

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION

MONTHLY OPERATING REPORT

MONTH May YEAR 1979

(Revised 11-05-79)

SUBMITTED:



SUPERINTENDENT - OPERATIONS

APPROVED:



MANAGER

1367 319

7911200 583

POOR ORIGINAL

OPERATING DATA REPORT

DOCKET NO. 50-338
DATE 11-5-79
COMPLETED BY W. R. Madison
TELEPHONE (703)894-5151

OPERATING STATUS

1. Unit Name: North Anna, Unit 1
2. Reporting Period: May 1979 (Revised)
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

Notes

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	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	744	3,623	8,640
12. Number Of Hours Reactor Was Critical	702.2	2,688.2	7,735
13. Reactor Reserve Shutdown Hours	11.8	48.7	145.5
14. Hours Generator On-Line	671.3	2,611.3	7,263
15. Unit Reserve Shutdown Hours	0	0	0
16. Gross Thermal Energy Generated (MWH)	1,815,373	6,971,048	19,167,843
17. Gross Electrical Energy Generated (MWH)	580,855	2,229,070	6,129,507
18. Net Electrical Energy Generated (MWH)	547,621	2,100,901	5,765,481
19. Unit Service Factor	90.2	72.1	84.1
20. Unit Availability Factor	90.2	72.1	84.1
21. Unit Capacity Factor (Using MDC Net)	82.0	64.6	74.3
22. Unit Capacity Factor (Using DER Net)	81.2	63.9	73.6
23. Unit Forced Outage Rate	6.0	9.3	4.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Reserve Station Service Tie-in; possibly July 1979; 10 days

25. If Shut Down At End Of Report Period, Estimated Date of Startup: N/A
26. Units In Test Status (Prior to Commercial Operation):

Forecast

Achieved

INITIAL CRITICALITY
INITIAL ELECTRICITY
COMMERCIAL OPERATION

1367 320

(9/77)

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH May 1979 (Revised)

DOCKET NO. 50-338
 UNIT NAME North Anna 1
 DATE 11-5-79
 COMPLETED BY W. R. Madison
 TELEPHONE (703) 894-5151

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
79-6	THIS SHUTDOWN WAS CONCLUDED ON MAY 2, 1979 AT 0445 WHEN THE TURBINE GENERATOR WAS PLACED IN SERVICE.								
79-7	790503	F	14.9	A*	3	NA	NA	NA	Automatic Reactor/Turbine/Generator Trip due to S/G Low level with feed flow/steam flow mismatch. Reason insufficient feedwater flow when feedpump was tripped due to loss of oil flow. Repaired broken oil line. Returned Reactor & Turb. Gen. to service.
79-8	790512	F	26.8	B*	1	NA	NA	NA	Unit shutdown by normal procedure to perform 18 mo. periodic test surveillance on the safety injection system & maintenance on "C" steam generator level transmitter. Satisfactorily completed testing & maintenance. Reactor trip due to operational error in blocking the source range high flux trip above permissive P-6. Operator was instructed to observe P-6. Reactor was restarted
79-9	790513	F	0.0*	G*	1	NA	NA	NA	

F: Forced
S: Scheduled

Reason:
A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling
D-Regulatory Restriction
E-Operator Training & License Examination
F-Administrative
G-Operational Error (Explain)
H-Other (Explain)

Method:
1-Manual
2-Manual Scram.
3-Automatic Scram.
4-Other (Explain)

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

Exhibit I - Same Source

(9/77)

*See Attached Sheet

POOR ORIGINAL

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH May 1979 (Revised)

DOCKET NO. 50-338
 UNIT NAME North Anna 1
 DATE 11-5-79
 COMPLETED BY W. R. Madison
 TELEPHONE (703) 894-5151

No.	Date	Type	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
79-10	790513	F	0.0	G*	1	NA	NA	NA	Turbine/Reactor Trip due to Hi-Hi stm Gen. "B" water level. While attempting to start up the unit too much water was added to "B" S/G & temp. caused the water level to swell to the Hi-Hi Level trip point. Restored level & restarted the reactor. Instructed operations to feed the S/G carefully.
79-11	790518	F	1.3	G*	3	NA	NA	NA	Reactor/Turbine/Generator trip from steam flow/feed flow mismatch & low S/G water level. Lost feedpump suction pressure when condensate was valved into the flash evaporator. The flash evaporator was valved out & the reactor & turbine generator then placed back in service. Significant power reduction of 20% of the average daily power level. See Attached sheet.
79-12	790531	NA	NA	A*	NA	NA	NA	NA	

¹ F: Forced
S: Scheduled

² Reason:
A-Equipment Failure (Explain)
B-Maintenance of 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

(9/77)

Note: Number 79-11 continues into the month of June 1979 (Significant power level reduction)

POOR ORIGINAL

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UNIT SHUTDOWN AND POWER REDUCTIONS

EXPLANATION SHEET

DOCKET NO. 50-338REPORT MONTH May (Revised) UNIT NAME North AnnaYEAR 1979 DATE 11-5-79COMPLETED BY W. R. MADISON

- 79-7 (A) A broken oil line to the (B) Feed Pump Motor caused a low oil pressure trip of the feed pump.
- 79-8 (B) As an initial condition of 1-PT-83.1 and 1-PT-83.2 (Simulated blackout and safety injection of 1H and 1J busses, the unit was removed from service and the reactor shutdown to Mode 3, during the shutdown maintenance was performed on "C" S/G level transmitter.
- 78-9 (G) Unit was not in service. In the course of a Rx startup, the operator failed to block the source range high flux Rx Trip (PG).
- 79-10 (G) Turbine Trip/Reactor trip when too much water was added to the steam generators causing "B" S/G to swell to the Hi-Hi Level Trip point.
- 79-11 (G) Reactor/Turbine/Generator Trip from steam flow/Feed flow mismatch and low S/G water level. When condensate was valved into the flash evaporator to increase plant performance, differential pressure created across the heat exchanger caused feedpump suction press to decrease causing feed flow to decrease to the point where S/G level could not be maintained.
- 79-12 A High bearing temperature on "C" main feedpump required a reduction in megawatt load when the feedpump was removed from service.

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