

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

November 10, 1999

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

Serial No. 99-586  
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 October 1999 Monthly Operating Report for North Anna Power Station Units 1 and 2.

Very truly yours,



W. R. Matthews  
Site Vice President

Enclosure

Commitments made in this letter: None.

cc: U. S. Nuclear Regulatory Commission  
Region II  
Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, Georgia 30303

Mr. M. J. Morgan  
NRC Senior Resident Inspector  
North Anna Power Station

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**VIRGINIA ELECTRIC AND POWER COMPANY  
NORTH ANNA POWER STATION  
MONTHLY OPERATING REPORT  
OCTOBER 1999**

Approved:

*W. R. Mattheis*  
Site Vice President

11/10/99  
Date *Q*

## OPERATING DATA REPORT

Docket No.: 50-338  
 Date: 11/05/99  
 Contact: W. R. Matthews  
 Telephone: (540) 894-2101

1. Unit Name:..... North Anna Unit 1
2. Reporting Period:..... October, 1999
3. Licensed Thermal Power (MWt):..... 2,893
4. Nameplate Rating (Gross MWe): ..... 979.74
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 in Capacity Ratings (Items Number 3 Through 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

	<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	745.0	7,296.0	187,236.0
12. Hours Reactor Was Critical	745.0	7,296.0	148,721.2
13. Reactor Reserve Shutdown Hours	0.0	0.0	7,134.2
14. Hours Generator On-Line	745.0	7,296.0	145,555.8
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	2,153,827.1	21,029,433.0	394,724,461.9
17. Gross Electrical Energy Generated (MWH)	730,953.0	7,091,520.0	166,849,390.0
18. Net Electrical Energy Generated (MWH)	696,618.0	6,753,931.0	123,115,169.0
19. Unit Service Factor	100.0%	100.0%	77.7%
20. Unit Availability Factor	100.0%	100.0%	77.7%
21. Unit Capacity Factor (Using MDC Net)	104.7%	103.6%	73.6%
22. Unit Capacity Factor (Using DER Net)	103.1%	102.1%	72.5%
23. Unit Forced Outage Rate	0.0%	0.0%	7.5%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
30 day refueling outage scheduled in March 2000

25. If Shut Down at End of Report Period, Estimated Date of Start-up: \_\_\_\_\_

26. Unit In Test Status (Prior to Commercial Operation):

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

## AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-338  
Unit Name: North Anna Unit 1  
Date: 11/05/99  
Contact: W. R. Matthews  
Telephone: (540) 894-2101

MONTH: October, 1999

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	935	17	934
2	935	18	934
3	936	19	934
4	935	20	934
5	936	21	934
6	937	22	935
7	937	23	935
8	935	24	936
9	934	25	936
10	934	26	935
11	933	27	937
12	934	28	936
13	934	29	937
14	934	30	936
15	935	31	937
16	934		

### 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.

Docket No.: 50-338  
Unit Name: North Anna Unit 1  
Date: 11/05/99  
Contact: W. R. Matthews  
Telephone: (540) 894-2101

**NORTH ANNA POWER STATION**

**UNIT NO.: 1**  
**MONTH: October, 1999**

**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>
October 1, 1999	0000	Began the month in Mode 1, 100% power, 982 MWe.
October 31, 1999	2400	Ended the month in Mode 1, 100% power, 981 MWe.

Docket No.: 50-338  
 Unit Name: North Anna Unit 1  
 Date: 11/05/99  
 Contact: W. R. Matthews  
 Telephone: (540) 894-2101

**UNIT SHUTDOWN AND POWER REDUCTION**  
 (EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: October, 1999

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Reactor	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence

None during the reporting period.

(1)  
 F: Forced  
 S: Scheduled

(2)  
 REASON:  
 A - Equipment Failure (Explain)  
 B - Maintenance or Test  
 C - Refueling  
 D - Regulatory Restriction  
 E - Operator Training & Licensing Examination  
 F - Administrative  
 G - Operational Error (Explain)

(3)  
 METHOD:  
 1 - Manual  
 2 - Manual Scram  
 3 - Automatic Scram  
 4 - Other (Explain)

(4)  
 Exhibit G - Instructions for Preparation of Data Entry Sheets  
 for Licensee Event Report (LER) File (NUREG 0161)

(5)  
 Exhibit 1 - Same Source

## OPERATING DATA REPORT

Docket No.: 50-339  
 Date: 11/05/99  
 Contact: W. R. Matthews  
 Telephone: (540) 894-2101

