VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH April YEAR 1984

APPROVED:

STATION MANAGER

IE24

OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 05-03-84
COMPLETED BY Joan N. Lee
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 1
2. Reporting Period: April, 1984
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): 890
8. If Changes Occur in Capacity Ratings (Items No. 3 thru 7) Since Last Report, Give Reasons

MDC changes in gross and net to reflect an increase in T_{avg}

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	2,903	51,344
12.	Number of Hours Reactor Was Critical	719	2,171.6	35,758.1
13.	Reactor Reserve Shutdown Hours	0	7.1	3,028.6
14.	Hours Generator On-Line	719	2,150.8	34,812.4
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Energy Generated (MWH)	1991626	5,883,322	90,935,095
17.	Gross Electrical Energy Generated (MWH)	677,095	1,994,721	29,378,908
18.	Net Electrical Energy Generated (MWH)	643,871	1,895,337	27,726,511
19.	Unit Service Factor	100.0	74.0	67.8
20.	Unit Availability Factor	100.0	74.0	67.8
21.	Unit Capacity Factor (Using MDC Net)	100.6	73.9	61.5
22.	Unit Capacity Factor (Using DER Net)	98.7	72.0	59.5
23.	Unit Forced Outage Rate	0	52.2	12.4

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

Unit 1 Refueling Outage 05-11-84

Unit 1 SCheduled Fall Maintenance 11-23-84

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		

IE24

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-338

UNIT NA-1

DATE 05-03-84

COMPLETED BY Joan N. Lee

TELEPHONE 703-894-5151X2527

MONTH April

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	877	17	903
2	885	18	901
3	887	19	900
4	891	20	900
5	891	21	900
6	891	22	898
7	885	23	900
8	877	24	900
9	892	25	899
10	899	26	900
11	899	27	900
12	900	28	901
13	899	29	901
14	898	30	902
15	882	31	
16	902		

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. 50-338

REPORT MONTH April UNIT NAME NA-1

YEAR 1984 DATE 05-03-84

COMPLETED BY Joan Lee

NO ENTRIES THIS MONTH.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April

DOCKET NO. 50-338
UNIT NAME North Anna 1
DATE 05-03-84
COMPLETED BY Joan Lee
TELEPHONE (703) 894-5151 X2527

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
84-10	840331	S		B	5	NA	NA	NA	Ended the month of March with unit 1 in Turbine Valve Freedom Test. Power level 94% at 881 MW. Unit return to full power on April 1, 1984 - 0420.
84-11	840407	S		B	5	NA	NA	NA	Unit 1 ramped down for Turbine Valve Freedom Test. Unit returned to full power.
84-12	840414	S		B	5	NA	NA	NA	Unit 1 ramped down for Turbine Valve Freedom Test. Unit returned to full power. Ended this month with unit at 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 ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION

UNIT NO. 1

MONTH April

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.

DATE	TIME	DATA
April 1, 1984	0000	Began this month with Unit at 93% power, 876 MW for Turbine Valve Freedom Test.
	0050	Unit stabilized at 860 MW.
	0125	Turbine Valve Freedom Test complete. Commenced ramping up to 100% power.
	0325	Unit stabilized at 98% power for calorimetric.
	0420	Calorimetric complete and unit at 100% power.
April 7, 1984	2100	Commenced rampdown for Turbine Valve Freedom Test.
	2330	Unit at approximately 860 MW 91% power level.
April 8, 1984	0100	Turbine Valve Freedom Test complete. Commenced ramping up to 100%.
	0400	Unit at 100% power.
April 14, 1984	2250	Commenced rampdown for Turbine Valve Freedom Test.
April 15, 1984	0150	Unit stabilized at 858 MW.
	0219	Turbine Valve Freedom Test complete. Commenced rampup to 100% power.
	0345	Stabilized power at 98% power for calorimetric.
	0416	Calorimetric complete. Commenced ramping up to 100%.
	0550	Unit at 100% power.
April 30, 1984	2400	Ended this month with unit at 100% power.

OPERATING DATA REPORT

DOCKET NO. 50-339
DATE 05-03-84
COMPLETED BY Joan N. Lee
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

Notes:

1. Unit Name: North Anna 2
2. Reporting Period: April 1984
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	719	2,903	29,615
12. Number of Hours Reactor Was Critical	520.7	2,802	22,448.9
13. Reactor Reserve Shutdown Hours	5.8	15.1	3,789.3
14. Hours Generator On-Line	515.1	2,557	22,064.1
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,240,206	6,567,288	56,983,329
17. Gross Electrical Energy Generated (MWH)	409,718	2,152,914	18,844,662
18. Net Electrical Energy Generated (MWH)	387,099	2,040,855	17,892,937
19. Unit Service Factor	71.6	88.0	74.5
20. Unit Availability Factor	71.6	88.0	74.5
21. Unit Capacity Factor (Using MDC Net)	60.4	79.0	67.9
22. Unit Capacity Factor (Using DER Net)	59.3	77.5	66.6
23. Unit Forced Outage Rate	0	5.6	14.5

