# VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

May 12, 2000

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

Serial No. NAPS/JHL 00-254

50-338

Docket Nos.

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 April 2000 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

Atlanta Federal Center

61 Forsyth St., SW, Suite 23T85

Atlanta, Georgia 30303

Mr. M. J. Morgan

NRC Senior Resident Inspector

North Anna Power Station

# VIRGINIA ELECTRIC AND POWER COMPANY NORTH ANNA POWER STATION MONTHLY OPERATING REPORT **APRIL 2000**

Approved:

#### **OPERATING DATA REPORT**

Docket No.:

Date: Contact: 50-338 05/05/00

D. A. Heacock

Telephone: (540) 894-2101 Unit Name:.... North Anna Unit 1 1 Reporting Period:.... 2. April 2000 3. Licensed Thermal Power (MWt): 2.893 Nameplate Rating (Gross MWe): 4. 979.74 5. Design Electrical Rating (Net MWe):.... 907 Maximum Dependable Capacity (Gross MWe): ... 940 Maximum Dependable Capacity (Net MWe): ...... 893 If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: 8. Power Level To Which Restricted, If Any (Net MWe): N/A 9. 10. Reasons For Restrictions, If Any: N/A This Month Year-To-Date Cumulative 11. Hours in Reporting Period 719.0 2.903.0 191,603.0 12. Hours Reactor Was Critical 561.8 2.267.3 152,452.5 13. Reactor Reserve Shutdown Hours 24.5 39.2 7,173.4 14. Hours Generator On-Line 530.5 2,235.1 149,254.9 15. Unit Reserve Shutdown Hours 0.0 0.0 0.0 16. Gross Thermal Energy Generated (MWH) 404,686,906.5 1,433,869.1 5.729.968.4 17. Gross Electrical Energy Generated (MWH) 483,163.0 1,950,430.0 170,236,573.0 18. Net Electrical Energy Generated (MWH) 458,282.0 1,850,186.0 126,335,886.0 19. Unit Service Factor 73.8% 77.0% 77.9% 20. Unit Availability Factor 73.8% 77.0% 77.9% 21. Unit Capacity Factor (Using MDC Net) 71.4% 71.4% 73.8% 22. Unit Capacity Factor (Using DER Net) 70.3% 70.3% 72.7% 23. Unit Forced Outage Rate 0.0% 0.0% 7.4% Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A 24. If Shut Down at End of Report Period, Estimated Date of Start-up: N/A 25. 26. Unit In Test Status (Prior to Commercial Operation): **FORECAST ACHIEVED** INITIAL CRITICALITY **INITIAL ELECTRICITY** COMMERCIAL OPERATION

# **AVERAGE DAILY UNIT POWER LEVEL**

Docket No.: 50-338 Unit Name: North Anna Unit 1

Date: 05/05/00 Contact: D. A. Heacock Telephone: (540) 894-2101

April, 2000 Монтн:

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)		
1	000	17	935		
2	000	18	934		
3	000	19	932		
4	000	20	933		
5	000	21	935		
6	000	22	935		
7	000	23	935		
8	014	24	935		
9	192	25	930		
10	552	26	932		
11	787	27	934		
12	934	28	936		
13	933	29	795		
14	934	30	931		
15	935				
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: 05/05/00

Contact: D. A. Heacock Telephone: (540) 894-2101

# **NORTH ANNA POWER STATION**

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

MONTH: April, 2000

# **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>
April 1, 2000	0000	Began the month in Mode 5.
April 6, 2000	1311	Entered Mode 4.
	1846	Entered Mode 3.
April 7, 2000	1340	Entered Mode 2.
	1414	Reactor critical.
April 8, 2000	0853	Entered Mode 1.
	2133	Placed Unit 1 on-line.
April 12, 2000	0241	Unit 1 is at 99.5% power, 982 MWe.
April 27, 2000	1254	Ramped Unit 1 to 95% power for governor valve maintenance.
	1406	Completed governor valve maintenance.
	1548	Ramped Unit 1 to 100% power, 984 MWe.
April 29, 2000	1232	Ramping to 60% power, to repair bus duct cooling fan 1-GM-F-1.
	1553	Unit 1 at 60% power, 575 MWe.
	2105	Completed maintenance on 1-GM-F-1. Ramping Unit to 100% power.
April 30, 2000	0152	Unit 1 is at 100% power.
	2400	Ended the month in Mode 1, 100% power, 980 MWe.

Docket No.: 50-338

Unit Name: North Anna Unit 1

Date: 05/05/00

Contact: D. A. Heacock Telephone: (540) 894-2101

# **UNIT SHUTDOWN AND POWER REDUCTION**

(EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: April, 2000

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
4/1/00	S	188.5	С	1	NA	NA	NA	Continuation of scheduled refueling outage
4/29/00	F	13.5	В	NA	NA	NA	NA	Ramped down to 60% power to repair bus duct cooling fan 1-GM-F-1.