1. Unit Name:..... North Anna Unit 2
  2. Reporting Period:..... October, 1999
  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 in Capacity Ratings (Items Number 3 Through 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

	<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	745.0	7,296.0	165,504.0
12. Hours Reactor Was Critical	537.4	6,635.0	140,423.2
13. Reactor Reserve Shutdown Hours	32.4	47.5	7,289.0
14. Hours Generator On-Line	514.2	6,610.7	139,184.0
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1,309,044.9	18,747,233.6	382,473,929.0
17. Gross Electrical Energy Generated (MWH)	435,727.0	6,194,020.0	125,150,936.0
18. Net Electrical Energy Generated (MWH)	413,130.0	5,889,734.0	119,503,807.0
19. Unit Service Factor	69.0%	90.6%	84.1%
20. Unit Availability Factor	69.0%	90.6%	84.1%
21. Unit Capacity Factor (Using MDC Net)	61.8%	90.0%	80.3%
22. Unit Capacity Factor (Using DER Net)	61.1%	89.0%	79.6%
23. Unit Forced Outage Rate	0.0%	0.0%	4.6%

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

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25. If Shut Down at End of Report Period, Estimated Date of Start-up: \_\_\_\_\_

26. Unit In Test Status (Prior to Commercial Operation):

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

## AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-339  
Unit Name: North Anna Unit 2  
Date: 11/05/99  
Contact: W. R. Matthews  
Telephone: (540) 894-2101

MONTH: October, 1999

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	000	17	923
2	000	18	924
3	000	19	925
4	000	20	925
5	000	21	926
6	000	22	926
7	000	23	926
8	000	24	926
9	000	25	926
10	068	26	926
11	222	27	926
12	337	28	927
13	466	29	927
14	674	30	927
15	701	31	927
16	819		

### 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.



Docket No.: 50-339  
Unit Name: North Anna Unit 2  
Date: 11/05/99  
Contact: W. R. Matthews  
Telephone: (540) 894-2101

**NORTH ANNA POWER STATION**

**UNIT NO.: 2**  
**MONTH: October, 1999**

**SUMMARY OF OPERATING EXPERIENCE**

Page 1 of 1

Listed below in chronological sequence is a summary of operating experiences for the month which required load reductions or resulted in significant non-load related incidents.

<u>Date</u>	<u>Time</u>	<u>Data</u>
October 1, 1999	0000	Began the month in Mode 6.
	0308	Entered Mode 5.
October 3, 1999	0117	Pressurizer power-operated relief valve (PORV) 2-RC-PCV-2455C lifted following the start of the "A" Reactor Coolant Pump. After the PORV opened, RCS temperature increased to 131 degrees F, the PORV setpoint limit automatically shifted to 415 psig and the PORV closed.
October 8, 1999	0555	Entered Mode 4.
	1710	Entered Mode 3.
October 9, 1999	1417	Entered Mode 2.
	1530	Reactor is critical.
October 10, 1999	1404	Entered Mode 1.
	1449	Unit 2 is on-line.
	1545	Unit is at 27% power in a chemistry hold and to place reheaters in service.
October 11, 1999	1605	Cleared chemistry hold and commenced ramp to 75% power.
October 13, 1999	2114	Stabilized power at 75.5%, 725 MWe for flux mapping.
October 14, 1999	0050	Flux mapping complete.
October 15, 1999	1730	Commenced ramp to 100% power.
October 17, 1999	0220	Unit at 100% power, 972 MWe.
October 31, 1999	2400	Ended the month in Mode 1, 100% power, 972 MWe.

Docket No.: 50-339  
 Unit Name: North Anna Unit 2  
 Date: 11/05/99  
 Contact: W. R. Matthews  
 Telephone: (540) 894-2101

**UNIT SHUTDOWN AND POWER REDUCTION**  
 (EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: October, 1999

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence
10-1-99	S	230.8	C	1	NA	NA	NA	Continuation of 1999 scheduled refueling outage.

(1)  
 F: Forced  
 S: Scheduled

(2)  
 REASON:  
 A - Equipment Failure (Explain)  
 B - Maintenance or Test  
 C - Refueling  
 D - Regulatory Restriction  
 E - Operator Training & Licensing Examination  
 F - Administrative  
 G - Operational Error (Explain)

(3)  
 METHOD:  
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