

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

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

Serial No. 03-021
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 December 2002 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. 02-12**

Approved:  1/14/03
Site Vice President Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 01/02/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: December 2002
- 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	744.0	8760.0	263208.0
12. Hours Reactor Was Critical	744.0	8760.0	194521.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	744.0	8760.0	191862.2
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	1893307.4	22198838.8	457506316.7
17. Gross Electrical Energy Generated (MWH)	634164.0	7425221.0	150505324.0
18. Net Electrical Energy Generated (MWH)	612134.0	7149460.0	143742321.0
19. Unit Service Factor	100.0%	100.0%	72.9%
20. Unit Availability Factor	100.0%	100.0%	74.3%
21. Unit Capacity Factor (Using MDC Net)	101.6%	100.8%	69.8%
22. Unit Capacity Factor (Using DER Net)	104.4%	103.6%	69.3%
23. Unit Forced Outage Rate	0.0%	0.0%	12.3%

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

April 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	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
 Date: 01/02/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: December 2002
- 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	744.0	8760.0	260089.0
12. Hours Reactor Was Critical	744.0	8065.4	191883.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	744.0	7968.0	189584.4
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1894224.0	20202080.3	453226984.5
17. Gross Electrical Energy Generated (MWH)	636957.0	6763526.0	149140533.0
18. Net Electrical Energy Generated (MWH)	614944.0	6523667.0	142480717.0
19. Unit Service Factor	100.0%	91.0%	72.9%
20. Unit Availability Factor	100.0%	91.0%	72.9%
21. Unit Capacity Factor (Using MDC Net)	101.4%	91.4%	69.7%
22. Unit Capacity Factor (Using DER Net)	104.9%	94.5%	69.5%
23. Unit Forced Outage Rate	0.0%	1.2%	9.8%

- 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	_____	_____

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

REPORT MONTH: December 2002

Docket No.: 50-280

Unit Name: Surry Unit 1

Date: 01/01/03

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
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: December 2002

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 01/01/03
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
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

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 01/02/03
 Completed by: R Stief
 Telephone: (757) 365-2486

MONTH: December 2002

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	825	17	824
2	824	18	825
3	825	19	824
4	824	20	824
5	824	21	824
6	824	22	824
7	820	23	824
8	818	24	824
9	819	25	824
10	822	26	824
11	822	27	824
12	823	28	824
13	822	29	823
14	823	30	823
15	824	31	823
16	808		

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: 01/02/03

Completed by: R. Stief

Telephone: (757) 365-2486

MONTH: December 2002

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	826	17	826
2	826	18	827
3	826	19	827
4	826	20	827
5	826	21	827
6	827	22	827
7	826	23	827
8	826	24	826
9	827	25	826
10	826	26	826
11	826	27	826
12	826	28	827
13	828	29	828
14	827	30	828
15	827	31	828
16	826		

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: December 2002

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:

12/01/02	0000	Unit started the month at 100% / 853 MWe.
12/31/02	2400	Unit finished the month at 100% / 852 MWe.

UNIT TWO:

12/01/02	0000	Unit started the month at 100% / 857 MWe.
12/31/02	2400	Unit finished the month at 100% / 856 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: December 2002

None during the Reporting Period

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

MONTH/YEAR: December 2002

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: December 2002

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: December 2002

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	4.00E-1	2.07E-1	3.15E-1	4.20E-1	1.69E-1	2.78E-1
Suspended Solids, ppm	0.01	0.01	0.01	0.01	0.01	0.01
Gross Tritium, $\mu\text{Ci/ml}$	6.78E-1	5.68E-1	6.34E-1	1.17E+0	1.08E+0	1.13E+0
^{131}I , $\mu\text{Ci/ml}$	2.62E-4	1.33E-4	1.81E-4	1.55E-4	9.02E-5	1.13E-4
$^{131}\text{I}/^{133}\text{I}$	0.09	0.05	0.07	0.16	0.08	0.11
Hydrogen, cc/kg	39.1	36.5	38	41.9	36.9	39.5
Lithium, ppm	2.26	2.06	2.16	2.33	2.09	2.21
Boron - 10, ppm*	97	76	87	195	175	186
Oxygen, (DO), ppm	≤ 0.005					
Chloride, ppm	0.003	0.002	0.002	0.003	0.001	0.002
pH @ 25 degree Celsius	7.23	6.93	7.09	6.8	6.47	6.65

* Boron - 10 = Total Boron x 0.196

Comment::

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: December 2002

<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: December 2002

None during the Reporting Period