

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
May 14, 2003

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Serial No. 03-326
SPS Lic/JSA R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Gentlemen:

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

The Monthly Operating Report for Surry Power Station Units 1 and 2 for the month of April 2003 is provided in the attachment.

If you have any questions or require additional information, please contact us.

Very truly yours,



Richard H. Blount,
Site Vice President
Surry Power Station

Attachment

Commitments made by this letter: None

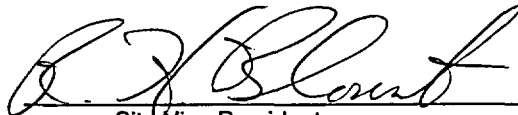
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

Mr. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 03-04**

Approved:


Site Vice President

5/14/03
Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 05/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

1. Unit Name: Surry Unit 1
2. Reporting Period: April 2003
3. Licensed Thermal Power (MWt): 2546
4. Nameplate Rating (Gross MWe): 847.5
5. Design Electrical Rating (Net MWe): 788
6. Maximum Dependable Capacity (Gross MWe): ... 842
7. Maximum Dependable Capacity (Net MWe): 810

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

9. Power Level To Which Restricted, If Any (Net MWe): _____

10. Reasons For Restrictions, If Any: _____

	<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	719.0	2879.0	266087.0
12. Hours Reactor Was Critical	455.8	2325.5	196847.1
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	455.2	2271.5	194133.7
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	1151464.1	5688741.6	463195058.3
17. Gross Electrical Energy Generated (MWH)	385260.0	1899476.0	152404800.0
18. Net Electrical Energy Generated (MWH)	371627.0	1831193.0	145573514.0
19. Unit Service Factor	63.3%	78.9%	73.0%
20. Unit Availability Factor	63.3%	78.9%	74.4%
21. Unit Capacity Factor (Using MDC Net)	63.8%	78.5%	69.9%
22. Unit Capacity Factor (Using DER Net)	65.6%	80.7%	69.4%
23. Unit Forced Outage Rate	0.0%	13.1%	12.3%

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

Type and duration of scheduled shutdowns are no longer provided.
 [Reference: Letter S/N 00-069, dated February 7, 2000]

25. If Shut Down at End of Report Period, Estimated Date of Start-up: Estimated start-up dates are no longer provided. [Reference: Letter S/N 00-069, dated February 7, 2000]

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

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
 Date: 05/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

1. Unit Name: Surry Unit 2
2. Reporting Period: April 2003
3. Licensed Thermal Power (MWt): 2546
4. Nameplate Rating (Gross MWe): 847.5
5. Design Electrical Rating (Net MWe): 788
6. Maximum Dependable Capacity (Gross MWe): ... 847
7. Maximum Dependable Capacity (Net MWe): 815

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

9. Power Level To Which Restricted, If Any (Net MWe): _____

10. Reasons For Restrictions, If Any: _____

	<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	719.0	2879.0	262968.0
12. Hours Reactor Was Critical	719.0	2816.1	194699.5
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	719.0	2791.3	192375.7
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1830574.0	7091689.5	460318674.0
17. Gross Electrical Energy Generated (MWH)	614927.0	2399830.0	151540363.0
18. Net Electrical Energy Generated (MWH)	593238.0	2297162.0	144777879.0
19. Unit Service Factor	100.0%	97.0%	73.2%
20. Unit Availability Factor	100.0%	97.0%	73.2%
21. Unit Capacity Factor (Using MDC Net)	101.2%	97.9%	70.0%
22. Unit Capacity Factor (Using DER Net)	104.7%	101.3%	69.9%
23. Unit Forced Outage Rate	0.0%	3.0%	9.7%

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

September 2003

Type and duration of scheduled shutdowns are no longer provided.

[Reference: Letter S/N 00-069, dated February 7, 2000]

25. If Shut Down at End of Report Period, Estimated Date of Start-up: Estimated start-up dates are no longer provided. [Reference: Letter S/N 00-069, dated February 7, 2000]

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

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

**UNIT SHUTDOWN AND POWER REDUCTION
 (EQUAL TO OR GREATER THAN 20%)**

REPORT MONTH: April 2003

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 05/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence
04/20/03	S	263.27	C	1	N/A	N/A	N/A	Unit offline for Refueling Outage/Reactor Vessel Head Replacement

(1)
 F: Forced
 S: Scheduled

(2)
 REASON:
 A - Equipment Failure (Explain)
 B - Maintenance or Test
 C - Refueling
 D - Regulatory Restriction
 E - Operator Training & Licensing 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 1 - Same Source

