

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 14, 1992

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 92-333
NL&P/JMJ:jmj
Docket Nos. 50-338
50-339
License Nos. NPF-4
NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
MONTHLY OPERATING REPORT

Enclosed is the Monthly Operating Report for North Anna Power Station Units 1 and 2 for the month of April 1992.

Very truly yours,



W. L. Stewart
Senior Vice President - Nuclear

Enclosures

cc: U.S. Nuclear Regulatory Commission
101 Marietta Street, NW
Suite 2900
Atlanta, GA 30323


Mr. M. S. Lesser
NRC Senior Resident Inspector
North Anna Power Station

Handwritten initials/signature

VIRGINIA POWER COMPANY
NORTH ANNA POWER STATION
MONTHLY OPERATING REPORT

MONTH: April YEAR: 1992

Approved:


Station Manager

4

OPERATING DATA REPORT

DOCKET NO.: 50-338
 DATE: May 4, 1992
 CONTACT: G. E. Kane
 PHONE: (703) 894-2101

OPERATING STATUS

1. Unit Name:.....North Anna 1
2. Reporting Period:.....April 1992
3. Licensed Thermal Power (MWt):..... 2,748
4. Nameplate Rating (Gross MWe):..... 947
5. Design Electrical Rating (Net MWe):..... 907
6. Maximum Dependable Capacity (Gross MWe):.. 894
7. Maximum Dependable Capacity (Net MWe):.... 848

8. If changes occur in Capacity Ratings (Items No. 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 restriction, if any: N/A

| | This Month | Y-t-D | Cumulative |
|--|-------------|-------------|---------------|
| 11. Hours in Reporting Period..... | 719.0 | 2,903.0 | 121,475.0 |
| 12. Number of Hours Reactor was Critical..... | 719.0 | 1,361.3 | 88,049.8 |
| 13. Reactor Reserve Shutdown Hours..... | 0.0 | 36.3 | 6,758.0 |
| 14. Hours Generator On-Line..... | 719.0 | 1,344.2 | 85,115.7 |
| 15. Unit Reserve Shutdown Hours..... | 0.0 | 0.0 | 0.0 |
| 16. Gross Thermal Energy Generated (MWH)..... | 1,961,347.8 | 3,529,434.7 | 226,482,207.1 |
| 17. Gross Electrical Energy Generated (MWH)..... | 650,184.0 | 1,167,258.0 | 74,425,105.0 |
| 18. Net Electrical Energy Generated (MWH)..... | 617,921.0 | 1,107,470.0 | 70,462,087.0 |
| 19. Unit Service Factor..... | 100.0% | 46.3% | 70.1% |
| 20. Unit Availability Factor..... | 100.0% | 46.3% | 70.1% |
| 21. Unit Capacity Factor (using MDC Net)..... | 101.3% | 42.6% | 64.8% |
| 22. Unit Capacity Factor (using DER Net)..... | 94.8% | 42.1% | 64.0% |
| 23. Forced Outage Rate..... | 0.0% | 0.0% | 12.1% |

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each) None

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: May 4, 1992
 Contact: G. E. Kane
 Phone: (703) 894-2101

MONTH: April 1992

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY LEVEL LEVEL (MWe-Net) |
|-----|-------------------------------------|-----|-------------------------------------|
| 1 | <u>863</u> | 17 | <u>868</u> |
| 2 | <u>864</u> | 18 | <u>868</u> |
| 3 | <u>864</u> | 19 | <u>864</u> |
| 4 | <u>864</u> | 20 | <u>865</u> |
| 5 | <u>865</u> | 21 | <u>864</u> |
| 6 | <u>864</u> | 22 | <u>864</u> |
| 7 | <u>864</u> | 23 | <u>865</u> |
| 8 | <u>864</u> | 24 | <u>865</u> |
| 9 | <u>864</u> | 25 | <u>866</u> |
| 10 | <u>832</u> | 26 | <u>867</u> |
| 11 | <u>814</u> | 27 | <u>867</u> |
| 12 | <u>816</u> | 28 | <u>868</u> |
| 13 | <u>825</u> | 29 | <u>867</u> |
| 14 | <u>864</u> | 30 | <u>868</u> |
| 15 | <u>866</u> | | |
| 16 | <u>867</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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.: 50-338
 UNIT NAME: NA-1
 DATE: May 4, 1992
 CONTACT: G. E. Kline
 PHONE: (703) 894-2101

REPORT MONTH: April 1992

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

*No entry this month.

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

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-338

Report Month April Unit Name: NA-1

Year: 1992 Date: May 4, 1992

Contact: G. E. Kane

*No entry this month.

