

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 15, 1991

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

Serial No. 91-382
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 June 1991. Also enclosed are two corrections to the March and May 1991 Monthly Operating Reports for North Anna Unit 1.

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

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VIRGINIA POWER COMPANY
NORTH ANNA POWER STATION
MONTHLY OPERATING REPORT

MONTH: June YEAR: 1991

Approved:


Station Manager (M)

OPERATING DATA REPORT

DOCKET NO.: 50-338
 DOCKET NO.: 50-338
 DATE: July 8, 1991
 COMPLETED BY: C. Mladen

OPERATING STATUS

1. Unit Name:.....North Anna 1
2. Reporting Period:.....June 1991
3. Licensed Thermal Power (MWt):..... 2,893
4. Nameplate Rating (Gross MWe):..... 947
5. Design Electrical Rating (Net MWe):..... 907
6. Maximum Dependable Capacity (Gross MWe):... 959
7. Maximum Dependable Capacity (Net MWe):.... 911

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.....	720.0	4,343.0	114,155.0
12. Number of Hours Reactor was Critical.....	720.0	2,802.6	82,793.5
13. Reactor Reserve Shutdown Hours.....	0.0	42.0	6,645.6
14. Hours Generator On-Line.....	720.0	2,664.4	79,884.4
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH).....	2,081,856.1	6,901,921.8	211,888,157.8
17. Gross Electrical Energy Generated (MWH).....	685,857.0	2,269,963.0	69,611,301.0
18. Net Electrical Energy Generated (MWH).....	652,414.0	2,152,539.0	65,881,291.0
19. Unit Service Factor.....	100.0%	61.3%	70.0%
20. Unit Availability Factor.....	100.0%	61.3%	70.0%
21. Unit Capacity Factor (using MDC Net).....	99.5%	54.4%	64.5%
22. Unit Capacity Factor (using DER Net).....	99.9%	54.6%	63.6%
23. Forced Outage Rate.....	0.0%	11.0%	12.5%

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: July 8, 1991
 Completed by: C. Mladen
 Phone: (703) 894-2774

MONTH: June 1991

DAY AVERAGE DAILY POWER
LEVEL (MWe-Net)

1	<u>894</u>
2	<u>906</u>
3	<u>905</u>
4	<u>906</u>
5	<u>907</u>
6	<u>908</u>
7	<u>911</u>
8	<u>909</u>
9	<u>910</u>
10	<u>907</u>
11	<u>907</u>
12	<u>908</u>
13	<u>906</u>
14	<u>906</u>
15	<u>906</u>
16	<u>906</u>

DAY AVERAGE DAILY LEVEL
LEVEL (MWe-Net)

17	<u>905</u>
18	<u>906</u>
19	<u>906</u>
20	<u>907</u>
21	<u>906</u>
22	<u>906</u>
23	<u>906</u>
24	<u>907</u>
25	<u>907</u>
26	<u>908</u>
27	<u>907</u>
28	<u>898</u>
29	<u>907</u>
30	<u>906</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.

REPORT MONTH: June 1991

DOCKET NO.: 50-338
UNIT NAME: NA-1
DATE: July 8, 1991
COMPLETED BY: C. Mladen
PHONE: (703) 894-2774

UNIT SHUTDOWNS AND POWER REDUCTIONS

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
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*No entry this month

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

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation sheet

Docket No.: 50-338

Report Month June Unit Name: NA-1

Year: 1991 Date: July 8, 1991

Completed by: Cathie Mladen

*No entry this month.

NORTH ANNA POWER STATION

UNIT NO.: 1
MONTH: June

Page 1 of 1

SUMMARY OF OPERATING EXPERIENCE

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>
June 01, 1991	0000	Began month with unit at 100%, 936 MWe.
June 28, 1991	0905	Commenced unit ramp-down for TVFT.
	1000	Unit stable at 870MWe.
	1054	TVFT completed satisfactorily.
	1056	Commenced unit ramp-up.
	1242	Unit stable at 98.72% with all main turbine valves full open. Commencing 1-TOP-31.3 to bypass a portion of feedwater to first point feedwater heaters to allow unit to reach 100%.
	1507	Unit stable at 100% power, 954MWe.
June 30, 1991	2400	Ended month at 100%, 954MWe.

