

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**RICHMOND, VIRGINIA 23261**

February 12, 2001

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

Serial No. 01-092  
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 2001 Monthly Operating Report for North Anna Power Station Units 1 and 2.

Very truly yours,



D. A. Heacock  
Site Vice President

Enclosure

Commitments made in this letter: None.

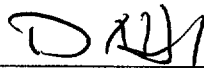
cc: U. S. Nuclear Regulatory Commission  
Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, Georgia 30303

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

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**NORTH ANNA POWER STATION**  
**MONTHLY OPERATING REPORT**  
**JANUARY 2001**

Approved:



Site Vice President

2-12-01

Date



# OPERATING DATA REPORT

Docket No.: 50-338  
 Date: 02/05/01  
 Contact: D. A. Heacock  
 Telephone: (540) 894-2101

1. Unit Name: ..... North Anna Unit 1
2. Reporting Period: ..... January 2001
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): ... 971
7. Maximum Dependable Capacity (Net MWe): ..... 925

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               | 744.0             | 744.0               | 198,228.0         |
| 12. Hours Reactor Was Critical              | 744.0             | 744.0               | 159,011.4         |
| 13. Reactor Reserve Shutdown Hours          | 0.0               | 0.0                 | 7,239.5           |
| 14. Hours Generator On-Line                 | 744.0             | 744.0               | 155,762.0         |
| 15. Unit Reserve Shutdown Hours             | 0.0               | 0.0                 | 0.0               |
| 16. Gross Thermal Energy Generated (MWH)    | 2,148,958.0       | 2,148,958.0         | 423,470,800.6     |
| 17. Gross Electrical Energy Generated (MWH) | 728,521.0         | 728,521.0           | 176,593,237.0     |
| 18. Net Electrical Energy Generated (MWH)   | 694,653.0         | 694,653.0           | 132,393,430.0     |
| 19. Unit Service Factor                     | 100.0%            | 100.0%              | 78.6%             |
| 20. Unit Availability Factor                | 100.0%            | 100.0%              | 78.6%             |
| 21. Unit Capacity Factor (Using MDC Net)    | 100.9%            | 100.9%              | 74.7%             |
| 22. Unit Capacity Factor (Using DER Net)    | 102.9%            | 102.9%              | 73.6%             |
| 23. Unit Forced Outage Rate                 | 0.0%              | 0.0%                | 7.1%              |

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 Start-up: N/A

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: 02/05/01  
Contact: D. A. Heacock  
Telephone: (540) 894-2101

MONTH: January, 2001

| Day | Average Daily Power Level<br>(MWe - Net) | Day | Average Daily Power Level<br>(MWe - Net) |
|-----|--|-----|--|
| 1   | 935                                      | 17  | 935                                      |
| 2   | 934                                      | 18  | 934                                      |
| 3   | 934                                      | 19  | 934                                      |
| 4   | 934                                      | 20  | 935                                      |
| 5   | 932                                      | 21  | 934                                      |
| 6   | 933                                      | 22  | 934                                      |
| 7   | 934                                      | 23  | 934                                      |
| 8   | 934                                      | 24  | 935                                      |
| 9   | 934                                      | 25  | 934                                      |
| 10  | 935                                      | 26  | 934                                      |
| 11  | 935                                      | 27  | 922                                      |
| 12  | 935                                      | 28  | 934                                      |
| 13  | 935                                      | 29  | 934                                      |
| 14  | 934                                      | 30  | 934                                      |
| 15  | 934                                      | 31  | 934                                      |
| 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: 02/05/01  
Contact: D. A. Heacock  
Telephone: (540) 894-2101

**NORTH ANNA POWER STATION**

**UNIT NO.: 1**  
**MONTH: January, 2001**

**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 1, 2001  | 0000        | Began the month in Mode 1, 100% power, 980 MWe.  |
| January 27, 2001 | 0021        | Commenced ramp down to perform repairs on extraction steam non-return valve 1-ES-NRV-101B due to a steam leak. |
|                  | 0121        | Stabilized power at 97%, 965 MWe.  |
|                  | 0351        | Hand torqued 1-ES-NRV-101B closed.   |
|                  | 0400        | Commenced ramp up to 100% power.   |
|                  | 0437        | Unit 1 at 100% power, 964 MWe.   |
| January 31, 2001 | 2400        | Ended the month in Mode 1, 100% power, 977 MWe.  |

Docket No.: 50-338  
 Unit Name: North Anna Unit 1  
 Date: 02/05/01  
 Contact: D. A. Heacock  
 Telephone: (540) 894-2101

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

REPORT MONTH: January, 2001

| Report No. | Date | (1)<br>Type | Duration Hours | (2)<br>Reason | (3)<br>Method of Shutting Down Reactor | LER No. | (4)<br>System Code | (5)<br>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  
 H - Other (Explain)

(3)  
 METHOD:  
 1 - Manual  
 2 - Manual Scram  
 3 - Automatic Scram  
 4 - Continuations  
 5 - Load Reduction  
 9 - Other

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

(5)  
 Exhibit H - Same Source

# OPERATING DATA REPORT

Docket No.: 50-339  
 Date: 02/05/01  
 Contact: D. A. Heacock  
 Telephone: (540) 894-2101

1. Unit Name: ..... North Anna Unit 2
2. Reporting Period: ..... January, 2001
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): ... 963
7. Maximum Dependable Capacity (Net MWe): ..... 917

