

VIRGINIA POWER COMPANY
NORTH ANNA POWER STATION
MONTHLY OPERATING REPORT

MONTH May YEAR 1985

APPROVED:



STATION MANAGER
FM

8508080660 850531
PDR ADDCK 05000338
R PDR

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OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 06-03-85
COMPLETED BY Brenda Garner
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 1
2. Reporting Period: May, 1985
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): 937
7. Maximum Dependable Capacity (Net MWe): 893
8. If Changes Occur in Capacity Ratings (Items No. 3 thru 7) Since Last Report, Give Reasons

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	744	3,623	60,851
12. Number of Hours Reactor Was Critical	744	3,623	41,994.7
13. Reactor Reserve Shutdown Hours	0	0	3,084.2
14. Hours Generator On-Line	744	3,595.8	40,708
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,064,197	9,683,911	106,543,573
17. Gross Electrical Energy Generated (MWH)	695,289	3,269,602	34,641,787
18. Net Electrical Energy Generated (MWH)	661,549	3,107,546	32,723,524
19. Unit Service Factor	100.0	99.2	56.9
20. Unit Availability Factor	100.0	99.2	66.9
21. Unit Capacity Factor (Using MDC Net)	99.6	96.2	61.1
22. Unit Capacity Factor (Using DER Net)	98.0	94.6	59.2
23. Unit Forced Outage Rate	0	0.7	11.0
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

Unit 1 Scheduled Fall Refueling.

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 06-03-85

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH May, 1985

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>891</u>	17	<u>890</u>
2	<u>892</u>	18	<u>891</u>
3	<u>886</u>	19	<u>892</u>
4	<u>892</u>	20	<u>891</u>
5	<u>893</u>	21	<u>891</u>
6	<u>892</u>	22	<u>891</u>
7	<u>893</u>	23	<u>890</u>
8	<u>891</u>	24	<u>891</u>
9	<u>891</u>	25	<u>892</u>
10	<u>890</u>	26	<u>892</u>
11	<u>875</u>	27	<u>888</u>
12	<u>891</u>	28	<u>883</u>
13	<u>890</u>	29	<u>870</u>
14	<u>891</u>	30	<u>890</u>
15	<u>890</u>	31	<u>890</u>
16	<u>889</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.

Page 1 of 1

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-338

REPORT MONTH May UNIT NAME NA-1

YEAR 1985 DATE 06-03-85

COMPLETED BY Brenda Garner

No entries this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.	50-338
UNIT NAME	North Anna 1
DATE	06-03-85
COMPLETED BY	Brenda Garner
TELEPHONE	(703) 894-5151 X2527

REPORT MONTH May, 1985

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
85-12	850503	S	NA	H	5	NA	NA	NA	Rampdown to 93% power for Turbine Valve Freedom Test. Unit returned to 100% power.

1	2
F: Forced	Reason:
S: Scheduled	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)

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Exhibit H - Same Source

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 1

MONTH May

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>
May 1, 1985	0000	Began this month with Unit at 100% power - 944 MW.
May 3, 1985	2106	Commenced rampdown to 93% power - 870 MW for Turbine Valve Freedom Test.
	2145	Stabilized Unit at 93% power - 870 MW for Turbine Valve Freedom Test
	2147	Commenced Turbine Valve Freedom Test
	2237	Test completed - Unit at 100% power - 938 MW.
May 31, 1985	2400	Ended this month with Unit at 100% power.

OPERATING DATA REPORT

DOCKET NO. 50-339
DATE 06-03-85
COMPLETED BY Brenda Garner
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

Notes:

1. Unit Name: North Anna 2
2. Reporting Period: May, 1985
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): 893
8. If Changes Occur in Capacity Ratings (Items No. 3 thru 7) Since Last Report, Give Reasons

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	744	3,623	39,119
12. Number of Hours Reactor Was Critical	744	3,564.2	29,354.6
13. Reactor Reserve Shutdown Hours	0	28.5	4,014.3
14. Hours Generator On-Line	744	3,358.7	28,763.8
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,017,514	8,407,308	73,907,549
17. Gross Electrical Energy Generated (MWH)	673,375	2,797,110	24,494,375
18. Net Electrical Energy Generated (MWH)	639,812	2,649,602	23,218,864
19. Unit Service Factor	100.0	92.7	73.5
20. Unit Availability Factor	100.0	92.7	73.5
21. Unit Capacity Factor (Using MDC Net)	96.3	81.8	66.4
22. Unit Capacity Factor (Using DER Net)	94.8	80.6	65.4
23. Unit Forced Outage Rate	0	7.3	12.5
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

