the short carried through the vital bus to the Nuclear Instrumentation System Channel 1 (N-41) control and instrumentation power causing the high flux rate and high flux rate and high flux setpoint trips. Since channel N-44 was already placed in trip due to inoperable detectors, the 2 of 4 logic was completed for the automatic reactor trip.
- 82-06 (G) (2) At 1451 on April 16, 1982 with the unit at 100% power a manually initiated turbine trip/reactor trip occurred. The unit was tripped due to power being lost to the 1G bus which supplies power to the Unit 1 circulating water pumps. The circulating water pumps lost power because breaker 15G10 failed to auto transfer, cross-tying with the 2G bus. The undervoltage spike was caused by closing breaker 25A9 ("A" HP heater drain pump on unit 2) with ground straps installed.
- 82-07 (A) (3) At 0934 on April 19, 1982 with the unit at 100% power the reactor automatically tripped, followed by high flux rate trip and high flux setpoint trip at the same time. The reactor trip was caused by faulty operation of the N43 power range instrument gain adjustment potentiometer. When a Reactor Operator repositioned the potentiometer based on the results of a secondary calorimetric, a spike was generated which caused an N43 high positive rate trip and the high flux setpoint trip. Since N44 was still in the trip condition, the 2 of 4 logic was completed for the automatic reactor trip.

OPERATING DATA REPORT

DOCKET NO. 50-339
 DATE 05-07-82
 COMPLETED BY L.L. Rogers
 TELEPHONE (703) 894-5151 X2510

OPERATING STATUS

Notes

1. Unit Name: North Anna 2
2. Reporting Period: April 1982
3. Licensed Thermal Power (Mwt): 2775
4. Nameplate Rating (Gross MWe): 947
5. Design Electrical Rating (Net MWe): 907
6. Maximum Dependable Capacity (Gross MWe): 939
7. Maximum Dependable Capacity (Net MWe): 890
8. If Changes Occur in Capacity Ratings (Items No. 3 thru 7) Since Last Report, Give Reasons:

NA

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	719	2,879	12,071
12. Number of Hours Reactor Was Critical	0	1,481.7	8,896.5
13. Reactor Reserve Shutdown Hours	0	46.4	1,679.6
14. Hours Generator On-Line	0	1,437.1	8,667.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	3,727,204	22,510,045
17. Gross Electrical Energy Generated (MWH)	0	1,233,691	7,570,923
18. Net Electrical Energy Generated (MWH)	0	1,171,660	7,174,076
19. Unit Service Factor	0	66.5	76.3
20. Unit Availability Factor	0	66.5	76.3
21. Unit Capacity Factor (Using MDC Net)	0	60.9	71.0
22. Unit Capacity Factor (Using DER Net)	0	59.8	69.7
23. Unit Forced Outage Rate	0	7.1	16.9

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

Fall Maintenance Outage 10-15-82 thru 10-25-82

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 05-18-82
26. Units In Test Status (Prior to Commercial Operation):

Forecast Achi ved

INITIAL CRITICALITY _____
 INITIAL ELECTRICITY _____
 COMMERCIAL OPERATION _____

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-339
 UNIT NAME North Anna 2
 DATE 05-07-82
 COMPLETED BY L. L. ROGERS
 TELEPHONE (703) 894-5151 X2510

REPORT MONTH April

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code 4	Component Code 5	Cause & Corrective Action to Prevent Recurrence
82-09			719		The scheduled refueling outage continues.				

<p>¹ F: Forced S: Scheduled</p>	<p>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)</p>	<p>³ Method: 1-Manual 2-Manual Scram. 3-Automatic Scram 4-Continuations 5-Load Reduction 9-Other</p>	<p>⁴ Exhibit F - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)</p> <p>⁵ Exhibit H - Same Source</p>
--	--	--	---

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-339

UNIT NA-2

DATE 05-07-82

COMPLETED BY L.L. Rogers

TELEPHONE 703-894-5151X2510

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>0</u>	17	<u>0</u>
2	<u>0</u>	18	<u>0</u>
3	<u>0</u>	19	<u>0</u>
4	<u>0</u>	20	<u>0</u>
5	<u>0</u>	21	<u>0</u>
6	<u>0</u>	22	<u>0</u>
7	<u>0</u>	23	<u>0</u>
8	<u>0</u>	24	<u>0</u>
9	<u>0</u>	25	<u>0</u>
10	<u>0</u>	26	<u>0</u>
11	<u>0</u>	27	<u>0</u>
12	<u>0</u>	28	<u>0</u>
13	<u>0</u>	29	<u>0</u>
14	<u>0</u>	30	<u>0</u>
15	<u>0</u>	31	<u>0</u>
16	<u>0</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.