# VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

January 11, 2002

| United States Nuclear Regulatory Commission | ì |
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| Attention: Document Control Desk            |   |

Washington, D. C. 20555

Serial No.

02-034

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 December 2001 Monthly Operating Report for North Anna Power Station Units 1 and 2.

Very truly yours,

D. A. Héacock

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

IEAL

# VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION MONTHLY OPERATING REPORT DECEMBER 2001

Approved:

Site Vice President

1-11-02

Date

#### **OPERATING DATA REPORT**

Docket No.:

Date:

Contact:

50-338

01/04/02 D. A. Heacock

(540) 894-2101 Telephone: Unit Name: ...... North Anna Unit 1 1. Reporting Period: ...... December 2001 2. Licensed Thermal Power (MWt): ..... 2.893 3. 979.74 Nameplate Rating (Gross MWe):.... 4. 5. Design Electrical Rating (Net MWe): ..... 907 Maximum Dependable Capacity (Gross MWe):.... 971 6. 925 Maximum Dependable Capacity (Net MWe):...... If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: 8. N/A Power Level To Which Restricted, If Any (Net MWe): N/A N/A 10. Reasons For Restrictions, If Any: Year-To-Date Cumulative This Month 744.0 8.760.0 206,244.0 11. Hours in Reporting Period 8.028.4 166.295.8 744.0 12. Hours Reactor Was Critical 7,275.2 0.0 35.7 Reactor Reserve Shutdown Hours 163,029.3 744.0 8.011.3 14. Hours Generator On-Line 0.0 0.0 0.0 15. Unit Reserve Shutdown Hours 443,430,006.9 2,151,009.2 22,108,164,3 16. Gross Thermal Energy Generated (MWH) 17. Gross Electrical Energy Generated (MWH) 732,129.0 7,490,515.0 183,355,231.0 7,120,790.0 138,819,567.0 697,125.0 18. Net Electrical Energy Generated (MWH) 79.0% 100.0% 91.5% 19. Unit Service Factor 79.0% 100.0% 91.5% 20. Unit Availability Factor 75.2% 101.3% 87.9% 21. Unit Capacity Factor (Using MDC Net) 74.2% 103.3% 89.6% 22. Unit Capacity Factor (Using DER Net) 6.9% 0.0% Unit Forced Outage Rate 0.0% 23. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A 24. Type and duration of scheduled shutdowns are no longer provided. (Reference: Letter Serial No. 00-070, dated February 11, 2000) If Shut Down at End of Report Period, Estimated Date of Start-up: N/A 25. Estimated start-up dates are no longer provided. (Reference: Letter Serial No. 00-070, dated February 11, 2000) Unit 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 Name: North Anna Unit 1

Date: 01/04/02 Contact: D. A. Heacock Telephone: (540) 894-2101

Month: December, 2001

| Day | Average Daily Power Level (MWe - Net) | Day | Average Daily Power Level<br>(MWe - Net) |
|-----|---------------------------------------|-----|--|
| 1   | 939                                   | 17  | 938                                      |
| 2   | 938                                   | 18  | 938                                      |
| 3   | 938                                   | 19  | 939                                      |
| 4   | 937                                   | 20  | 938                                      |
| 5   | 937                                   | 21  | 937                                      |
| 6   | 936                                   | 22  | 937                                      |
| 7   | 937                                   | 23  | 937                                      |
| 8   | 937                                   | 24  | 930                                      |
| 9   | 938                                   | 25  | 937                                      |
| 10  | 939                                   | 26  | 936                                      |
| 11  | 937                                   | 27  | 937                                      |
| 12  | 937                                   | 28  | 936                                      |
| 13  | 937                                   | 29  | 936                                      |
| 14  | 936                                   | 30  | 936                                      |
| 15  | 937                                   | 31  | 936                                      |
| 16  | 937                                   |     |  |

#### **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 Name: North Anna Unit 1

Date: 01/04/02

Contact: D. A. Heacock

Telephone: (540) 894-2101

#### **NORTH ANNA POWER STATION**

**UNIT NO.:** <u>1</u>

MONTH: December, 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>                                     |
|-------------------|-------------|---|
| December 1, 2001  | 0000        | Began the month in Mode 1, 100% power, 986 MWe. |
| December 31, 2001 | 2400        | Ended the month in Mode 1, 100% power, 982 MWe. |

Unit Name: North Anna Unit 1

Date: 01/04/02 Contact: D. A. Heacock

Telephone: (540) 894-2101

## **UNIT SHUTDOWN AND POWER REDUCTION**

(EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: December, 2001

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

None during the reporting period.

(1) Forced Scheduled (2) REASON:

A - Equipment Failure (Explain)
B - Maintenance or Test
C - Refueling
D - Regulatory Restriction
E - Operator Training & Licensing Examination

Administrative

G-Operational Error

Other (Explain)

METHOD:

Manual

Manual Scram

Automatic Scram

4 - Continuations

5 - Load Reduction 9 - Other

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**

50-339

01/04/02 D. A. Heacock

Docket No.: Date:

Contact:

