

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 11, 2003

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

Serial No. 03-608
SPS Lic/JSA R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

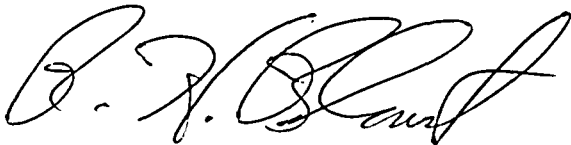
Gentlemen:

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 November 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

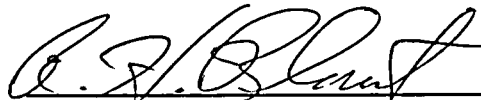
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

Mr. G. J. McCoy
NRC Senior Resident Inspector
Surry Power Station

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 03-11**

Approved:



Site Vice President

12/11/03

Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 12/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period:..... November 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	720.00	8016.00	271224.00
12.	Hours Reactor Was Critical	720.00	6137.88	200659.48
13.	Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14.	Hours Generator On-Line	720.00	5998.57	197860.77
15.	Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16.	Gross Thermal Energy Generated (MWH)	1832600.60	14991987.80	472498304.50
17.	Gross Electrical Energy Generated (MWH)	615831.00	4997943.00	155503267.00
18.	Net Electrical Energy Generated (MWH)	584347.00	4805994.00	148548315.00
19.	Unit Service Factor	100.00%	74.83%	72.95%
20.	Unit Availability Factor	100.00%	74.83%	74.33%
21.	Unit Capacity Factor (Using MDC Net)	100.20%	74.02%	69.86%
22.	Unit Capacity Factor (Using DER Net)	102.99%	76.09%	69.50%
23.	Unit Forced Outage Rate	0.00%	6.45%	12.09%

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: 12/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... November 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	720.00	8016.00	268105.00
12. Hours Reactor Was Critical	152.03	6345.63	198229.03
13. Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14. Hours Generator On-Line	0.00	6168.80	195753.20
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	16492.00	15705208.80	468932193.30
17. Gross Electrical Energy Generated (MWH)	0.00	5268222.00	154408755.00
18. Net Electrical Energy Generated (MWH)	0.00	5063321.00	147544038.00
19. Unit Service Factor	0.00%	76.96%	73.01%
20. Unit Availability Factor	0.00%	76.96%	73.01%
21. Unit Capacity Factor (Using MDC Net)	0.00%	77.50%	69.93%
22. Unit Capacity Factor (Using DER Net)	0.00%	80.16%	69.84%
23. Unit Forced Outage Rate	0.00%	2.27%	9.59%

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):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

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

REPORT MONTH: November 2003

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 12/01/03
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: November 2003

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 12/01/03
 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
11/01/03	S	720	C	1	N/A	N/A	N/A	Unit 2 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
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(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: 12/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: November 2003

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	825	17	811
2	819	18	818
3	824	19	822
4	825	20	808
5	826	21	821
6	824	22	822
7	821	23	810
8	805	24	803
9	818	25	796
10	804	26	797
11	797	27	811
12	809	28	811
13	810	29	810
14	796	30	796
15	799		
16	810		

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: 12/012/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: November 2003

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0		
16	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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: November 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:

11/01/03	0000	Unit started the month at 100% / 856 MWe.
11/30/03	2400	Unit finished the month at 100% / 856 MWe.

UNIT Two:

11/01/03	0000	Unit started the month at 0% / 0 MWe. Unit offline for refueling/reactor vessel head replacement.
11/13/03	0309	Reactor Critical.
11/16/03	1201	Shutdown reactor due to a delay in the startup of the secondary plant for investigation of the Lube Oil System.
11/19/03	0957	Reactor Critical.
11/22/03	0907	Shutdown reactor due to a delay in the startup of the turbine because of Hydrogen Seal Oil System problems.
11/30/03	2400	Unit finished the month at 0% / 0 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2003

None during the Reporting Period

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

MONTH/YEAR: November 2003

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2003

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: November 2003

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.47E-1	1.52E-2	2.64E-1	3.59E-2	3.43E-4	1.07E-2
Suspended Solids, ppm	-	-	-	0.25	0.01	0.05
Gross Tritium, $\mu\text{Ci/ml}$	5.93E-1	4.30E-1	5.13E-1	4.39E-2	3.20E-2	3.74E-2
^{131}I , $\mu\text{Ci/ml}$	2.23E-4	9.38E-5	1.46E-4	2.79E-5	3.23E-6	1.34E-5
$^{131}\text{I}/^{133}\text{I}$	0.12	0.05	0.08	-	-	-
Hydrogen, cc/kg	35.8	33.3	34.3	34.4	1.52	25.3
Lithium, ppm	2.31	2.1	2.2	3.96	0.11	2.75
Boron - 10, ppm*	216	200	207	507	365	408
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	6	≤ 0.005	1.2
Chloride, ppm	0.005	0.004	0.005	0.013	0.001	0.005
pH @ 25 degree Celsius	6.62	6.42	6.56	6.25	4.8	5.49

* Boron - 10 = Total Boron x 0.196

Comments:

Unit 1: 100% power

Unit 2: In startup, following Refueling Shutdown

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: November 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: November 2003

None during the Reporting Period