NORTH ANNA POWER STATION

UNIT NO.: 1
 MONTH: April

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 01, 1992 | 0000 | Began month with unit at 95% power, 907MWe. |
| April 10, 1992 | 0835 | Commenced unit ramp-down to 880MWe for TVFT. |
| | 0955 | Commenced TVFT. |
| | 1030 | TVFT completed satisfactorily. Maintaining unit at approximately 90% power for Main Condenser waterbox inspections. |
| April 13, 1992 | 1826 | Commenced unit ramp-up to 93% power for calorimetric. |
| | 1920 | Calorimetric completed satisfactorily. Commenced unit ramp-up to full power. |
| | 2054 | Unit stable at 95% power, 912MWe. |
| April 30, 1992 | 2400 | Ended month with unit at 95% power, 909MWe. |

OPERATING DATA REPORT

DOCKET NO.: 50-339
 DATE: May 4, 1992
 CONTACT: G. E. Kane
 PHONE: (703) 894-7101

OPERATING STATUS

- 1. Unit Name:.....North Anna 2
- 2. Reporting Period:.....April 1992
- 3. Licensed Thermal Power (MWt):..... 2893
- 4. Nameplate Rating (Net MWe):..... 947
- 5. Design Electrical Rating (Net MWe):..... 907
- 6. Maximum Dependable Capacity (Gross MWe):... 957
- 7. Maximum Dependable Capacity (Net MWe):.... 909

8. If changes occur in Capacity Ratings (Items No. 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..... | 719.0 | 2,903.0 | 99,743.0 |
| 12. Number of Hours Reactor was Critical..... | 158.8 | 1,505.9 | 81,241.8 |
| 13. Reactor Reserve Shutdown Hours..... | 68.4 | 108.8 | 6,166.2 |
| 14. Hours Generator On-Line..... | 129.5 | 1,460.7 | 80,235.1 |
| 15. Unit Reserve Shutdown Hours..... | 0.0 | 0.0 | 0.0 |
| 16. Gross Thermal Energy Generated (MWH)..... | 253,114.4 | 3,685,055.5 | 215,502,188.6 |
| 17. Gross Electrical Energy Generated (MWH)..... | 81,211.0 | 1,202,358.0 | 70,582,484.0 |
| 18. Net Electrical Energy Generated (MWH)..... | 75,894.0 | 1,137,622.0 | 67,637,355.0 |
| 19. Unit Service Factor..... | 18.0% | 50.3% | 80.4% |
| 20. Unit Availability Factor..... | 18.0% | 50.3% | 30.4% |
| 21. Unit Capacity Factor (using MDC Net)..... | 11.6% | 43.1% | 75.3% |
| 22. Unit Capacity Factor (using DER Net)..... | 11.6% | 43.2% | 74.8% |
| 23. Forced Outage Rate..... | 0.0% | 1.8% | 5.9% |

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and 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 | Achiev |
|----------------------|----------|--------|
| INITIAL CRITICALITY | _____ | _____ |
| INITIAL ELECTRICITY | _____ | _____ |
| COMMERCIAL OPERATION | _____ | _____ |

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-339
 Unit: NA-2
 Date: May 4, 1992
 Contact: G. E. Kane
 Phone: (703) 894-2101

MONTH: April 1992

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY LEVEL LEVEL (MWe-Net) |
|-----|-------------------------------------|-----|-------------------------------------|
| 1 | 0 | 17 | 0 |
| 2 | 0 | 18 | 0 |
| 3 | 0 | 19 | 0 |
| 4 | 0 | 20 | 0 |
| 5 | 0 | 21 | 0 |
| 6 | 0 | 22 | 0 |
| 7 | 0 | 23 | 0 |
| 8 | 0 | 24 | 0 |
| 9 | 0 | 25 | 76 |
| 10 | 0 | 26 | 203 |
| 11 | 0 | 27 | 425 |
| 12 | 0 | 28 | 690 |
| 13 | 0 | 29 | 866 |
| 14 | 0 | 30 | 902 |
| 15 | 0 | | |
| 16 | 0 | | |

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 SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.: 50-339
 UNIT NAME: NA-2
 DATE: May 4, 1992
 CONTACT: E. Kane
 PHONE: (703) 894-2101

REPORT MONTH: April 1992

| 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 |
|-------|--------|-----------|-------------------|-------------|--|-------------------------------|---------------------|------------------------|---|
| 92-03 | 920226 | S | 589.5 | C | 4 | N/A | N/A | N/A | Refueling in progress. S/G maintenance and inspections ongoing. |

1: Type
 F=Forced
 S=Scheduled

2: Reason
 A=Equipment Failure (explain)
 B=Maintenance or Test
 C=Refueling
 D=Regulatory Restriction
 E=Operator Training & License 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 F - Instructions
 for preparation of Data
 Entry Sheets for Licensee
 Event Report (LER) File
 (NUREG-0161)

5:
 Exhibit H - Same Source

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-339

Report Month April Unit Name: NA-2

Year: 1992 Date: May 4, 1992

Contact: G. E. Kane

#92-03

February 26, 1992

Main Generator taken off-line at 1413 hours in preparation for refueling outage. Unit entered Mode 3 at 1501 hours.

