

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

February 9, 1993

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

Serial No. 93-061  
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 January 1993.

Very truly yours,



M. L. Bowling, Manager  
Nuclear Licensing and Programs

Enclosure

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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PDR ADDCK 05000338  
R PDR

JEH 1/1

VIRGINIA POWER COMPANY  
NORTH ANNA POWER STATION  
MONTHLY OPERATING REPORT

MONTH: January YEAR: 1993

Approved:

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\_\_\_\_\_  
Station Manager

# OPERATING DATA REPORT

DOCKET NO.: 50-338  
 DATE: February 2, 1993  
 CONTACT: G. E. Kane  
 PHONE: (703) 894-2101

## OPERATING STATUS

1. Unit Name:.....North Anna 1
2. Reporting Period:.....January 1993
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 restrictions, if any: N/A

	This Month	Y-t-D	Cumulative
11. Hours in Reporting Period.....	744.0	744.0	128,100.0
12. Number of Hours Reactor was Critical.....	84.2	84.2	94,015.0
13. Reactor Reserve Shutdown Hours.....	15.7	15.7	6,773.7
14. Hours Generator On-Line.....	83.0	83.0	91,079.7
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH).....	95,402.5	95,402.5	240,271,589.4
17. Gross Electrical Energy Generated (MWH).....	31,066.0	31,066.0	78,957,971.0
18. Net Electrical Energy Generated (MWH).....	27,823.0	27,823.0	74,741,763.0
19. Unit Service Factor.....	11.2%	11.2%	71.1%
20. Unit Availability Factor.....	11.2%	11.2%	71.1%
21. Unit Capacity Factor (using MDC Net).....	4.4%	4.4%	65.3%
22. Unit Capacity Factor (using DER Net).....	4.1%	4.1%	64.3%
23. Forced Outage Rate.....	0.0%	0.0%	11.4%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each) \_\_\_\_\_

25. If Shutdown at end of Report Period, estimated time of Startup: April 21, 1993. \_\_\_\_\_

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: Feb. 2, 1993  
 Contact: G. E. Kane  
 Phone: (703) 894-2101

MONTH: January 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	341
2	340
3	340
4	139
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	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

REPORT MONTH: Jan. 1993

DOCKET NO.: 50-338  
 UNIT NAME: NA-1  
 DATE: Feb. 2, 1993  
 CONTACT: G. E. Kane  
 PHONE: (703) 894-2101

No.	Date	Type <sup>1</sup>	Duration (hrs)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
93-01	930104	S	659.8	C/H	1	N/A	N/A	N/A	Shutdown for refueling and replacement of Steam Generators.

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.: 50-338

Report Month January Unit Name: NA-1

Year: 1993 Date: Feb. 2, 1993

Contact: G. E. Kane

#93-01

January 4, 1993

Main generator taken off line at 1100 hours for a  
refueling and steam generator replacement outage.



# NORTH ANNA POWER STATION

UNIT NO.: 1  
MONTH: January

## 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>
January	01, 1993 0000	Began month with unit at 40% power, 383 MWe, in a power coastdown.
January	04, 1993 1100	Removed main generator from service for a refueling and steam generator replacement outage.
	1213	Unit entered mode 3.
	2246	Unit entered mode 4.
January	05, 1993 0356	Unit entered mode 5.
January	18, 1993 1018	Unit entered mode 6.
January	20, 1993 0032	Unit was defueled.
January	31, 1993 2400	Ended month with unit defueled and steam generator replacement work ongoing.

# OPERATING DATA REPORT

DOCKET NO.: 50-339  
 DATE: February 2, 1993  
 CONTACT: G. E. Kane  
 PHONE: (703) 894-2101

## OPERATING STATUS

1. Unit Name:.....North Anna 2
2. Reporting Period:.....January 1993
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.....	744.0	744.0	106,368.0
12. Number of Hours Reactor was Critical.....	744.0	744.0	87,788.2
13. Reactor Reserve Shutdown Hours.....	0.0	0.0	6,244.4
14. Hours Generator On-Line.....	744.0	744.0	86,757.1
15. Unit Reserve Shutdown Hours.....	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH) .....	2,151,599.2	2,151,599.2	234,276,363.7
17. Gross Electrical Energy Generated (MWH).....	705,299.0	705,299.0	76,742,015.0
18. Net Electrical Energy Generated (MWH).....	671,495.0	671,495.0	73,495,976.0
19. Unit Service Factor.....	100.0%	100.0%	81.6%
20. Unit Availability Factor.....	100.0%	100.0%	81.6%
21. Unit Capacity Factor (using MDC Net).....	99.3%	99.3%	76.7%
22. Unit Capacity Factor (using DER Net).....	99.5%	99.5%	76.2%
23. Forced Outage Rate.....	0.0%	0.0%	5.5%

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	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____



# AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-339  
 Unit: NA-2  
 Date: Feb. 2, 1993  
 Contact: G. E. Kane  
 Phone: (703) 894-2101

MONTH: January 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>905</u>
2	<u>904</u>
3	<u>904</u>
4	<u>903</u>
5	<u>902</u>
6	<u>902</u>
7	<u>903</u>
8	<u>902</u>
9	<u>903</u>
10	<u>903</u>
11	<u>902</u>
12	<u>904</u>
13	<u>904</u>
14	<u>903</u>
15	<u>904</u>
16	<u>903</u>

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	<u>903</u>
18	<u>904</u>
19	<u>904</u>
20	<u>903</u>
21	<u>904</u>
22	<u>901</u>
23	<u>904</u>
24	<u>905</u>
25	<u>905</u>
26	<u>906</u>
27	<u>904</u>
28	<u>904</u>
29	<u>901</u>
30	<u>879</u>
31	<u>902</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

REPORT MONTH: Jan. 1993

DOCKET NO.: 50-339  
UNIT NAME: NA-2  
DATE: Feb. 2, 1993  
CONTACT: G. E. Kane  
PHONE: (703) 894-2101

No.	Date	1 Type	2 Duration (hrs)	3 Reason	4 Method of Shutting Down Reactor	5 Licensee Event Report #	6 System Code	7 Component Code	Cause & Corrective Action to Prevent Recurrence
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\* No entry this month.

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 January Unit Name: NA-2

Year: 1993 Date: Feb. 2, 1993

Contact: G. E. Kane

\*No entry this month.

# NORTH ANNA POWER STATION

UNIT NO.: 2  
MONTH: January

## 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>
January 01, 1993	0000	Began month with unit at 100% power, 945 MWe.
January 22, 1993	0818	Commence rampdown to 92% power for TVFT.
	0850	Unit stable at 92% power, 880 MWe.
	0930	Commenced ramp to 100% power following satisfactory completion of TVFT.
	1033	Unit stable at 100% power, 950 MWe.
January 29, 1993	2114	Secured one high pressure heater drain pump (2-SD-P-1A) for relief valve maintenance. Unit output decreased to 925 MWe.
January 31, 1993	0034	Returned 2-SD-P-1A to service. Unit output returned to 100% power, 950 MWe.
January 31, 1993	2400	Ended month with unit at 100% power, 952 MWe.