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

Unit 2 Refueling Outage 08-17-84

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 05-03-84

COMPLETED BY Joan N. Lee

TELEPHONE 703-894-5151X252

MONTH APRIL

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	875
2	0	18	878
3	0	19	876
4	0	20	877
5	0	21	879
6	0	22	879
7	0	23	877
8	0	24	877
9	102	25	879
10	214	26	876
11	215	27	876
12	213	28	815
13	761	29	773
14	871	30	796
15	875	31	
16	876		

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 April UNIT NAME NA-2

YEAR 1984 DATE 05-03-84

COMPLETED BY Joan Lee

84-19	S	(2)	Commenced rampdown of unit 2 scheduled spring maintenance outage on March 30, 1984 at 2137. On March 31, 1984, Unit 2 was off-line. Maintenance completed on Unit 2, and unit was on line April 9, 1984 at 1148. By April 13, 1984 at 0651 unit was 100% power. Ended the month of April with unit at 100% power.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April

DOCKET NO. 50-339
UNIT NAME North Anna 2
DATE 05-03-84
COMPLETED BY Joan Lee
TELEPHONE (703) 894-5151 X2527

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
84-19	840330	S	21.1-March 203.9-April	B	1	NA	NA	NA	Ramped down to begin Scheduled Spring Maintenance Outage. Ended the month of March with Unit in Mode 5. Maintenance was completed and Unit on line April 9, 1984, 1148. Returned to 100% power on April 13, 1984 at 0651.
84-20	840414	S		B	5	NA	NA	NA	Ramped down for Turbine Valve Freedom test. Unit returned to full power.
84-21	840427	S		H	5	NA	NA	NA	Ramped down for load following. Unit returned to full power.
84-22	840428	S		H	5	NA	NA	NA	Ramped down for load following. Unit returned to full power.
84-23	840429	S		H	5	NA	NA	NA	Ramped down for load following. Unit returned to full power. Ended this month with Unit at 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 ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION

UNIT NO. 2

MONTH April

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.

DATE	TIME	DATA
April 1, 1984	0000	Began this month with Unit 2 in Mode 5 for Scheduled Spring Maintenance Outage.
April 9, 1984	0545	Commenced Reactor start-up.
	0617	Unit 2 Reactor critical.
	1148	Unit 2 on line.
April 10, 1984	0037	Holding power at 29% power level. 246 MW for chemistry Hold.
April 13, 1984	0125	Unit 2 released from chemistry hold, commenced ramping up to 100% power.
	0620	Unit stabilized at 90% power for calorimetric.
	0621	Re-commenced ramping up to 100% power.
	0651	Unit 2 at 100% power
April 14, 1984	0030	Commenced rampdown for Turbine Valve Freedom Test.
	0153	Turbine Valve Freedom Test complete - Commenced ramping up to 100% power.
	0218	Stabilized power at 98% for calorimetric.
	0228	Calorimetric complete and Unit at to 100%.
April 27, 1984	2345	Commenced rampdown for load following per System Operator.

April 28, 1984	0122	Stabilized power at 680 MW/71% power.
	0506	Commenced ramping up to 100% power per System operator.
	0609	Stabilized power 98% for calorimetric.
	0612	Calorimetric complete and increasing power to 100%.
	0700	Unit at 100% power.
	2236	Commercial rampdown for load following per System operator.
	2345	Stabilized power - Unit at 77% power - 730 MW.
April 29, 1984	0100	Decreasing load following another 100 MW per System operator.
	0130	Stabilizing at 635 MW. System operator wants to decrease another 100 MW. Continuing rampdown.
	0200	Shifted from Eastern Standard time to Daylight Savings time.
	0300	Power at 57%, 535 MW.
	0622	Commenced increasing power to 100% per System operator.
	0813	Stabilizing power at 90% for calorimetric.
	0820	Calorimetric complete. Commenced ramping up to 100%.
	1005	Unit at 100% power.
April 29, 1984	2345	Commenced rampdown for load following per System operator.
April 30, 1984	0055	Stabilizing power at 77%, 740 MW.
	0105	System operator request another 100 MW load reduction. Commenced rampdown.
	0136	Stabilizing at 67% power - 640 MW.
	0228	System operator requests another 100 MW - Commenced rampdown.
	0256	Stabilizing power at 58%, 540 MW.

April 30, 1984	0414	Commenced ramping up to 100%.
	0653	Stabilizing power at 90% for calorimetric.
	0735	Calorimetric complete. Commenced ramping up to 100%.
	0810	Unit 2 at 100% power.
	2400	Ended this month with Unit at 100% power.

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

May 15, 1984

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

Serial No. 291
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 April, 1984.

Very truly yours,

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. W. Branch
NRC Resident Inspector
North Anna Power Station

IE24
1/1

WLS 5/15/84

bc: ~~Mr. W. R. Cartwright~~ WRC 5/15/84
Mr. W. N. Thomas
Mr. A. L. Hogg - NA
Mr. L. W. Ellis
Mr. J. L. Wilson
Mr. E. W. Harrell (2) GEK 5/10/84
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