VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH Sept. YEAR 1979

SUBMITTED:

SUPERINTENDENT - OPERATIONS

APPROVED:

MANAGER

OPERATING DATA REPORT

POOR ORIGINAL

DOCKET NO. 50-338
DATE 10-10-79
COMPLETED BY W. R. Madison
TELEPHONE 703-894-5151

OPERATING STATUS

1. Unit Name: North Anna, Unit 1
2. Reporting Period: September, 1979
3. Licensed Thermal Power (MWt): 2775
4. Nameplate Rating (Gross MWe): 947
5. Design Electrical Rating (Net MWe): 907
6. Maximum Dependable Capacity (Gross MWe): 928
7. Maximum Dependable Capacity (Net MWe): 898
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: N/A

Notes

9. Power Level To Which Restricted, If Any (Net MWe): N/A
10. Reasons For Restrictions, If Any: N/A

| | This Month | Yr.-to-Date | Cumulative |
|---|---|---|---|
| 11. Hours In Reporting Period | 720 | 6,552 | 11,569 |
| 12. Number Of Hours Reactor Was Critical | 582.2 | 5,478.4 | 10,525.2 |
| 13. Reactor Reserve Shutdown Hours | 2.8 | 14.6 | 14.6 |
| 14. Hours Generator On-Line | 582.2 | 5,401.4 | 10,053.1 |
| 15. Unit Reserve Shutdown Hours | 0 | 0 | 0 |
| 16. Gross Thermal Energy Generated (MWH) | 1,134,368 | 21,083,118 | 26,279,913 |
| 17. Gross Electrical Energy Generated (MWH) | 345,793 | 4,445,776 | 8,346,349 |
| 18. Net Electrical Energy Generated (MWH) | 320,744 | 4,188.866 | 7,853,446 |
| 19. Unit Service Factor | 80.7 | 82.4 | 86.9 |
| 20. Unit Availability Factor | 80.7 | 82.4 | 86.9 |
| 21. Unit Capacity Factor (Using MDC Net) | 49.6 | 71.2 | 75.6 |
| 22. Unit Capacity Factor (Using DER Net) | 49.1 | 70.5 | 74.8 |
| 23. Unit Forced Outage Rate | 0.5 | 15 | 9.1 |

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 Startup: December 17, 1979

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

| | Forecast | Achieved |
|---|---|---|
| INITIAL CRITICALITY | | |
| INITIAL ELECTRICITY | | |
| COMMERCIAL OPERATION | | |



(9/77)

## AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-338
UNIT NA 1
DATE 10-10-79
COMPLETED BY W. R. Madison
TELEPHONE 703-894-5151

MONTH September 1979

| DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) | DAY | AVERAGE DAILY POWER LEVEL (MWe-Net) |
|---|---|---|---|
| 1 | 761 | 17 | 252 |
| 2 | 747 | 18 | 389 |
| 3 | 737 | 19 | 452 |
| 4 | 730 | 20 | 563 |
| 5 | 745 | 21 | 630 |
| 6 | 736 | 22 | 420 |
| 7 | 730 | 23 | 282 |
| 8 | 718 | 24 | 650 |
| 9 | 720 | 25 | 164 |
| 10 | 702 | 26 | 0 |
| 11 | 694 | 27 | 0 |
| 12 | 640 | 28 | 0 |
| 13 | 294 | 29 | 0 |
| 14 | 238 | 30 | 0 |
| 15 | 128 | 31 | |
| 16 | 241 | | |

**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.

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## UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-338
UNIT NAME North Anna Unit 1
DATE 10-10-79
COMPLETED BY W. R. Madison
TELEPHONE 703-894-5151

REPORT MONTH September 1979

| No. | Date | Type[1] | Duration (Hours) | Reason[2] | Method of Shutting Down Reactor[3] | Licensee Event Report # | System Code[4] | Component Code[5] | Cause & Corrective Action to Prevent Recurrence |
|---|---|---|---|---|---|---|---|---|---|
| 79-14 | 790912 | S | 0 | F* | 4* | N/A | N/A | N/A | Ramped down to 35% reactor power in preparation for extended period of operation beyond 9/15/79 pending amendment of NPF-4. |
| 79-15 | 790921 | F | 0 | B* | 4* | N/A | N/A | N/A | Ramped down to 28% reactor power to perform turbine valve freedom test. Testing was performed & the reactor was escalated to 80%. |
| 79-16 | 790925 | F | 2.8 | A* | #* | LER/RO 79-128 | SF | VALVEX | Automatic $R_x$ Turbine Generator trip due to high level in the extraction steam side of the 5B feedwater heater. The plant is presently shutdown & the cooler will be repaired. |
| 79-16 | 790925 | S | 135 | C* | 4* | N/A | N/A | N/A | Commenced 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 & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (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 I - Same Source

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*See attached sheet
Shutdown 79-17 continued into October.

1175 265

UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET

DOCKET NO. 50-338

REPORT MONTH September

UNIT NAME North Anna

YEAR 1979

DATE 10-10-79

COMPLETED BY W. R. Madison

79-14 (F) (4) The reactor was operating in the end of cycle 1 coastdown: Reactor power was decreased to extend the cycle to October 5, 1979 pending NRC approval. Amendment 15 to NPF-4 was approved. Subsequent analysis indicated that reactor power could be increased back to maximum attainable. Reactor power was increased to approximately 80%.

79-15 (B) (4) Reactor power was decreased to establish the required conditions for turbine valve testing. The required testing was completed and reactor power was escalated to 80%. The reactor was not shutdown.

79-16 (A) (3) The 5th point heater drain cooler dump valve LCV-SD-128B began to cycle due to a tube rupture inside the cooler. The leakage was more than the capability of the drain valves causing extraction steam condensate to back up into the 5th point heater to the turbine trip setpoint. This resulted in an automatic Reactor Turbine Generator trip. The heater drain cooler tubes will be replaced during the current outage.

79-17 (C) (4) Commenced the scheduled refueling outage at 0900 September 25, 1979. The reactor was already shutdown from event 79-16.