(1) F: Forced (2) REASON:

(3) METHOD:

S: Scheduled

Manual

Equipment Failure (Explain) Maintenance or Test

2 -Manual Scram

Refueling

Automatic Scram

C -D -

Regulatory Restriction

Other (Explain)

Operator Training & Licensing Examination

Administrative

Operational Error (Explain)

(5) Exhibit 1 - Same Source

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

#### **OPERATING DATA REPORT**

Docket No.:

Date:

Contact:

50-339

05/05/00

D. A. Heacock

Telephone: (540) 894-2101 Unit Name:.... North Anna Unit 2 2. Reporting Period:.... April, 2000 Licensed Thermal Power (MWt): 3. 2.893 Nameplate Rating (Gross MWe): ..... 979 5. Design Electrical Rating (Net MWe):..... 907 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: Power Level To Which Restricted, If Any (Net MWe): N/A 9. 10. Reasons For Restrictions, If Any: N/A This Month Year-To-Date Cumulative 11. Hours in Reporting Period 719.0 2,903.0 169,871.0 12. Hours Reactor Was Critical 686.1 2.870.1 144,738.3 13. Reactor Reserve Shutdown Hours 31.0 31.0 7,338.6 14. Hours Generator On-Line 664.4 2.848.0 143,456.8 15. Unit Reserve Shutdown Hours 0.0 0.0 0.0 16. Gross Thermal Energy Generated (MWH) 1,908,949.3 8,185,133.9 394,706,387.5 17. Gross Electrical Energy Generated (MWH) 638,547.0 2,746,135.0 129,256,313.0 18. Net Electrical Energy Generated (MWH) 608,571.0 2,617,198.0 123,416,416.0 19. Unit Service Factor 92.4% 98.1% 84.5% 20. Unit Availability Factor 92.4% 98.1% 84.5% 21. Unit Capacity Factor (Using MDC Net) 94.4% 100.5% 80.8% 22. Unit Capacity Factor (Using DER Net) 93.3% 99.4% 80.1% 23. Unit Forced Outage Rate 7.5% 1.8% 4.5% 24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): N/A If Shut Down at End of Report Period, Estimated Date of Start-up: 25. N/A 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: 05/05/00

Date: 05/05/00 Contact: D. A. Heacock Telephone: (540) 894-2101

Month: April, 2000

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)	
1	924	17	929	
2	917	18	929	
3	344	19	927	
4	000	20	926	
5	110	21	926	
6	880	22	928	
7	916	23	928	
8	917	24	928	
9	925	25	927	
10	924	26	928	
11	924	27	928	
12	925	28	927	
13	928	29	925	
14	923	30	927	
15	929			
16	928			

#### **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: 05/05/00 Contact: D. A. Heacock Telephone: (540) 894-2101

# **NORTH ANNA POWER STATION**

**UNIT NO.: 2** 

MONTH: April, 2000

# **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>
April 1, 2000	0000	Began the month in Mode 1, 100% power, 970 MWe.
April 3, 2000	0857	Automatic reactor trip due to 2C station service transformer secondary feeder cable failure.
April 4, 2000	0557	Entered Mode 2.
	0624	Reactor critical.
	0749	Entered Mode 1.
	1146	Manual reactor trip due to loss of reactor coolant loop flow.
	2247	Entered Mode 2.
	2314	Reactor critical.
April 5, 2000	0010	Entered Mode 1.
	1536	Placed Unit 2 on-line.
April 6, 2000	0548	Unit at 100% power, 960 MWe.
April 30, 2000	2400	Ended the month in Mode 1, 100% power, 969 MWe.

Docket No.: 50-339

Unit Name: North Anna Unit 2

Date: 05/05/00 Contact: D. A. Heacock Telephone: (540) 894-2101

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

REPORT MONTH: April, 2000

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
4/3/00	F	54.6*	А	3	N2-00- 001-00	EA	CBL5	Automatic reactor trip due to 2C station service transformer (SST) secondary feeder cable failure. The cable was repaired and the 2C SST was returned to service.
4/4/00	F		G	2	N2-00- 002-00	АВ	Р	Manual reactor trip due to loss of reactor coolant loop flow when the incorrect potential transformer fuse drawer for the "F" emergency transfer bus was opened. Remedial training was provided to Operations personnel involved. A change to the controlling procedure for clearing tags and locating fuses was initiated.

<sup>\*</sup> Total duration for both events

(1) F: Forced

(2)REASON:

METHOD:

S: Scheduled

Equipment Failure (Explain)

Manual

B -C -Maintenance or Test

Refueling

D - Regulatory Restriction

2 - Manual Scram 3 - Automatic Scram 4 - Other (Explain)

E - Operator Training & Licensing Examination

F - Administrative

G - Operational Error (Explain)

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

(5) Exhibit 1 - Same Source