

VIRGINIA POWER COMPANY
NORTH ANNA POWER STATION
MONTHLY OPERATING REPORT

MONTH AUGUST YEAR 1988

APPROVED:


STATION MANAGER

8809200267 880831
FDR ADOCK 05000338
R FDC

2274
1/1

OPERATING DATA REPORT

DOCKET NO. 50-338
 DATE 09-01-88
 COMPLETED BY Brenda Garner
 TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 1
2. Reporting Period: August 1988
3. Licensed Thermal Power (MWT): 2893
4. Nameplate Rating (Gross MWe): 947
5. Design Electrical Rating (Net MWe): 907
6. Maximum Dependable Capacity (Gross MWe): 963
7. Maximum Dependable Capacity (Net MWe): 915
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	744	5,855	89,363
12. Number of Hours Reactor Was Critical	704.7	5,090.5	63,290.4
13. Reactor Reserve Shutdown Hours	34	182.6	6,457.3
14. Hours Generator On-Line	607.8	4,833.3	60,585.5
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,737,741	13,665,876	159,838,531
17. Gross Electrical Energy Generated (MWH)	565,597	4,514,620	52,418,512
18. Net Electrical Energy Generated (MWH)	535,909	4,281,714	49,576,308
19. Unit Service Factor	81.7	82.5	67.8
20. Unit Availability Factor	81.7	82.5	67.8
21. Unit Capacity Factor (Using MDC Net)	78.7	79.9	62.3
22. Unit Capacity Factor (Using DER Net)	79.4	80.6	60.8
23. Unit Forced Outage Rate	18.3	15.8	15.2
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

NA

25. If Shut Down At End Of Report Period, Estimated Date of Startup: NA
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 09-01-88

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH AUGUST 1988

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>813</u>	17	<u>901</u>
2	<u>894</u>	18	<u>900</u>
3	<u>902</u>	19	<u>901</u>
4	<u>903</u>	20	<u>902</u>
5	<u>903</u>	21	<u>903</u>
6	<u>864</u>	22	<u>904</u>
7	<u>0</u>	23	<u>905</u>
8	<u>0</u>	24	<u>905</u>
9	<u>0</u>	25	<u>905</u>
10	<u>0</u>	26	<u>904</u>
11	<u>0</u>	27	<u>904</u>
12	<u>71</u>	28	<u>904</u>
13	<u>727</u>	29	<u>905</u>
14	<u>900</u>	30	<u>901</u>
15	<u>901</u>	31	<u>906</u>
16	<u>902</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. 50-338

REPORT MONTH August UNIT NAME NA-1

YEAR 1988 DATE 09-01-88

COMPLETED BY Brenda Garner

- 88 -05 1) August 6, 1988 at 2257, a reactor trip occurred at 100% power, due to "B" steam generator feed flow/steam flow mismatch coincident with a low level. (Mismatch occurred due to stem separation on "B" main feed reg valve). Repairs were completed and on August 12, 1988, at 1507 the Unit returned on line.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-338
 UNIT NAME North Anna 1
 DATE 09-01-88
 COMPLETED BY Brenda Garner
 TELEPHONE (703) 894-5151 X2527

REPORT MONTH AUGUST

No.	Date	Type ¹	Duration (Hours)	Reason ²	Method of Shutting Down Reactor ³	Licensee Event Report #	System Code ⁴	Component Code ⁵	Cause and Corrective Action to Prevent Recurrence
88-05	880806	F	136.2	A	3	LER NI-88-20	SJ	FCV	Reactor tripped at 100% power, due to "B" steam generator feed flow/steam flow mismatch coincident with a low level. 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

NORTH ANNA POWER STATION

UNIT NO. 1

MONTH AUGUST

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>
August 1, 1988	0000	Began the month with Unit at 739 MW - 83% power, to continue maintenance on feedwater heater.
	0618	Commenced ramp up to 90% power, maintenance completed on feedwater heater.
	0711	Unit holding at 840 MW - 90% power to perform 1-PT-24 calorimetric.
	0835	Commenced ramp up to 98% power, 1-PT-24 calorimetric completed.
	1100	Unit holding at 930 MW - 98% power, to perform 1-PT-24 calorimetric.
	1245	Commenced ramp up to 100% power, 1-PT-24 calorimetric completed.
	1315	Unit stabilized at 944 MW - 100% power.
August 6, 1988	2257	Reactor tripped from 100% power due to "B" steam generator feed flow/steam flow mismatch coincident with a low level.
August 8, 1988	1415	Reactor critical
August 12, 1988	1507	Unit on line.
	1710	Unit holding at 270 MW - 30% power, for chemistry.
August 13, 1988	0224	Commenced ramp up to 50% power, released from chemistry hold.

<u>DATE</u>	<u>TIME</u>	<u>DATA</u>
	0352	Unit holding at 465 MW - 50% power, to perform Quadrant Power Tilt Ratio (Q.P.T.R.).
	0400	Commenced ramp up to 90% power, Q.P.T.R. completed.
	0815	Unit holding at 850 MW - 90% power, to perform 1-PT-24.1 calorimetric.
	0845	Commenced ramp up to 100% power, 1-PT-24.1 calorimetric completed.
	1045	Unit stabilized at 945 MW - 100% power.
August 30, 1988	1057	Commenced rampdown of 5% power to swap 1-FW-P-1C to 1-FW-P-1A.
	1140	Unit holding at 910 MW - 95% power, to swap main feedwater pumps.
	1254	Commenced ramp up to 100% power, main feedwater pumps secured.
	1333	Unit stabilized at 954 MW - 100% power.
August 31, 1988	2400	Ended the month with Unit at 954 MW - 100% power.