OPERATING DATA REPORT

DOCKET NO.: 50-339
 DATE: July 8, 1991
 COMPLETED BY: C. Mladen
 PHONE: (703) 894-2774

OPERATING STATUS

1. Unit Name:.....North Anna 2
2. Reporting Period:.....June 1991
3. Licensed Thermal Power (Mwt):..... 2893
4. Nameplate Rating (Gross 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.....	720.0	4,343.0	92,423.0
12. Number of Hours Reactor was Critical.....	720.0	4,343.0	75,477.3
13. Reactor Reserve Shutdown Hours.....	0.0	0.0	5,949.6
14. Hours Generator On-Line.....	720.0	4,343.0	74,577.3
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH).....	2,082,244.6	12,557,168.3	199,806,281.7
17. Gross Electrical Energy Generated (MWH).....	683,868.0	4,154,689.0	65,457,275.0
18. Net Electrical Energy Generated (MWH).....	649,734.0	3,955,322.0	62,770,802.0
19. Unit Service Factor.....	100.0%	100.0%	80.7%
20. Unit Availability Factor.....	100.0%	100.0%	80.7%
21. Unit Capacity Factor (using MDC Net).....	99.3%	100.2%	75.5%
22. Unit Capacity Factor (using DER Net).....	99.5%	100.4%	74.9%
23. Forced Outage Rate.....	0.0%	0.0%	6.0%

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.: 50-339
 Unit: NA-2
 Date: July 8, 1991
 Completed by: C. Mladen
 Phone: (703) 894-2774

MONTH: June 1991

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY LEVEL LEVEL (MWe-Net)
1	<u>903</u>	17	<u>901</u>
2	<u>903</u>	18	<u>901</u>
3	<u>903</u>	19	<u>902</u>
4	<u>903</u>	20	<u>902</u>
5	<u>905</u>	21	<u>902</u>
6	<u>906</u>	22	<u>901</u>
7	<u>896</u>	23	<u>902</u>
8	<u>907</u>	24	<u>902</u>
9	<u>905</u>	25	<u>903</u>
10	<u>904</u>	26	<u>902</u>
11	<u>904</u>	27	<u>903</u>
12	<u>903</u>	28	<u>902</u>
13	<u>902</u>	29	<u>902</u>
14	<u>902</u>	30	<u>900</u>
15	<u>902</u>		
16	<u>901</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.

REPORT MONTH: June 1991

DOCKET NO.: 50-339
UNIT NAME: NA-2
DATE: July 8, 1991
COMPLETED BY: C. Mladen
PHONE: (703) 894-2774

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
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*No entry this month

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

UNIT SHUTDOWN AND POWER REDUCTIONS
Explanation Sheet

Docket No.: 50-339

Report Month June Unit Name: NA-2

Year: 1991 Date: July 8, 1991

Completed by: Cathie Mladen

*No entry this month

NORTH ANNA POWER STATION

UNIT NO.: 2
MONTH: May

Page 1 of 1

SUMMARY OF OPERATING EXPERIENCE

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>
June 01, 1991	0000	Began month with unit at 100%, 951 MWe.
June 07, 1991	0905	Commenced unit ramp-down for TVFT.
	1005	Unit stable at 882MWe.
	1058	TVFT completed satisfactorily.
	1152	Commenced unit ramp-up to 100%.
	1515	Unit stable at 100%.
June 30, 1991	2400	Ended month with unit at 100%, 943MWe.

Corrected Pages for March and May 1991
North Anna Unit 1 Monthly Operating Reports

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO.: 50-338
 UNIT NAME: NA-1
 DATE: April 1, 1991
 COMPLETED BY: C. Mladen
 PHONE: (703) 894-2537

REPORT MONTH: March 1991

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
91-01	910112	S	216 197	C	4	N/A	N/A	N/A	S/G Maintenance planned

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 License
 Event Report (LER) File
 (NUREG-0161)
 5:
 Exhibit H - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH: May 1991

DOCKET NO.: 50-338
 UNIT NAME: NA-1
 DATE: June 3, 1991
 COMPLETED BY: C. Mladen
 PHONE: (703) 894-2774

No.	Date	Type	Duration (hrs)	Reason	Method of Shutting Down Reactor	Licensee Event Report #	System Code	Component Code	Cause & Corrective Action to Prevent Recurrence
91-02	910505	F	0 47.8	B	9	N/A	TB	RLY	Corrective maintenance on Main Generator - maintained reactor power @12% during repairs
91-03	910509	F	0	B	9	N/A	AB	ISV	Increasing Unidentified RCS Leakage -reduced reactor power to @30% to investigate
91-04	910511	F	330.5 282.7	B	1	N1-91-011	AB	ISV	Reactor shutdown due to RCS Pressure Boundary Leakage

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

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