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

|   | This Month  | Year-To-Date | Cumulative    |
|---|-------------|--------------|---------------|
| 11. Hours in Reporting Period               | 744.0       | 744.0        | 176,496.0     |
| 12. Hours Reactor Was Critical              | 713.3       | 713.3        | 151,332.6     |
| 13. Reactor Reserve Shutdown Hours          | 30.1        | 30.1         | 7,368.7       |
| 14. Hours Generator On-Line                 | 710.3       | 710.3        | 150,048.1     |
| 15. Unit Reserve Shutdown Hours             | 0.0         | 0.0          | 0.0           |
| 16. Gross Thermal Energy Generated (MWH)    | 1,992,221.1 | 1,992,221.1  | 413,661,184.3 |
| 17. Gross Electrical Energy Generated (MWH) | 667,589.0   | 667,589.0    | 135,595,857.0 |
| 18. Net Electrical Energy Generated (MWH)   | 635,356.0   | 635,356.0    | 129,453,427.0 |
| 19. Unit Service Factor                     | 95.5%       | 95.5%        | 85.0%         |
| 20. Unit Availability Factor                | 95.5%       | 99.5%        | 85.0%         |
| 21. Unit Capacity Factor (Using MDC Net)    | 93.1%       | 93.1%        | 81.6%         |
| 22. Unit Capacity Factor (Using DER Net)    | 94.2%       | 94.2%        | 80.9%         |
| 23. Unit Forced Outage Rate                 | 4.5%        | 4.5%         | 4.3%          |

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): March 2001  
 Type and duration of scheduled shutdowns are no longer provided.  
 (Reference: Letter Serial No. 00-070, dated February 11, 2000)

25. If Shut Down at End of Report Period, Estimated Date of Start-up: N/A

26. Unit 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 Name: North Anna Unit 2  
Date: 02/05/01  
Contact: D. A. Heacock  
Telephone: (540) 894-2101

MONTH: January, 2001

| Day | Average Daily Power Level<br>(MWe - Net) | Day | Average Daily Power Level<br>(MWe - Net) |
|-----|--|-----|--|
| 1   | 925                                      | 17  | 918                                      |
| 2   | 925                                      | 18  | 915                                      |
| 3   | 925                                      | 19  | 558                                      |
| 4   | 925                                      | 20  | 000                                      |
| 5   | 925                                      | 21  | 496                                      |
| 6   | 924                                      | 22  | 887                                      |
| 7   | 923                                      | 23  | 889                                      |
| 8   | 924                                      | 24  | 889                                      |
| 9   | 924                                      | 25  | 893                                      |
| 10  | 924                                      | 26  | 891                                      |
| 11  | 925                                      | 27  | 886                                      |
| 12  | 925                                      | 28  | 875                                      |
| 13  | 924                                      | 29  | 874                                      |
| 14  | 923                                      | 30  | 864                                      |
| 15  | 921                                      | 31  | 858                                      |
| 16  | 920                                      |     |  |

### 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: 02/05/01  
Contact: D. A. Heacock  
Telephone: (540) 894-2101

**NORTH ANNA POWER STATION**

**UNIT NO.: 2**  
**MONTH: January, 2001**

**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>  |
|------------------|-------------|--|
| January 1, 2001  | 0000        | Began the month in Mode 1, 100% power, 971 MWe.  |
| January 12, 2001 | 1014        | Began end of life power coastdown.   |
| January 19, 2001 | 1145        | Commenced ramping unit off line due to reactor coolant system (RCS) identified leakage exceeding the Technical Specification (TS) 3.4.6.2 leakage limit.   |
|                  | 1711        | The main generator was removed from service.   |
|                  | 1735        | Entered Mode 2.  |
|                  | 1747        | Entered Mode 3.  |
|                  | 2145        | RCS identified leakage was reduced below the TS 3.4.6.2 leakage limit when the "C" reactor coolant loop bypass valve, 2-RC-MOV-2587, was positioned on its backseat. The packing on 2-RC-MOV-2587 was subsequently replaced. |
| January 20, 2001 | 2353        | Entered Mode 2.  |
| January 21, 2001 | 0032        | Reactor critical.  |
|                  | 0110        | Entered Mode 1.  |
|                  | 0254        | Placed Unit 2 on line and commenced ramp up.   |
| January 25, 2001 | 0000        | Unit 2 is at 96.7% power, 939 MWe.   |
| January 31, 2001 | 2400        | Ended the month in Mode 1, 93.1% power, 901 MWe in an end of life power coastdown.   |

Docket No.: 50-339  
Unit Name: North Anna Unit 2  
Date: 02/05/01  
Contact: D. A. Heacock  
Telephone: (540) 894-2101

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

REPORT MONTH: January, 2001

| Report No | Date    | (1)<br>Type | Duration<br>Hours | (2)<br>Reason | (3)<br>Method<br>of<br>Shutting<br>Down<br>Reactor | LER No.    | (4)<br>System<br>Code | (5)<br>Component<br>Code | Cause &<br>Corrective Action<br>to Prevent<br>Recurrence  |
|-----------|---------|-------------|-------------------|---------------|--|------------|-----------------------|--------------------------|---|
| 2001-001  | 1/19/01 | F           | 33.7              | A             | 1  | N2-2001-00 | AB                    | ISV                      | The increase in identified RCS leakage was the result of the "C" reactor coolant loop bypass valve leaking past the valve stem packing material due to to aging of the packing material. The valve was placed on its backseat to stop the leakage. The valve stem packing material was subsequently replaced. |

(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  
H - Other (explain)

(3)  
METHOD:  
1 - Manual  
2 - Manual Scram  
3 - Automatic Scram  
4 - Continuations  
5 - Load Reduction  
9 - Other

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

(5)  
Exhibit H - Same Source