

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
November 12, 2002

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

Serial No. 02-694
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 October 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

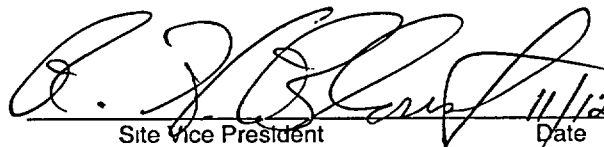
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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. 02-10**

Approved:


Site Vice President

11/12/02
Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 11/04/02
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: October 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	745.0	7296.0	261744.0
12. Hours Reactor Was Critical	745.0	7296.0	193057.6
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	745.0	7296.0	190398.2
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	1896770.0	18472900.2	453780378.1
17. Gross Electrical Energy Generated (MWH)	633390.0	6176986.0	149257089.0
18. Net Electrical Energy Generated (MWH)	611952.0	5945648.0	142538509.0
19. Unit Service Factor	100.0%	100.0%	72.7%
20. Unit Availability Factor	100.0%	100.0%	74.2%
21. Unit Capacity Factor (Using MDC Net)	101.4%	100.6%	69.8%
22. Unit Capacity Factor (Using DER Net)	104.2%	103.4%	69.1%
23. Unit Forced Outage Rate	0.0%	0.0%	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: 11/04/02
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: October 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	745.0	7296.0	258625.0
12.	Hours Reactor Was Critical	745.0	6637.8	190455.8
13.	Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14.	Hours Generator On-Line	745.0	6599.3	188215.7
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1896586.7	16721046.5	449745950.7
17.	Gross Electrical Energy Generated (MWH)	636735.0	5595702.0	147972709.0
18.	Net Electrical Energy Generated (MWH)	614569.0	5396283.0	141353333.0
19.	Unit Service Factor	100.0%	90.5%	72.8%
20.	Unit Availability Factor	100.0%	90.5%	72.8%
21.	Unit Capacity Factor (Using MDC Net)	101.2%	90.8%	69.8%
22.	Unit Capacity Factor (Using DER Net)	104.7%	93.9%	69.4%
23.	Unit Forced Outage Rate	0.0%	0.0%	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: October 2002

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 11/01/02
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: October 2002

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 11/01/02
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: 11/04/02
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: October 2002

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	819	17	822
2	818	18	822
3	817	19	823
4	818	20	823
5	819	21	824
6	820	22	824
7	819	23	824
8	820	24	823
9	821	25	824
10	820	26	823
11	820	27	858
12	820	28	823
13	820	29	824
14	820	30	823
15	821	31	824
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: 11/04/02
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: October 2002

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	822	17	827
2	822	18	826
3	820	19	827
4	821	20	826
5	819	21	826
6	821	22	827
7	821	23	826
8	823	24	827
9	823	25	827
10	824	26	827
11	824	27	862
12	824	28	827
13	825	29	828
14	825	30	828
15	827	31	828
16	827		

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: October 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:

10/01/02	0000	Unit started the month at 100% / 850 MWe.
10/31/02	2400	Unit finished the month at 100% / 853 MWe.

UNIT Two:

10/01/02	0000	Unit started the month at 100% / 853 MWe
10/31/02	2400	Unit finished the month at 100% / 858 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: October 2002

None during the Reporting Period

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

MONTH/YEAR: October 2002

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: October 2002

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: October 2002

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.53E-1	1.60E-1	2.81E-1	3.33E-1	1.69E-1	2.63E-1
Suspended Solids, ppm	0.01	0.01	0.01	0.01	0.01	0.01
Gross Tritium, $\mu\text{Ci/ml}$	8.67E-1	8.34E-1	8.51E-1	1.58E+0	1.04E+0	1.40E+0
^{131}I , $\mu\text{Ci/ml}$	2.58E-4	8.75E-5	1.73E-4	1.09E-4	6.14E-5	8.68E-5
$^{131}\text{I}/^{133}\text{I}$	0.1	0.04	0.07	0.11	0.05	0.08
Hydrogen, cc/kg	38.1	35	36.1	40.2	35.7	37.7
Lithium, ppm	2.32	2.12	2.21	2.32	2.12	2.23
Boron - 10, ppm*	135	117	127	227	211	220
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.005	0.003	0.004	0.004	0.002	0.002
pH @ 25 degree Celsius	7	6.7	6.87	6.61	6.35	6.49

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: October 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: October 2002

None during the Reporting Period