

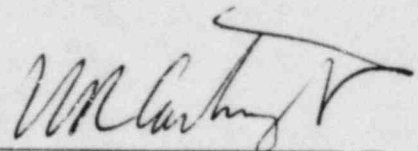
VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH November YEAR 1982

APPROVED:



STATION MANAGER

OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 12-01-82
COMPLETED BY G. D. Schmitendorf
TELEPHONE (703) 894-5151 X2502

OPERATING STATUS

Notes

1. Unit Name: North Anna 1
2. Reporting Period: November 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	720	8016	39,337
12. Number of Hours Reactor Was Critical	93.3	3,223.2	27,051.5
13. Reactor Reserve Shutdown Hours	260	281.5	516.4
14. Hours Generator On-Line	0	3,022.9	26,375.9
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	0	7,941,328	68,255,580
17. Gross Electrical Energy Generated (MWH)	0	2,537,888	21,783,410
18. Net Electrical Energy Generated (MWH)	0	2,396,973	20,519,889
19. Unit Service Factor	0	37.7	67.1
20. Unit Availability Factor	0	37.7	67.1
21. Unit Capacity Factor (Using MDC Net)	0	34.6	60.3
22. Unit Capacity Factor (Using DER Net)	0	33.0	57.5
23. Unit Forced Outage Rate	0	7.3	5.1
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Spring Maintenance Outage 03-21-83 thru 03-31-83

25. If Shut Down At End Of Report Period, Estimated Date of Startup: 12-04-82
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 12-01-82

COMPLETED BY G. Schmitendorf

TELEPHONE 703-894-5151X2502

MONTH November

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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-338

UNIT NAME North Anna 1

DATE 12-01-82

COMPLETED BY G. D. Schmitendorf

TELEPHONE (703) 894-5151 X2502

REPORT MONTH November

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
82-10		S	720	The scheduled refueling outage continues.					

¹F: Forced
S: Scheduled²

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-Other⁴Exhibit F - Instructions
for Preparation of Data
Entry Sheets for Licensee
Event Report (LER) File
(NUREG-0161)⁵

Exhibit H - Same Source

Page 1 of 1

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-338

REPORT MONTH November UNIT NAME NA-1

YEAR 1982 DATE 12-01-82

COMPLETED BY G. D. Schmitendorf

NO ENTRIES THIS MONTH

OPERATING DATA REPORT

DOCKET NO. 50-339
DATE 12-01-82
COMPLETED BY G. D. Schmitendorf
TELEPHONE (703) 894-5151 X2502

OPERATING STATUS

Notes

1. Unit Name: North Anna 2
2. Reporting Period: November 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	720	8,016	17,208
12. Number of Hours Reactor Was Critical	713.3	4,344.3	11,759.1
13. Reactor Reserve Shutdown Hours	0	388.6	2,021.8
14. Hours Generator On-Line	705.6	4,249.3	11,708.7
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,901,368	10,950,658	29,733,499
17. Gross Electrical Energy Generated (MWH)	625,900	3,629,710	9,938,942
18. Net Electrical Energy Generated (MWH)	592,375	3,431,563	9,433,979
19. Unit Service Factor	98.0	53.0	68.0
20. Unit Availability Factor	98.0	53.0	68.0
21. Unit Capacity Factor (Using MDC Net)	92.4	48.1	61.6
22. Unit Capacity Factor (Using DER Net)	90.7	47.2	60.4
23. Unit Forced Outage Rate	2.0	16.2	21.0
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Refueling Outage 04-01-83 thru 05-15-83

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 12-01-82

COMPLETED BY G. Schmitendorf

TELEPHONE 703-894-5151X2502

MONTH November

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>876</u>	17	<u>860</u>
2	<u>876</u>	18	<u>862</u>
3	<u>875</u>	19	<u>861</u>
4	<u>875</u>	20	<u>858</u>
5	<u>874</u>	21	<u>860</u>
6	<u>871</u>	22	<u>861</u>
7	<u>875</u>	23	<u>861</u>
8	<u>875</u>	24	<u>860</u>
9	<u>875</u>	25	<u>862</u>
10	<u>874</u>	26	<u>863</u>
11	<u>874</u>	27	<u>861</u>
12	<u>284</u>	28	<u>862</u>
13	<u>550</u>	29	<u>864</u>
14	<u>864</u>	30	<u>443</u>
15	<u>864</u>	31	<u></u>
16	<u>863</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 12-01-82
 COMPLETED BY G. D. Schmitendorf
 TELEPHONE (703) 894-5151 X2502

REPORT MONTH November

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
82-19	821112	F	14.4	H	3	NA	NA	NA	The cause of the Reactor Trip was determined to be a spurious actuation of "A" Reactor Trip Breaker.
82-20	821130	F	0	A	9	NA	NA	NA	Low Hotwell Level caused cavitation of Condensate Pumps followed by loss of "A" Main Feedwater Pump on Low Suction Pressure. Following initial power reduction due to loss of feed pump, continued reduction to 30 percent power for Chemistry cleanup and repair of condenser tube leak.

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. 50-339REPORT MONTH November UNIT NAME NA-2YEAR 1982 DATE 12-01-82COMPLETED BY G. D. Schmitendorf

- 82-19 (H) (3) At 0726 on November 12, 1982 with the unit at 100% power the reactor tripped resulting in a turbine generator trip. The first out annunciator was "Reactor Trip-Turbine Trip", which from the sequence of events recorded occurred as a result of "A" Reactor Trip Breaker opening. Recovery following the trip was normal as the plant was stabilized in Hot Standby (Mode 3) condition within minutes after the trip occurred. Investigation into the cause for "A" Reactor Trip Breaker opening, including a functional check of the Solid State Protection System, uncovered no failures. Therefore, the cause of the trip is considered to be a spurious actuation of "A" Reactor Trip Breaker.
- 82-20 (A) (9) At 0707 on November 30, 1982 with the unit at 100% with "A" condenser waterbox just returned to service and "C" condenser waterbox just having been removed from service as per the Chemistry Department due to suspected condenser tube leaks, the "B" Hotwell level went low due to unusually slow equalization from the "A" Hotwell following the removal of "C" waterbox from service. This caused the Condensate Pumps to cavitate. The "B" condensate Pump auto started. The feed pumps suction pressure was still low causing "A" Main Feedwater Pump to trip. The Turbine was run back in manual to 94% power and the "A" Main Feedwater Pump restarted with adequate suction pressure now available. The unit was stabilized at 94% following the transient. A unit rampdown was commenced due to excessive Cation Conductivity in the Steam Generators. The unit was stabilized at 30% power for secondary chemistry hold. The month ends with the unit at 30% power with further investigation into suspected condenser tube leaks in progress while in the secondary chemistry hold.