VIRGINIA POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH December YEAR 1987

APPROVED:

STATION MANAGER

IE24
1/1

OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 01-04-88
COMPLETED BY Brenda Garner
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 1
2. Reporting Period: December, 1987
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	8,760	83,508
12. Number of Hours Reactor Was Critical	567.1	4,585.1	58,199.9
13. Reactor Reserve Shutdown Hours	22.5	169.3	6,274.7
14. Hours Generator On-Line	563.5	4,525.5	55,752.2
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,479,767	11,386,891	146,172,655
17. Gross Electrical Energy Generated (MWH)	490,485	3,775,672	47,903,892
18. Net Electrical Energy Generated (MWH)	464,247	3,568,907	45,294,594
19. Unit Service Factor	75.7	51.7	66.8
20. Unit Availability Factor	75.7	51.7	66.8
21. Unit Capacity Factor (Using MDC Net)	68.2	44.5	61.0
22. Unit Capacity Factor (Using DER Net)	68.8	44.9	59.8
23. Unit Forced Outage Rate	24.3	34.9	15.2

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. 50-338

UNIT NA-1

DATE 01-04-88

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH December, 1987

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	917
2	0	18	917
3	0	19	918
4	0	20	918
5	0	21	918
6	0	22	917
7	0	23	917
8	94	24	916
9	216	25	916
10	216	26	916
11	492	27	916
12	912	28	916
13	912	29	916
14	916	30	917
15	916	31	918
16	916		

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 December UNIT NAME NA-1

YEAR 1987 DATE 01-04-88

COMPLETED BY Brenda Garner

87-07	1)	Continuation from November 1987, when the Unit was taken off line to repair "B" reactor coolant pump #1 seal. Repairs were completed and Unit returned on line December 8, 1987, at 1228.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH December, 1987

DOCKET NO.	50-338
UNIT NAME	North Anna 1
DATE	01-04-88
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 & Corrective Action to Prevent Recurrence
87-07	871201	F	180.5	A	1	NA	NA	NA	Continuation from November 1987, when the Unit was taken off line to repair 'B' reactor coolant pump #1 seal. Repairs were completed and Unit returned on line December 08, 1987 at 1228.

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)

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Exhibit H - Same Source

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 1

MONTH December

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
December 1, 1987	0000	Began the month with Unit in Mode 5, continuing with repairs on 'B' reactor coolant pump #1 seal.
December 7, 1987	1023	Entered Mode 4.
	1439	Entered Mode 3.
December 8, 1987	0851	Reactor critical.
	1228	Unit online.
	1250	Unit holding at 174MW-18% power, to unisolate the main feedwater regulator valves.
	1401	Commenced ramp up to 30% power, main feed regulator valves in service.
	1430	Unit holding at 252MW-30% power, for Chemistry.
December 11, 1987	1100	Commenced ramp up to 100% power, released from Chemistry hold.
	1414	Unit holding at 669MW-68% power, for Chemistry.
	1527	Commenced ramp up to 90% power, released from Chemistry hold.

VIRGINIA POWER
NORTH ANNA POWER STATION

UNIT NO. 1

MONTH December

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
December 11, 1987	1730	Unit holding at 875 MW - 90% power for 1-PT-24.1 calorimetric.
	1745	Commenced ramp up to 100% power, 1-PT-24.1 calorimetric completed.
	1913	Unit stabilized at 962MW-100% power.
December 31, 1987	2400	Ended the month with Unit at 968MW-100% power.

OPERATING DATA REPORT

DOCKET NO. 50-339
DATE 01-04-88
COMPLETED BY Brenda Garner
TELEPHONE (703) 894-5151 X2527

OPERATING STATUS

1. Unit Name: North Anna 2
2. Reporting Period: December, 1987
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	8,760	61,776
12.	Number of Hours Reactor Was Critical	744	6,842.2	48,468.3
13.	Reactor Reserve Shutdown Hours	0	13.2	5,653
14.	Hours Generator On-Line	744	6,785.5	47,656
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Energy Generated (MWH)	2,152,259	18,006,585	124,318,781
17.	Gross Electrical Energy Generated (MWH)	715,304	5,971,044	41,205,121
18.	Net Electrical Energy Generated (MWH)	680,468	5,653,448	39,058,347
19.	Unit Service Factor	100	77.5	77.1
20.	Unit Availability Factor	100	77.5	77.1
21.	Unit Capacity Factor (Using MDC Net)	100	70.5	70.8
22.	Unit Capacity Factor (Using DER Net)	100.8	71.2	69.7
23.	Unit Forced Outage Rate	0	0	9.3

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 01-04-88

COMPLETED BY Brenda Garner

TELEPHONE 703-894-5151X2527

MONTH December, 1987

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	916	17	923
2	917	18	920
3	918	19	904
4	919	20	904
5	915	21	903
6	915	22	901
7	914	23	900
8	915	24	916
9	915	25	918
10	916	26	917
11	917	27	917
12	919	28	917
13	922	29	916
14	905	30	917
15	920	31	918
16	922		

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 December UNIT NAME NA-2

YEAR 1987 DATE 01-04-88

COMPLETED BY Brenda Garner

No Entry This Month

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-339
UNIT NAME North Anna 2
DATE 01-04-88
COMPLETED PY Brenda Garner
TELEPHONE (703) 894-5151 X2527

REPORT MONTH December

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
No Entry This Month									

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. 2

MONTH December

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
December 1, 1987	0000	Began the month with the Unit at 960 MW - 100% power.
December 14, 1987	0020	Commenced rampdown of 100 MW to perform Turbine Valve Freedom Test.
	0059	Unit holding at 860 MW - 89% power, to perform Turbine Valve Freedom Test.
	0350	Commenced ramp up to 100% power, Turbine Valve Freedom Test completed.
	0430	Unit stabilized at 966 MW - 100% power.
December 31, 1987	2400	Ended the month with Unit at 961 MW - 100% power.

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

W. L. STEWART
VICE PRESIDENT
NUCLEAR OPERATIONS

January 15, 1988

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

Serial No. 88-002
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 December 1987.

Very truly yours,

W. L. Stewart

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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