

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

February 6, 1997

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

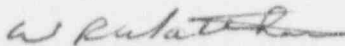
Serial No. 97-089  
NAPS/JHL  
Docket Nos. 50-338  
50-339  
License Nos. NPF-4  
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY  
NORTH ANNA POWER STATION UNIT NOS. 1 AND 2  
MONTHLY OPERATING REPORT

Enclosed is the January 1997 Monthly Operating Report for North Anna Power Station Unit 1 and 2.

Very truly yours,

  
W. R. Matthews  
Station Manager

Enclosure

cc: U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N. W.  
Suite 2900  
Atlanta, Georgia 30323

Mr. R. D. McWhorter  
NRC Senior Resident Inspector  
North Anna Power Station

9702110234 970131  
PDR ADOCK 05000338  
R PDR

1/1  
1e24

VIRGINIA POWER COMPANY  
NORTH ANNA POWER STATION  
MONTHLY OPERATING REPORT

MONTH: January YEAR: 1997

Approved:

  
Station Manager

JRH

# OPERATING DATA REPORT

DOCKET NO.: 50-338  
 DATE: February 5, 1997  
 CONTACT: W. R. Matthews  
 PHONE: (540) 894-2101

OPERATING STATUS

- 1. Unit Name:..... North Anna 1
- 2. Reporting Period:..... January 1997
- 3. Licensed Thermal Power (MWT):..... 2,893
- 4. Nameplate Rating (Gross MWe):..... 994
- 5. Design Electrical Rating (Net MWe):..... 907
- 6. Maximum Dependable Capacity (Gross MWe):..... 940
- 7. Maximum Dependable Capacity (Net MWe):..... 893

8. If changes occur to Capacity Ratings (Items 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	Y-t-D	Cumulative
11. Hours in Reporting Period.....	744.0	744.0	163,164.0
12. Number of Hours Reactor was Critical.....	744.0	744.0	125,961.2
13. Reactor Reserve Shutdown Hours.....	0.0	0.0	7,046.0
14. Hours Generator On-Line.....	744.0	744.0	122,917.8
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH).....	2,151,416.6	2,151,416.6	329,731,953.2
17. Gross Electrical Energy Generated (MWH).....	705,709.0	705,709.0	145,348,395.0
18. Net Electrical Energy Generated (MWH).....	671,972.0	671,972.0	102,658,626.0
19. Unit Service Factor.....	100.0%	100.0%	75.3%
20. Unit Availability Factor.....	100.0%	100.0%	75.3%
21. Unit Capacity Factor (using MD <sup>c</sup> Net).....	101.1%	101.1%	70.4%
22. Unit Capacity Factor (using DEF).....	99.6%	99.6%	69.4%
23. Forced Outage Rate.....	0.0%	0.0%	8.8%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, Duration of Each):  
Scheduled Refueling Outage beginning May 9, 1997  
Duration = 35 days.

---



---

25. If Shutdown at end of Report Period, estimated time of Startup: N/A

---



---

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: February 5, 1997  
 Contact: W. R. Matthews  
 Phone: (540) 894-2101

MONTH: January 1997

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>905</u>	17	<u>904</u>
2	<u>905</u>	18	<u>904</u>
3	<u>900</u>	19	<u>904</u>
4	<u>904</u>	20	<u>904</u>
5	<u>905</u>	21	<u>904</u>
6	<u>904</u>	22	<u>904</u>
7	<u>905</u>	23	<u>904</u>
8	<u>905</u>	24	<u>902</u>
9	<u>905</u>	25	<u>897</u>
10	<u>904</u>	26	<u>901</u>
11	<u>905</u>	27	<u>901</u>
12	<u>904</u>	28	<u>901</u>
13	<u>904</u>	29	<u>901</u>
14	<u>904</u>	30	<u>901</u>
15	<u>903</u>	31	<u>902</u>
16	<u>904</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.

NORTH ANNA POWER STATION

UNIT NO.: 1  
 MONTH: January

SUMMARY OF OPERATING EXPERIENCE

Page 1 of 1

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>
January 01, 1997	0000	Began month with unit at 100% power, 951 MWe.
January 03, 1997	0940	Commenced ramp down from 100% power, 950 MWe for swapping Main Feedwater Pumps.
	1005	Unit stable at 95% power, 905 MWe.
	1130	Commenced ramp to 100% power after swapping Main Feedwater Pumps.
	1300	Unit stable at 100% power, 950 MWe.
January 25, 1997	1345	Commenced ramp down for Turbine Valve Freedom Test (TVFT) from 100% power, 950 MWe.
	1437	Unit stable at 92% power, 870 MWe.
	1510	TVFT complete satisfactorily.
	1525	Commenced ramp to 100% power.
	1615	Unit stable at 100% power, 945 MWe.
January 31, 1997	2400	Ended month with unit stable at 100% power, 950 MWe.

UNIT SHUTDOWN AND POWER REDUCTIONS  
Explanation Sheet

Docket No.: 50-338

Report Month January Unit Name: NA-1

Year: 1997 Date: February 5, 1997

Contact: W. R. Matthews

\* No entries this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: January 1997

DOCKET NO.: 50-338  
 UNIT NAME: NA-1  
 DATE: February 5, 1997  
 CONTACT: W. R. Matthews  
 PHONE: (540) 894-2101

No.	Date	1 Type	Duration (hrs)	2 Reason	3 Method of Shutting Down Reactor	Licensee Event Report #	4 System Code	5 Component Code	Cause & Corrective Action to Prevent Recurrence
-----	------	-----------	-------------------	-------------	--	-------------------------------	---------------------	------------------------	---

\* No entries this month.

