

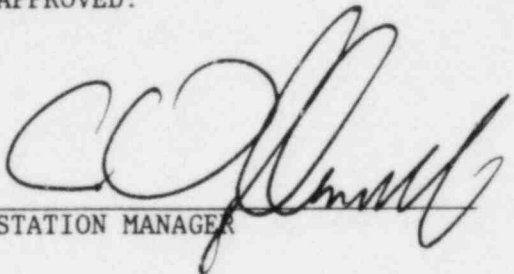
VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH September YEAR 1983

APPROVED:



STATION MANAGER

8311170292 831004
PDR ADOCK 05000338
R PDR

IE 24
1/1

OPERATING DATA REPORT

DOCKET NO. 50-338
 DATE 10-04-83
 COMPLETED BY Joan N. Lee
 TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

Notes

1. Unit Name: North Anna 1
2. Reporting Period: September 1983
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): 930
7. Maximum Dependable Capacity (Net MWe): 877
8. If Changes Occur in Capacity Ratings (Items No. 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	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	720	6,551	46,632
12. Number of Hours Reactor Was Critical	685.7	4,790.2	31,913.2
13. Reactor Reserve Shutdown Hours	34.3	1,760.8	3,014.9
14. Hours Generator On-Line	677.7	4,620.0	31,002.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,907,391	12,464,257	80,664,611
17. Gross Electrical Energy Generated (MWH)	617,420	4,125,375	25,909,907
18. Net Electrical Energy Generated (MWH)	585,555	3,911,169	24,431,902
19. Unit Service Factor	94.1	70.5	66.4
20. Unit Availability Factor	94.1	70.5	66.4
21. Unit Capacity Factor (Using MDC Net)	92.7	68.1	59.7
22. Unit Capacity Factor (Using DER Net)	89.7	65.8	57.8
23. Unit Forced Outage Rate	4.8	29.4	11.4
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Scheduled Maintenance, 10-07-83 (10 Days)

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. 50-338

UNIT NA-1

DATE 10-04-83

COMPLETED BY Joan N. Lee

TELEPHONE 703-894-5151X2527

MONTH September

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>883</u>
2	<u>884</u>
3	<u>880</u>
4	<u>870</u>
5	<u>883</u>
6	<u>883</u>
7	<u>881</u>
8	<u>882</u>
9	<u>878</u>
10	<u>880</u>
11	<u>874</u>
12	<u>882</u>
13	<u>873</u>
14	<u>859</u>
15	<u>885</u>
16	<u>883</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>880</u>
18	<u>860</u>
19	<u>879</u>
20	<u>880</u>
21	<u>887</u>
22	<u>885</u>
23	<u>887</u>
24	<u>887</u>
25	<u>876</u>
26	<u>888</u>
27	<u>888</u>
28	<u>490</u>
29	<u>0</u>
30	<u>151</u>
31	<u> </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	10-04-83
COMPLETED BY	Joan N. Lee
TELEPHONE	(703) 894-5151 X2507

REPORT MONTH September

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
83-08	830928	F	42.3	A	1	NA	NA	NA	Unit 1 ramped down and manually tripped for malfunction of Gland Steam Condenser. Repairs were made. Prior to unit returning to service Unit 1 was manually tripped due to malfunction of the Turbine Throttle Valve Control System. Repairs were made and unit was returned to full power.

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

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-338REPORT MONTH September UNIT NAME NA-1YEAR 1983 DATE 10-04-83COMPLETED BY Joan Lee

83-08 (A) (1) At 1242 on September 28, 1983 a ramp down of Unit 1 was commenced. The rampdown was due to a Gland Steam Condenser tube leak. At 1328 on September 28, 1983 a manual reactor trip was initiated. The Unit was held at Mode 3 (hot standby). The repairs were made and reactor start up commenced at 2122 on September 29, 1983. At 2212 on September 29, 1983 reactor was critical. Prior to the unit returning to service, at 2349 on September 29, 1983, the reactor was tripped manually. The reason for the trip was a malfunction of the Turbine Throttle Valve Control System. At 0106 September 30, 1983 commenced reactor startup. At 0126 September 30, 1983 reactor was critical. The turbine was latched at 0626 September 30, 1983. At 0747 Unit was on line. Report period ends with Unit 1 at 30% power awaiting secondary chemistry cleanup.