**UNIT SHUTDOWN AND POWER REDUCTION
(EQUAL TO OR GREATER THAN 20%)**

REPORT MONTH: April 2003

Docket No.: 50-281

Unit Name: Surry Unit 2

Date: 05/01/03

Completed by: R. Stief

Telephone: (757) 365-2486

None during the Reporting Period

(1)
F: Forced
S: Scheduled

(2)
REASON:
A - Equipment Failure (Explain)
B - Maintenance or Test
C - Refueling
D - Regulatory Restriction
E - Operator Training & Licensing Examination
F - Administrative
G - Operational Error (Explain)
H - Other (Explain)

(3)
METHOD:
1 - Manual
2 - Manual Scram
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4 - Other (Explain)

(4)
Exhibit G - Instructions for Preparation of Data Entry Sheets
for Licensee Event Report (LER) File (NUREG 0161)

(5)
Exhibit 1 - Same Source

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 05/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: April 2003

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	823	17	823
2	823	18	824
3	823	19	713
4	821	20	0
5	826	21	0
6	791	22	0
7	821	23	0
8	820	24	0
9	821	25	0
10	823	26	0
11	824	27	0
12	824	28	0
13	823	29	0
14	820	30	0
15	820		
16	822		

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.

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 05/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: April 2003

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	823	17	825
2	823	18	825
3	824	19	826
4	826	20	820
5	824	21	822
6	791	22	825
7	826	23	826
8	827	24	826
9	827	25	825
10	825	26	826
11	825	27	826
12	825	28	827
13	825	29	827
14	826	30	827
15	826		
16	825		

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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: April 2003

The following chronological sequence by unit is a summary of operating experiences for this month that required load reductions or resulted in significant non-load related incidents.

UNIT ONE:

04/01/03	0000	Unit started the month at 100% / 853 MWe.
04/20/03	0033	Output breakers opened. Unit offline for Refueling Outage/Reactor Vessel Head Replacement.
04/20/03	0053	Reactor Trip Breakers opened, Reactor Tripped.
04/30/03	2400	Unit finished the month at 0% / 0 MWe.

UNIT TWO:

04/01/03	0000	Unit started the month at 100% / 854 MWe.
04/30/03	2400	Unit finished the month at 100% / 855 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: April 2003

DCP 02-053

Design Change Package
(Regulatory Evaluation 03-002)

04/29/03

Design Change Package 02-053, "Reactor Vessel Head Replacement" addresses the replacement and the modifications necessary for the replacement of the reactor vessel closure head. The modifications remain within the current operating license without change to the Technical Specifications (TS) or TS basis.

**PROCEDURE OR METHOD OF OPERATION CHANGES
THAT DID NOT REQUIRE NRC APPROVAL**

MONTH/YEAR: April 2003

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: April 2003

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: April 2003

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.96E-1	8.55E-4	1.13E-1	3.66E-1	1.08E-1	2.25E-1
Suspended Solids, ppm	0.15	≤ 0.01	0.04	-	-	-
Gross Tritium, $\mu\text{Ci/ml}$	7.43E-2	6.79E-2	7.11E-2	8.44E-1	6.82E-1	7.55E-1
I^{131} , $\mu\text{Ci/ml}$	2.72E-4	5.35E-5	1.90E-4	1.15E-4	5.92E-5	8.83E-5
I^{131}/I^{133}	0.09	0.06	0.08	0.1	0.05	0.08
Hydrogen, cc/kg	38.4	0	23.8	39.5	35.7	37.7
Lithium, ppm	1.21	0.1	0.66	2.34	1.8	2.19
Boron - 10, ppm*	484	11.6	302	120	101	110
Oxygen, (DO), ppm	6	≤ 0.005	2.95	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.008	0.001	0.002	0.003	0.001	0.002
pH @ 25 degree Celsius	7.78	4.81	5.76	7.13	6.77	6.93

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: April 2003

<u>New Fuel Shipment or Cask No.</u>	<u>Date Stored or Received</u>	<u>Number of Assemblies per Shipment</u>	<u>Assembly Number</u>	<u>ANSI Number</u>	<u>Initial Enrichment</u>	<u>New or Spent Fuel Shipping Cask Activity</u>
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None during the Reporting Period

**DESCRIPTION OF PERIODIC TEST(S) WHICH WERE NOT COMPLETED
WITHIN THE TIME LIMITS SPECIFIED IN TECHNICAL SPECIFICATIONS**

MONTH/YEAR: April 2003

None during the Reporting Period