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

# OPERATING DATA REPORT

DOCKET NO.: 50-339  
 DATE: February 5, 1997  
 CONTACT: W. R. Matthews  
 PHONE: (540) 894-2101

**OPERATING STATUS**

1. Unit Name:..... North Anna 2  
 2. Reporting Period:..... January 1997  
 3. Licensed Thermal Power (MWT):..... 2,893  
 4. Nameplate Rating (Gross MWe):..... 979  
 5. Design Electrical Rating (Net MWe):..... 907  
 6. Maximum Dependable Capacity (Gross MWe):..... 944  
 7. Maximum Dependable Capacity (Net MWe):..... 897

8. If changes occur to Capacity Ratings (Items 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	Y-t-D	Cumulative
11. Hours in Reporting Period.....	744.0	744.0	141,432.0
12. Number of Hours Reactor was Critical.....	744.0	744.0	117,699.2
13. Reactor Reserve Shutdown Hours.....	0.0	0.0	7,162.2
14. Hours Generator On-Line.....	744.0	744.0	116,528.2
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH).....	2,148,955.0	2,148,955.0	317,730,873.0
17. Gross Electrical Energy Generated (MWH).....	705,621.0	705,621.0	103,974,856.0
18. Net Electrical Energy Generated (MWH).....	672,128.0	672,128.0	99,365,310.0
19. Unit Service Factor.....	100.0%	100.0%	82.4%
20. Unit Availability Factor.....	100.0%	100.0%	82.4%
21. Unit Capacity Factor (using MDC Net).....	100.7%	100.7%	78.1%
22. Unit Capacity Factor (using DER Net).....	99.6%	99.6%	77.5%
23. Forced Outage Rate.....	0.0%	0.0%	5.4%

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

25. If Shutdown at end of Report Period, estimated time of Startup: N/A

26. Units in Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____



AVERAGE DAILY UNIT POWER LEVEL

Docket No.:	<u>50-339</u>
Unit:	<u>NA-2</u>
Date:	<u>February 5, 1997</u>
Contact:	<u>W. R. Matthews</u>
Phone:	<u>(540) 894-2101</u>

MONTH: January 1997

DA.	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>907</u>	17	<u>904</u>
2	<u>907</u>	18	<u>904</u>
3	<u>907</u>	19	<u>904</u>
4	<u>907</u>	20	<u>899</u>
5	<u>908</u>	21	<u>904</u>
6	<u>907</u>	22	<u>904</u>
7	<u>906</u>	23	<u>904</u>
8	<u>906</u>	24	<u>905</u>
9	<u>907</u>	25	<u>904</u>
10	<u>906</u>	26	<u>905</u>
11	<u>906</u>	27	<u>905</u>
12	<u>905</u>	28	<u>905</u>
13	<u>905</u>	29	<u>906</u>
14	<u>906</u>	30	<u>868</u>
15	<u>905</u>	31	<u>885</u>
16	<u>905</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.

NORTH ANNA POWER STATION

UNIT NO.: 2

MONTH: January

SUMMARY OF OPERATING EXPERIENCE

Page 1 of 1

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>
January 01, 1997	0000	Began month in Mode 1 at 100% power, 952 MWe.
January 20, 1997	0938	Commenced ramp from 100% power, 945 MWe for performance of Turbine Valve Freedom Test (TVFT).
	1014	Unit stable at 90% power, 860 MWe.
	1046	TVFT completed satisfactorily.
	1049	Commenced ramp to 100% power after completing TVFT.
	1125	Unit stable at 100% power, 944 MWe.
January 30, 1997	0459	"A" and "C" Moisture Separator Reheater (MSR) flow valves failed closed. "B" valve at 10% open and "D" at 25% open. Valves then began to cycle between open and closed.
	0536	MSR valves started to drift back open. Reset push-button used to fully close all valves.
	0538	Control rods stepped in "auto" to step 204 on "D" bank due to Tave/Tref mismatch.
	0538	Reactor power stabilized at 95.5%, 904 MWe.
January 31, 1997	1035	Moisture Separator Reheaters (MSRs) returned to service. Returned unit to 100% power, 932 MWe.
	1605	All control valves associated with the MSRs returned to service. Generator output increased to 950 MWe.
	2400	Ended month in Mode 1 at 100% power, 950 MWe.

UNIT SHUTDOWN AND POWER REDUCTIONS  
Explanation Sheet

Docket No.: 50-339

Report Month January Unit Name: NA-2

Year: 1997 Date: February 5, 1997

Contact: W. R. Matthews

\* No entries this month.

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: January 1997

DOCKET NO.: 50-339  
 UNIT NAME: NA-2  
 DATE: February 5, 1997  
 CONTACT: W. R. Matthews  
 PHONE: (540) 894-2101

No.	Date	1 Type	Duration (hrs)	2 Reason	3 Method of Shutting Down Reactor	Licensee Event Report #	4 System Code	5 Component Code	Cause & Corrective Action to Prevent Recurrence
-----	------	-----------	-------------------	-------------	--	-------------------------------	---------------------	------------------------	---

\* No entries this month.

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