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 06-03-85

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH May

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>881</u>	17	<u>780</u>
2	<u>880</u>	18	<u>857</u>
3	<u>881</u>	19	<u>810</u>
4	<u>882</u>	20	<u>842</u>
5	<u>883</u>	21	<u>881</u>
6	<u>882</u>	22	<u>879</u>
7	<u>881</u>	23	<u>871</u>
8	<u>878</u>	24	<u>815</u>
9	<u>883</u>	25	<u>811</u>
10	<u>883</u>	26	<u>751</u>
11	<u>884</u>	27	<u>794</u>
12	<u>884</u>	28	<u>880</u>
13	<u>882</u>	29	<u>878</u>
14	<u>872</u>	30	<u>860</u>
15	<u>874</u>	31	<u>866</u>
16	<u>876</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 SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET DOCKET NO. 50-339

REPORT MONTH May UNIT NAME NA-2

YEAR 1985 DATE 06-03-85

COMPLETED BY Brenda Garner

No entry this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.	50-339
UNIT NAME	North Anna 2
DATE	06-03-85
COMPLETED BY	Brenda Garner
TELEPHONE	(703) 894-5151 X2527

REPORT MONTH May

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
85-19	850517	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-20	850518	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-21	850519	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-22	850520	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-23	850524	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% 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)

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 SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.	50-339
UNIT NAME	North Anna 2
DATE	06-03-85
COMPLETED BY	Brenda Garner
TELEPHONE	(703) 894-5151 X2527

REPORT MONTH May

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
85-24	850525	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-25	850526	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-26	850527	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-27	850530	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% power.
85-28	850531	S	NA	H	5	NA	NA	NA	Ramped Unit 2 down for load following. Unit returned to 100% 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)

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

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
May 1, 1985	0000	Began this month with 937 MW - 100% power
May 17, 1985	0155	Commenced rampdown for load follow
	0345	Unit stabilized at 650 MW - 70% power
	0500	Commenced ramp up to 100% power. D water box removed from service
	0955	Holding ramp up 800 MW - 86% power for work on D water box
	1900	Commenced ramp up to 100% power. All water-boxes in service
	1953	Unit stabilized at 911 MW - 98% power for 2-PT-24 calorimetric
	2022	Commenced ramp up to 100% power, 2-PT-24 calorimetric complete
	2035	Unit stabilized at 930 MW - 100% power
May 18, 1985	0157	Commenced rampdown to 830 MW - 85% power for load follow
	0230	Commenced rampdown to 780 MW - 80% power for load follow
	0300	Commenced rampdown to 730 MW - 77% power for load follow
	0318	Unit holding at 730 MW - 77% power
	0518	Commenced ramp up to 100% power

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
May 19, 1985	0720	Unit stabilized at 930 MW - 100% power
	0035	Commenced rampdown to 830 MW - 85% power for load follow
	0118	Commenced rampdown to 730 MW - 77% power for load follow
	0210	Commenced rampdown to 630 MW - 70% power for load follow
	0256	Commenced rampdown to 600 MW for load follow
	0613	Commenced ramp up to 100% power
	0746	Unit holding at 857 MW - 90% power for calorimetric
	0815	Calorimetric complete, commenced ramp up to 100% power
	0900	Unit stabilized at 935 MW - 100% power
	0036	Commenced rampdown to 835 MW - 87% power for load follow
May 20, 1985	0130	Commenced rampdown to 735 MW - 77% power for load follow
	0210	Unit holding at 740 MW - 78% power
	0436	Commenced ramp up to 100% power
	0700	Unit holding at 850 MW - 90% power

