

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH FEBRUARY YEAR 1982

APPROVED:


STATION MANAGER

8204150517 820315
PDR ADOCK 05000338
R PDR

OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 03-03-82
COMPLETED BY L.L. Rogers
TELEPHONE (703) 894-5151 X2104

OPERATING STATUS

Notes

1. Unit Name: North Anna 1
2. Reporting Period: February 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	672	1,416	32,737
12. Number of Hours Reactor Was Critical	658.2	1,394.5	25,222.8
13. Reactor Reserve Shutdown Hours	13.8	21.5	256.4
14. Hours Generator On-Line	651.6	1,382.2	24,735.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,757,129	3,694,212	64,008,464
17. Gross Electrical Energy Generated (MWH)	558,265	1,183,660	20,429,182
18. Net Electrical Energy Generated (MWH)	528,688	1,120,303	19,243,219
19. Unit Service Factor	97.0	97.6	75.6
20. Unit Availability Factor	97.0	97.6	75.6
21. Unit Capacity Factor (Using MDC Net)	91.0	91.5	68.0
22. Unit Capacity Factor (Using DER Net)	86.7	87.2	64.8
23. Unit Forced Outage Rate	2.1	1.9	4.6
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage 05-21-82 thru 07-02-82

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 03-03-82

COMPLETED BY L.L. Rogers

TELEPHONE 703-894-5151X2104

MONTH February

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>804</u>	17	<u>842</u>
2	<u>851</u>	18	<u>842</u>
3	<u>848</u>	19	<u>843</u>
4	<u>845</u>	20	<u>842</u>
5	<u>844</u>	21	<u>841</u>
6	<u>845</u>	22	<u>844</u>
7	<u>833</u>	23	<u>191</u>
8	<u>836</u>	24	<u>216</u>
9	<u>840</u>	25	<u>609</u>
10	<u>840</u>	26	<u>846</u>
11	<u>843</u>	27	<u>846</u>
12	<u>840</u>	28	<u>844</u>
13	<u>840</u>	29	<u></u>
14	<u>840</u>	30	<u></u>
15	<u>841</u>	31	<u></u>
16	<u>841</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	03-03-82
COMPLETED BY	L. L. ROGERS
TELEPHONE	(703) 894-5151 X2104

REPORT MONTH FEBRUARY

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
82-03	820217	S	NA	H	1	NA	NA	NA	Ramped unit down to ~ 67% power for load following.
82-04	820223	F	20.4	A	1	NA	NA	NA	Ramped unit down to 35% power and manually tripped the turbine/reactor due to tube rupture in gland steam condenser. The tube was plugged prior to returning unit to service.

1	2	3
F: Forced	Reason:	Method:
S: Scheduled	A-Equipment Failure (Explain)	1-Manual
	B-Maintenance or Test	2-Manual Scram.
	C-Refueling	3-Automatic Scram
	D-Regulatory Restriction	4-Continuations
	E-Operator Training & License Examination	5-Load Reduction
	F-Administrative	9-Other
	G-Operational Error (Explain)	
	H-Other (Explain)	

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

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Exhibit H - Same Source

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-338

REPORT MONTH FEBRUARY UNIT NAME NA-1

YEAR 1982 DATE 03-03-82

COMPLETED BY L. L. ROGERS

- 82-03 (H) (1) Ramped unit down to \approx 67% power for load following per System Operator to accomodate system load demand.
- 82-04 (A) (1) At 0450 on February 22, 1982 with the unit at full power, commenced ramp down due to loss of condensate caused by tube rupture in gland steam condenser. At 0541 a manual turbine/reactor trip was initiated due to unstable secondary conditions. The ruptured tube was plugged prior to returning the unit to service.

OPERATING DATA REPORT

DOCKET NO. 50-339
DATE 03-03-82
COMPLETED BY L.L. Rogers
TELEPHONE (703) 894-5151 X2104

OPERATING STATUS

Notes

1. Unit Name: North Anna 2
2. Reporting Period: February 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	672	1416	10,608
12. Number of Hours Reactor Was Critical	659.6	1336.8	8,751.6
13. Reactor Reserve Shutdown Hours	11.8	46.4	1,679.6
14. Hours Generator On-Line	652.3	1292.4	8,522.5
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,734,705	3,335,796	22,118,637
17. Gross Electrical Energy Generated (MWH)	565,804	1,101,608	7,438,840
18. Net Electrical Energy Generated (MWH)	537,295	1,045,949	7,048,365
19. Unit Service Factor	97.1	91.3	80.3
20. Unit Availability Factor	97.1	91.3	80.3
21. Unit Capacity Factor (Using MDC Net)	89.8	83.0	74.7
22. Unit Capacity Factor (Using DER Net)	88.2	81.4	73.3
23. Unit Forced Outage Rate	2.9	7.8	17.2
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage 03-05-82 thru 05-14-82

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

DOCKET NO. 50-339

UNIT NA-2

DATE 03-03-82

COMPLETED BY L.L. Rogers

TELEPHONE 703-894-5151X2104

MONTH February

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>651</u>	17	<u>889</u>
2	<u>258</u>	18	<u>888</u>
3	<u>887</u>	19	<u>890</u>
4	<u>891</u>	20	<u>890</u>
5	<u>889</u>	21	<u>214</u>
6	<u>890</u>	22	<u>232</u>
7	<u>786</u>	23	<u>744</u>
8	<u>890</u>	24	<u>878</u>
9	<u>891</u>	25	<u>879</u>
10	<u>891</u>	26	<u>878</u>
11	<u>892</u>	27	<u>883</u>
12	<u>889</u>	28	<u>861</u>
13	<u>891</u>	29	<u></u>
14	<u>889</u>	30	<u></u>
15	<u>890</u>	31	<u></u>
16	<u>890</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. 50-339

UNIT NAME North Anna 2

DATE 03-03-82

COMPLETED BY L. L. ROGERS

TELEPHONE (703) 894-5151 X2104

REPORT MONTH February

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
82-06	820201	F	NA	F	5	NA	NA	NA	Ramped unit down to 30% power due to steam generator cation conductivity out of specification.
82-07	820207	F	NA	F	5	NA	NA	NA	Ramped unit down to 30% power due to steam generator cation conductivity out of specification.
82-08	820221	F	19.7	A	3	NA	NA	NA	Reactor trip on nuclear power high negative rate. Dropped rod while trouble shooting rod urgent failure alarm.

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. 50-339

REPORT MONTH FEBRUARY UNIT NAME NA-2

YEAR 1982 DATE 03-03-82

COMPLETED BY L. L. ROGERS

82-08 (G) (3) On February 21, 1982 with the Unit at ~ 95% ready to increase power following Turbine Valve Freedom Test, "Rod Control Urgent Failure" alarm was received after one step movement on "D" bank group 1. Reactor Trip on high negative rate due to dropped rod during replacement of Rod Control System multiplexing card which had been determined to be the cause of the "Rod Control Urgent Failure" alarm.