Telephone: (540) 894-2101 Unit Name:.... North Anna Unit 2 1. Reporting Period: December, 2001 2. Licensed Thermal Power (MWt): ..... 2.893 979 Nameplate Rating (Gross MWe):..... 4. Design Electrical Rating (Net MWe): ..... 907 5. Maximum Dependable Capacity (Gross MWe):.... 963 6. 7. Maximum Dependable Capacity (Net MWe):...... 917 If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A 8. 9. Power Level To Which Restricted, If Any (Net MWe): N/A Reasons For Restrictions, If Anv: N/A 10. This Month Year-To-Date Cumulative 8,760.0 184,512.0 744.0 11. Hours in Reporting Period 157,450.0 367.3 6.830.7 Hours Reactor Was Critical 12. 7,489.7 67.8 151.1 Reactor Reserve Shutdown Hours 13. 156,116.4 6,778.6 Hours Generator On-Line 349.1 14. 0.0 0.0 0.0 15. Unit Reserve Shutdown Hours 18.844,060.8 430,513,024.0 982,913.9 16. Gross Thermal Energy Generated (MWH) 6,289,873.0 141,218,141.0 Gross Electrical Energy Generated (MWH) 327.915.0 17. 5,975,803.0 134,793,874.0 18. Net Electrical Energy Generated (MWH) 311,717.0 46.9% 77.4% 84.6% Unit Service Factor 19. 46.9% 77.4% 84.6% 20. Unit Availability Factor 81.2% 74.4% Unit Capacity Factor (Using MDC Net) 45.7% 21. 75.2% 80.5% Unit Capacity Factor (Using DER Net) 46.2% 22. 12.8% 1.2% 4.2% 23. Unit Forced Outage Rate Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A 24. Type and duration of scheduled shutdowns are no longer provided. (Reference: Letter Serial No. 00-070, dated February 11, 2000) If Shut Down at End of Report Period, Estimated Date of Start-up: 25. Estimated start-up dates are no longer provided. (Reference: Letter Serial No. 00-070, dated February 11, 2000) 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: 01/04/02
Contact: D. A. Heacock
Telephone: (540) 894-2101

Month: December, 2001

| Day | Average Daily Power Level<br>(MWe - Net) | Day | Average Daily Power Level<br>(MWe - Net) |
|-----|--|-----|--|
| 1   | 000                                      | 17  | 923                                      |
| 2   | 000                                      | 18  | 925                                      |
| 3   | 000                                      | 19  | 925                                      |
| 4   | 000                                      | 20  | 925                                      |
| 5   | 000                                      | 21  | 925                                      |
| 6   | 000                                      | 22  | 578                                      |
| 7   | 000                                      | 23  | 000                                      |
| 8   | 000                                      | 24  | 081                                      |
| 9   | 000                                      | 25  | 866                                      |
| 10  | 000                                      | 26  | 925                                      |
| 11  | 000                                      | 27  | 924                                      |
| 12  | 000                                      | 28  | 924                                      |
| 13  | 000                                      | 29  | 923                                      |
| 14  | 000                                      | 30  | 924                                      |
| 15  | 381                                      | 31  | 923                                      |
| 16  | 917                                      |     |  |

#### **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 Name: North Anna Unit 2
Date: 01/04/02
Contact: D. A. Heacock
Telephone: (540) 894-2101

## **NORTH ANNA POWER STATION**

**UNIT NO.: 2** 

MONTH: Debember, 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>  |
|-------------------|-------------|--|
| December 1, 2001  | 0000        | Began the month in Mode 6  |
| December 9, 2001  | 0252        | Entered Mode 5.  |
| December 13, 2001 | 2001        | Entered Mode 4.  |
| December 14, 2001 | 0600        | Entered Mode 3.  |
| December 15, 2001 | 0351        | Commenced reactor startup.   |
| December 15, 2001 | 0358        | The Unit 2 reactor is critical.  |
| December 15, 2001 | 0507        | Entered Mode 1.  |
| December 15, 2001 | 0749        | The main generator was placed on-line.   |
| December 15, 2001 | 0910        | Unit 2 is at 30% power, 225 MWe.   |
| December 16, 2001 | 0405        | Unit 2 is at 100% power, 962 MWe.  |
| December 22, 2001 | 1542        | Automatic reactor trip from 100% power due to EHC power supply failure. The pressurizer PORVs lifted monentarily and immediately reseated during the transient which is not unexpected for a loss of load event. |
| December 24, 2001 | 0315        | Commenced reactor startup.   |
| December 24, 2001 | 0331        | Entered Mode 2.  |
| December 24, 2001 | 0402        | Tne Unit 2 reactor is critical.  |
| December 24, 2001 | 0508        | Entered Mode 1.  |
| December 24, 2001 | 1849        | The main generator was placed on-line.   |
| December 24, 2001 | 1953        | Unit 2 is at 30% power, 240 MWe.   |
| December 25, 2001 | 0740        | Unit 2 is at 100% power, 965 MWe.  |
| December 31, 2001 | 2400        | Ended the month in Mode 1, 100% power, 967 MWe.  |

Unit Name: North Anna Unit 2

Date: 01/04/02

Contact: D. A. Heacock

Telephone: (540) 894-2101

# **UNIT SHUTDOWN AND POWER REDUCTION**

(EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: December, 2001

| Report<br>No | Date     | (1)<br>Type | Duration<br>Hours | (2)<br>Reason | (3) Method of Shutting Down Reactor | LER No. | (4)<br>System<br>Code | (5)<br>Component<br>Code | Cause &<br>Corrective Action<br>to Prevent<br>Recurrence  |
|--------------|----------|-------------|-------------------|---------------|-------------------------------------|---------|-----------------------|--------------------------|---|
| N2-2001-005  | 12/22/01 | S           | 343.8<br>51.1     | A             | 3                                   | 01-005  | TG                    | RECT/IS                  | Continuation of scheduled shutdown to inspect the reactor head.  Automatic reactor trip due to EHC power supply failure. The diode and switch that caused the reactor trip were replaced. |

(1) Forced S: Scheduled

(2)REASON:

Equipment Failure (Explain)

B -C -D -Maintenance or Test

Refueling
Regulatory Restriction
Operator Training & Licensing Examination

Administrative

**Operational Error** G

Other (explain)

(3)METHOD:

Manual

Manual Scram

**Automatic Scram** 3 -

Continuations 4 -

5 -Load Reduction

Other

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

(5) Exhibit H - Same Source