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION

UNIT NO. 1

MONTH September

SUMMARY OF OPERATING EXPERIENCE

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>
September 1, 1983	0000	Started this month with Unit at 100%.
September 3,	2100	Placed #1 & 4 shunt RX in service - commenced ramp down for Turbine Freedom Valve Test.
September 4,	0046	Turbine Valve Freedom Test - complete increased power slowly.
	0308	Commenced increasing power at 3%/hr.
	0500	Stabilized at 100% power.
September 10,	2203	Commenced ramp down for Turbine Valve Freedom Test.
September 11,	0042	Commenced Turbine Valve Freedom Test (PT-34.3).
	0104	Completed Turbine Valve Freedom Test.
	0355	Commenced ramp up to 100% power.
September 17,	2100	Commenced ramp down at 3%/hr for PT-34.3.
	2350	Holding at 855 MW.
September 18,	0050	Completed PT-34.3. Holding power level at request of System Operator.
	0603	Commenced increasing power to 100%.
	0900	Unit at 100% power.
September 24,	2319	Commenced Unit 1 rampdown for Turbine Valve Freedom Test.

September 25,	0055	Stopped ramp down at approximately 890 MW.
	0057	Commenced Turbine Valve Freedom Test.
	0110	Continuing ramp down to approximately 850 MW to test governor valves.
	0300	Completed Turbine Valve Freedom Test. Commenced ramp up to 100% power.
	0600	Unit holding power at 100%.
September 28,	1242	Commenced Unit ramp down due to gland steam condenser malfunction.
	1328	Manual reactor trip, due to continuing degradation of gland steam condenser.
September 29,	2122	Commenced reactor start up.
	2212	Reactor critical.
September 29,	2349	Reactor manually tripped due to malfunction of turbine throttle valve control system.
September 30,	0126	Reactor critical.
	0620	Latched turbine.
	0747	Unit on the line.
September 30,	2400	Ending this month with Unit on line holding at 30% for chemistry hold.

OPERATING DATA REPORT

DOCKET NO. 50-339
 DATE 10-04-83
 COMPLETED BY Joan Lee
 TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

Notes

1. Unit Name: North Anna 2
2. Reporting Period: September 1983
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:

N/A

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	6,551	24,503
12. Number of Hours Reactor Was Critical	720	4,956.2	17,459.3
13. Reactor Reserve Shutdown Hours	0	1,753.4	3,008
14. Hours Generator On-Line	720	4,873.4	17,326.1
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,985,640	12,733,864	44,459,884
17. Gross Electrical Energy Generated (MWH)	655,600	4,165,774	14,755,087
18. Net Electrical Energy Generated (MWH)	621,149	3,942,402	13,992,020
19. Unit Service Factor	100	74.4	70.7
20. Unit Availability Factor	100	74.4	70.7
21. Unit Capacity Factor (Using MDC Net)	96.9	67.6	64.2
22. Unit Capacity Factor (Using DER Net)	95.1	66.4	63.0
23. Unit Forced Outage Rate	0	5.7	16.4
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Scheduled Maintenance, 11-18-83 (10 days)

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 10-04-83

COMPLETED BY J. N. Lee

TELEPHONE 703-894-5151X2527

MONTH September

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>868</u>	17	<u>821</u>
2	<u>836</u>	18	<u>840</u>
3	<u>862</u>	19	<u>869</u>
4	<u>866</u>	20	<u>868</u>
5	<u>867</u>	21	<u>868</u>
6	<u>866</u>	22	<u>870</u>
7	<u>864</u>	23	<u>871</u>
8	<u>865</u>	24	<u>870</u>
9	<u>864</u>	25	<u>875</u>
10	<u>863</u>	26	<u>870</u>
11	<u>865</u>	27	<u>866</u>
12	<u>864</u>	28	<u>869</u>
13	<u>866</u>	29	<u>869</u>
14	<u>873</u>	30	<u>871</u>
15	<u>868</u>	31	<u></u>
16	<u>831</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 10-04-83
 COMPLETED BY Joan N. Lee
 TELEPHONE (703) 894-5151 X2507

REPORT MONTH September

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
83-18	830902	S	0	H	5	NA	NA	NA	Rampdown for load following per System Operator. Unit returned to full power.
83-19	830916	S	0	H	5	NA	NA	NA	Rampdown for Load following. Unit returned to full power.
83-20	830917	S	0	H	5	NA	NA	NA	Rampdown for load following. Unit returned to full power.
83-21	830918	S	0	H	5	NA	NA	NA	Rampdown for load following. Unit returned to full power.