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
May 24, 1985	0818	Commenced ramp up to 100% power
	0915	Unit stabilized at 930 MW - 100% power
	0005	Commenced rampdown of 100 MW for load follow.
	0145	Commenced rampdown to 630 MW for load follow. System Operator requested another decrease of 100 MW
	0157	Unit holding at 590 MW - 65% power
	0409	Commenced ramp up to 100% power
	0430	Unit holding at 660 MW - 73% power
	0453	Commenced ramp up to 100% power
	0543	Unit holding at 850 MW - 90% power for 2-PT-24 calorimetric
	0618	Commenced ramp up to 100% power, 2-PT-24 calorimetric completed
May 25, 1985	0722	Unit stabilized at 934 MW - 100% power
	0016	Commenced rampdown to 800 MW - 85% power for load follow
	0149	Commenced rampdown to 685 MW - 75% power for load follow
	0246	Commenced rampdown of 25 MW for load follow

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
	0255	Unit holding at 660 MW - 73% power
	0540	Commenced ramp up to 100% power
	0550	Unit holding at 700 MW - 75% power
	0640	Commenced ramp up to 100% power
	0728	Unit holding at 850 MW - 90% power for 2-PT-24 calorimetric
	0754	Commenced ramp up to 100% power, 2-PT-24 calorimetric complete
	0845	Unit stabilized at 934 MW - 100% power
May 26, 1985	0013	Commenced rampdown to 800 MW - 85% power for load follow
	0157	Unit holding at 630 MW - 70% power
	0201	Commenced rampdown of 60 MW for load follow
	0215	Unit holding at 570 MW - 63% power
	0242	Commenced rampdown of 70 MW for load follow
	0300	Unit holding at 500 MW - 56% power
	0325	Commenced rampdown of 60 MW for load follow
	0338	Unit holding at 440 MW - 51% power

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
May 27, 1985	0428	Commenced rampdown of 40 MW for load follow
	0443	Unit holding at 400 MW - 47% power
	0636	Commenced ramp up to 100% power
	1030	Unit stabilized at 935 MW - 100% power
	0027	Commenced rampdown of 100 MW - 90% power for load follow
	0115	Unit holding at 830 MW - 87% power
	0130	Commenced rampdown of 200 MW for load follow
	0239	Unit holding at 630 MW - 70% power
	0303	Commenced rampdown of 55 MW for load follow
	0316	Unit holding at 575 MW - 67% power
	0422	Commenced rampdown of 45 MW for load follow
	0437	Unit holding at 530 MW - 59% power
	0514	Commenced ramp up to 100% power
	0530	Unit holding at 580 MW - 65% power
	0626	Commenced ramp up to 100% power

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
	0800	Unit holding at 850 MW - 90% power for calorimetric
	0826	Commenced ramp up to 100% power
	0925	Unit stabilized at 930 MW - 100% power, calorimetric complete
May 30, 1985	0139	Commenced rampdown of 150 MW for load follow
	0240	Unit holding at 790 MW - 84% power
	0258	Commenced rampdown of 50 MW for load follow
	0312	Unit holding at 740 MW - 77% power
	0435	Commenced ramp up of 50 MW per System Operator
	0450	Commenced ramp up to 100% power
	0557	Unit holding at 922 MW - 98% power for 2-PT-24 calorimetric
	0612	Commenced ramp up to 100% power, 2-PT-24 calorimetric complete
	0623	Unit stabilized at 940 MW - 100% power
May 31, 1985	0109	Commenced rampdown of 37 MW for load follow
	0125	Commenced rampdown to 875 MW - 95% power for load follow

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH May

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>
	0130	Unit holding at 880 MW - 91% power
	0217	Commenced rampdown to 815 MW - 85% power for load follow
	0240	Unit holding at 815 MW - 85.1% power
	0437	Commenced ramp up to 100% power
	0525	Unit holding at 98% power for 2-PT-24 calorimetric
	0535	Commenced ramp up to 100% power
	0557	Unit stabilized at 937 MW - 100% power, 2-PT-24 calorimetric complete
	2400	Ended this month with Unit at 100% power



VIRGINIA POWER

June 14, 1985

Mr. Maurice R. Beebe
Office of Resource Management
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 85-441
NO/JBL:acm
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Dear Mr. Beebe:

Enclosed is the Monthly Operating Report for North Anna Power Station Unit Nos. 1 and 2 for the month of May, 1985.

Very truly yours,

W. L. Stewart

Enclosure (3 copies)

cc: Mr. J. M. Taylor, Director (12 copies)
Office of Inspection and Enforcement

Dr. J. Nelson Grace (1 copy)
Regional Administrator
Region II

Mr. M. W. Branch
NRC Resident Inspector
North Anna Power Station

IE24
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