VIRGINIA POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH AUGUST YEAR 1988

APPROVED:



STATION MANAGER

OPERATING DATA REPORT

DOCKET NO. 50-339
 DATE 09-01-88
 COMPLETED BY Brenda Garner
 TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 2
2. Reporting Period: August 1988
3. Licensed Thermal Power (Mwt): 2893
4. Nameplate Rating (Gross MWe): 947
5. Design Electrical Rating (Net MWe): 907
6. Maximum Dependable Capacity (Gross MWe): 963
7. Maximum Dependable Capacity (Net MWe): 915
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	744	5,855	67,631
12. Number of Hours Reactor Was Critical	744	5,805.9	54,274.2
13. Reactor Reserve Shutdown Hours	0	49.1	5,702.1
14. Hours Generator On-Line	744	5,779.2	53,435.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	2,150,540	16,677,609	140,996,390
17. Gross Electrical Energy Generated (MWH)	703,614	5,534,610	46,739,731
18. Net Electrical Energy Generated (MWH)	667,158	5,257,425	44,315,772
19. Unit Service Factor	100	98.7	79.0
20. Unit Availability Factor	100	98.7	79.0
21. Unit Capacity Factor (Using MDC Net)	98.0	98.1	73.2
22. Unit Capacity Factor (Using DER Net)	98.9	99.0	72.2
23. Unit Forced Outage Rate	0	0	8.3
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):			

N/A

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A
26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY _____
 INITIAL ELECTRICITY _____
 COMMERCIAL OPERATION _____

Forecast

Achieved

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-338

UNIT NA-1

DATE 09-01-88

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH August 1988

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>899</u>	17	<u>899</u>
2	<u>900</u>	18	<u>897</u>
3	<u>900</u>	19	<u>871</u>
4	<u>899</u>	20	<u>896</u>
5	<u>899</u>	21	<u>896</u>
6	<u>898</u>	22	<u>898</u>
7	<u>896</u>	23	<u>899</u>
8	<u>891</u>	24	<u>899</u>
9	<u>896</u>	25	<u>899</u>
10	<u>893</u>	26	<u>888</u>
11	<u>895</u>	27	<u>897</u>
12	<u>896</u>	28	<u>899</u>
13	<u>898</u>	29	<u>901</u>
14	<u>898</u>	30	<u>902</u>
15	<u>898</u>	31	<u>904</u>
16	<u>898</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 DOCKFT NO. 50-339

REPORT MONTH AUGUST UNIT NAME NA-2

YEAR 1988 DATE 09-01-88

COMPLETED BY Brenda Garner

No Entry This Month

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH AUGUST 1988

DOCKET NO. 50-339
 UNIT NAME North Anna 2
 DATE 09-01-88
 COMPLETED BY Brenda Garner
 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 and Corrective Action to Prevent Recurrence
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NO ENTRY THIS MONTH

<p>¹ F: Forced S: Scheduled</p>	<p>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)</p>	<p>³ Method: 1-Manual 2-Manual Scram. 3-Automatic Scram 4-Continuations 5-Load Reduction 9-Other</p>	<p>⁴ Exhibit F - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)</p> <p>⁵ Exhibit H - Same Source</p>
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NORTH ANNA POWER STATION

UNIT NO. 2

MONTH AUGUST

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>
August 1, 1988	0000	Began the month with the Unit at 950 MW - 100% power.
August 19, 1988	0600	Commenced rampdown of 70 MW to perform Turbine Valve Freedom Test.
	0653	Unit holding at 880 MW - 89% power, to perform Turbine Valve Freedom Test and to perform maintenance on 2-CN-P-1C condensate pumps.
	1245	Commenced ramp up to 98% power, Turbine Valve Freedom Test completed.
	1357	Unit holding at 915 MW - 98% power to perform 2-PT-24 and to complete maintenance on 2-CN-P-1C condensate pumps.
	1745	Commenced ramp up to 100% power, repairs completed on 2-CN-P-1C condensate pumps.
August 19, 1988	1842	Unit stabilized at 940 MW - 100% power.
August 31, 1988	2400	Ended the month with Unit at 945 MW - 100% power.

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 14, 1988

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

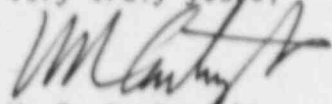
Serial No. 88-615
NO/DJV:jmj
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
MONTHLY OPERATING REPORT

Enclosed is the Monthly Operating Report for North Anna Power Station Units 1 and 2 for the month of August 1988.

Very truly yours,



W. R. Cartwright
Vice President - Nuclear

Enclosures

cc: U.S. Nuclear Regulatory Commission
101 Marietta Street, NW
Suite 2900
Atlanta, GA 30323

Mr. J. L. Caldwell
NRC Senior Resident Inspector
North Anna Power Station

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