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)

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 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 September UNIT NAME NA-2YEAR 1983 DATE 10-04-83COMPLETED BY Joan N. Lee

- 83-18 (H) (5) At 0246 September 2, 1983, commenced rampdown for load follow. At 0340 Load at 800 MW. 0500 commenced ramp up per System Operator. At 0514 holding power at 90% for calorimetric per 2-OP-2.1. At 0819 commenced ramp up and by 1005 Unit 2 stabilized at 100% power.
- 83-19 (H) (5) At 0053 September 16, 1983, commenced rampdown to 800 MW for load follow. At 0124 stabilized power at 800 MW -85% power. At 0145 ramped down to 750 MW for load follow. At 0205 stabilized power at 750 MW and 78% power. At 0225 ramped down to 720 MW for load follow. Stabilized power at 720 MW with 75% power. At 0500 commenced power increase per System Operator. By 0652 unit at 100% power.
- 83-20 (H) (5) At 0205 September 17, 1983, commenced ramp down for load follow. At 0255 stabilized power at 73% (700 MW). At 0310 commenced ramp down to 650 MW for load follow. At 0511 commenced ramp up to 100% as per System Operator. At 0745 unit at 100% power.
- 83-21 (H) (5) At 0219 September 18, 1983, commenced ramp down for load follow. At 0303 holding reactor at 800 MW -85% power. At 0305 continued load follow to 750 MW -79% power. At 0605 commenced ramp up per System Operator. By 0722 unit at 100% power.

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH September

SUMMARY OF OPERATING EXPERIENCE

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>
September 1, 1983	0000	Started this month with the unit at 100% power.
September 2,	0246	Commenced load reduction for load follow.
	0340	Load followed at 800 MW - 85% power.
	0500	Commenced rampup per System Operator.
	0514	Holding power at 90% for calorimeter per 2-OP-2.1.
	0545	Gen leads Cooling trouble alarm; fan breaker tripped - reset, tripped again. Investigating - holding power.
	0819	Commenced rampup.
	1005	Stabilized at 100% power.
September 2,	2253	Commenced ramp down for Turbine Valve Freedom Test.
	2308	Holding at 880 MW for Turbine Valve Freedom Test.
September 3,	0100	Completed Turbine Valve Freedom Test. Commenced slow ramp up to 100% per System Operator.
	0230	Unit at 100% power.
September 9,	2313	Commenced unit rampdown to 860 MW for Turbine Valve Freedom Test.
	2351	Stabilized power at 860 MW.

September 10,	0055	Completed Turbine Valve Freedom Test. Commenced rampup to 100% power.
	0117	Unit at 100% power.
September 16,	0053	Commenced rampdown to 800 MW for load follow.
	0124	Stabilized power at 800 MW - 85% power.
	0145	Rampdown to 750 MW for load follow.
	0205	Stabilized power at 750 MW -78% power.
	0225	Ramped down to 720 MW for load follow.
	0238	Stabilized power at 720 MW -75%.
	0500	Commenced power increase per System Operator.
	0622	Stabilized reactor power for 2-PT-24.
	0652	Unit at 100% power.
September 17,	0030	Commenced rampdown for Turbine Valve Freedom Test.
	0155	Turbine Valve Freedom Test complete.
	0205	Commenced ramp-down to 700 MW for load follow.
	0255	Stabilized power at 700 MW -73%.
	0310	Commenced rampdown to 650 MW per System Operator.
	0340	Stabilized power at 650 MW -67% power.
	0511	Commenced rampup to 100% as per System Operator.
	0620	Unit stabilized at 90% power for 2-PT-24.
	0745	Unit at 100% power.
September 18,	0219.	Commenced rampdown for load follow.
	0303	Holding reactor power at 800 MW - 85% power.
	0305	Continued load follow to 750 MW.

	0322	Holding reactor power at 750 MW -79% power.
	0605	Commenced rampup as per System Operator.
	0635	Holding reactor power at 90% for 2-PT-24.
	0649	Re-commenced rampup.
	0722	Unit at 100% power.
September 24,	0003	Commenced rampdown to approximately 860 MW for Turbine Valve Freedom Test.
	0034	Stabilized at approximately 860 MW.
	0107	Commenced rampup to 100% power.
	0130	Unit at 100% power.
September 30,	2400	Ending this month at 100% power.

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

October 14, 1983

Mr. N. M. Haller, Director
Office of Management and Program Analysis
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 579
NO/JHL:acm
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Dear Mr. Haller:

Enclosed is the Monthly Operating Report for North Anna Power Station Unit
Nos. 1 and 2 for the month of September, 1983.

Very truly yours,

W. L. Stewart
W. L. Stewart

Enclosure (3 copies)

cc: Mr. R. C. DeYoung, Director (12 copies)
Office of Inspection and Enforcement

Mr. James P. O'Reilly (1 copy)
Regional Administrator
Region II

Mr. M. B. Shymlock
NRC Resident Inspector
North Anna Power Station

IE 24
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