February 27, 1992

Unit entered Mode 4 at 0449 hours. Unit entered Mode 5 at 1930 hours.

March 07, 1992

Unit entered Mode 6 at 0522 hours.

March 14, 1992

Reactor defueled at 0640 hours.

March 23, 1992

Reactor fuel on-load commenced at 0633 hours.

March 26, 1992

Reactor fuel on-load completed at 0413 hours.

April 01, 1992

Unit entered Mode 5 at 0920 hours. Pressurizer power operated relief valve, PCV-2455C, lifted and reseated in response to Reactor Coolant System NDT Overpressurization signal at 1119 hours. The RCS was in a solid condition with no PCPs running.

April 20, 1992

Unit entered Mode 4 at 1253 hours.

April 21, 1992

Unit entered Mode 3 at 0320 hours. Unit entered Mode 2 at 2352 hours.

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-339

April 22, 1992

Entered T.S. Action Statement 3.1.3.2 at 1540 hours due to IRPI K-8 failing low. Determined rod K-8 is dropped at 1715 hours, and entered appropriate abnormal procedure. Commenced reactor shutdown at 2030 hours. Unit entered Mode 3 at 2031 hours.

April 23, 1992

Unit entered Mode 4 at 0408 hours. Unit entered Mode 5 at 0820 hours.

April 24, 1992

Unit entered Mode 4 at 0816 hours. Unit entered Mode 3 at 1818 hours.

April 25, 1992

Unit entered Mode 2 at 0551 hours. Unit entered Mode 1 at 1240 hours. Main Generator placed on line at 1325 hours and experienced turbine trip due to antimotoring alarm at 1326 hours. Main Generator placed on-line at 1431 hours. Unit stable at 30% power for Chemistry hold at 1753 hours.

April 27, 1992

Cleared Chemistry hold and commenced unit ramp-up at 0530 hours.

April 30, 1992

Unit stable at 99% power, 947MWe, with all turbine valves full open at 2200 hours.

NORTH ANNA POWER STATION

UNIT NO.: 2
MONTH: AprilSUMMARY OF OPERATING EXPERIENCE

Page 1 of 2

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 01, 1992 | 0000 | Began month with unit in Mode 6. |
| | 0920 | Unit entered Mode 5. |
| April 14, 1992 | 1119 | Pressurizer power operated relief valve, PCV-2455C, lifted and reseated in response to Reactor Coolant System NDT Overpressurization signal. The RCS was in a solid condition with no RCPS running. |
| | 1253 | Unit entered Mode 4. |
| April 21, 1992 | 0320 | Unit entered Mode 3. |
| | 2352 | Unit entered Mode 2. |
| | 1540 | Entered T.S. Action Statement 3.1.3.2 due to IRPI K-8 failing low. |
| April 22, 1992 | 1715 | Investigation determined rod K-8 is dropped. Entered appropriate abnormal operating procedure. |
| | 2030 | Commenced reactor shutdown. |
| | 2031 | Unit entered Mode 3 in preparation for repairs to rod control for K-8. |
| | 0408 | Unit entered Mode 4. |
| April 23, 1992 | 0820 | Unit entered Mode 5. |
| | 0816 | Unit entered Mode 4 following repair of rod control for K-8. |
| April 24, 1992 | 1818 | Unit entered Mode 3. |
| | 0551 | Unit entered Mode 2. |
| April 25, 1992 | 1045 | Placed Main Turbine on-line and experienced turbine trip due to low oil pressure when 2-TM-P-1 was secured. |

NORTH ANNA POWER STATION

UNIT NO.: 2
 MONTH: April

SUMMARY OF OPERATING EXPERIENCE

Page 2 of 2

| | | |
|-------------------------------|------|---|
| April 25, 1992 (continued) | 1133 | Placed Main Turbine on-line and experienced turbine trip due to low oil pressure when 2-TM-P-1 was secured. |
| | 1240 | Unit entered Mode 1. |
| | 1325 | Main generator placed on-line. |
| | 1326 | Experienced turbine trip due to antimotoring alarm. |
| | 1431 | Main generator placed on-line at a higher load rate. |
| | 1753 | Unit stable at approximately 30% power for Chemistry hold. |
| April 27, 1992 | 0530 | Cleared Chemistry hold. Commenced unit ramp-up at 4%/hour. |
| April 28, 1992 | 0352 | Unit stable at 98% power per delta T indication. |
| | 1549 | Delta T and Tavg adjustments in progress. |
| | 1751 | Commenced unit ramp-up to full power after adjustments. |
| April 30, 1992 | 2200 | Unit stable at 99% power, 947MWe, with all turbine valves full open. |
| | 2400 | Ended month with unit at 99% power, 949MWe. |