

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 9, 2002

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

Serial No. 02-732
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 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

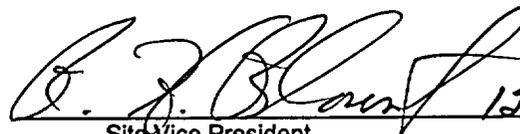
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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. 02-11**

Approved:


Site Vice President

12/9/02
Date

TABLE OF CONTENTS

Section	Page
Operating Data Report - Unit No. 1	3
Operating Data Report - Unit No. 2	4
Unit Shutdowns and Power Reductions - Unit No. 1	5
Unit Shutdowns and Power Reductions - Unit No. 2	6
Average Daily Unit Power Level - Unit No. 1	7
Average Daily Unit Power Level - Unit No. 2	8
Summary of Operating Experience - Unit Nos. 1 and 2.....	9
Facility Changes That Did Not Require NRC Approval.....	10
Procedure or Method of Operation Changes That Did Not Require NRC Approval	11
Tests and Experiments That Did Not Require NRC Approval.....	12
Chemistry Report.....	13
Fuel Handling - Unit Nos. 1 and 2.....	14
Description of Periodic Test(s) Which Were Not Completed Within the Time Limits Specified in Technical Specifications	15

OPERATING DATA REPORT

Docket No.: 50-280
Date: 12/02/02
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: November 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	720.0	8016.0	262464.0
12.	Hours Reactor Was Critical	720.0	8016.0	193777.6
13.	Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14.	Hours Generator On-Line	720.0	8016.0	191118.2
15.	Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16.	Gross Thermal Energy Generated (MWH)	1832631.2	20305531.4	455613009.3
17.	Gross Electrical Energy Generated (MWH)	614071.0	6791057.0	149871160.0
18.	Net Electrical Energy Generated (MWH)	591678.0	6537326.0	143130187.0
19.	Unit Service Factor	100.0%	100.0%	72.8%
20.	Unit Availability Factor	100.0%	100.0%	74.2%
21.	Unit Capacity Factor (Using MDC Net)	101.5%	100.7%	69.7%
22.	Unit Capacity Factor (Using DER Net)	104.3%	103.5%	69.2%
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: 12/02/02
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: November 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	720.0	8016.0	259345.0
12. Hours Reactor Was Critical	683.6	7321.4	191139.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	624.7	7224.0	188840.4
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1586809.8	18307856.3	451332760.5
17. Gross Electrical Energy Generated (MWH)	530867.0	6126569.0	148503576.0
18. Net Electrical Energy Generated (MWH)	512440.0	5908723.0	141865773.0
19. Unit Service Factor	86.8%	90.1%	72.8%
20. Unit Availability Factor	86.8%	90.1%	72.8%
21. Unit Capacity Factor (Using MDC Net)	87.3%	90.4%	69.6%
22. Unit Capacity Factor (Using DER Net)	90.3%	93.5%	69.4%
23. Unit Forced Outage Rate	13.2%	1.3%	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: November 2002

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 12/02/02
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: November 2002

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 12/02/02
 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
11/23/02	S	1H 44M	B	N/A	N/A	N/A	N/A	Unit ramped to perform 2-OSP-TM-001, Turbine Inlet Valve Freedom Test
11/23/02	F	95H 15M	A	3	Report Under Review	JJ	HCU	Unit 2 tripped due to failure of Electro-Hydraulic Controls

(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: 12/02/02
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: November 2002

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	824	17	824
2	824	18	824
3	824	19	824
4	824	20	822
5	824	21	821
6	824	22	822
7	823	23	819
8	824	24	814
9	822	25	813
10	822	26	806
11	824	27	819
12	824	28	823
13	824	29	824
14	824	30	824
15	824		
16	819		

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: 12/02/02
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: November 2002

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	828	17	825
2	828	18	827
3	828	19	828
4	828	20	828
5	828	21	829
6	827	22	828
7	828	23	115
8	828	24	0
9	827	25	0
10	827	26	0
11	827	27	550
12	827	28	827
13	828	29	826
14	828	30	827
15	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: November 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:

11/01/02 0000 Unit started the month at 100% / 853 MWe.
11/30/02 2400 Unit finished the month at 100% / 853 MWe.

UNIT TWO:

11/01/02 0000 Unit started the month at 100% / 858 MWe.
11/23/02 0148 Commenced ramping to 85% in accordance with procedure 2-OSP-TM-001.
11/23/02 0251 Stopped ramp at 85%.
11/23/02 0303 Commenced 2-OSP-TM-001.
11/23/02 0332 Unit Reactor Trip. While closing #3 Governor Valve IAW 2-OSP-TM-001, EHC Control Cards failed causing all Governor Valves to fail shut. Cards replaced.
11/24/02 1550 Reactor Critical.
11/27/02 0247 Generator On-line.
11/27/02 1653 Unit at 100% Power 855 MWe.
11/30/02 2400 Unit finished the month at 100% / 857 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2002

None during the Reporting Period

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

MONTH/YEAR: November 2002

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2002

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: November 2002

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.98E-1	1.39E-1	2.86E-1	3.87E-1	2.82E-2	2.55E-1
Suspended Solids, ppm	-	-	-	0.05	0.01	0.03
Gross Tritium, $\mu\text{Ci/ml}$	1.21E+0	7.14E-1	8.77E-1	1.63E+0	1.15E+0	1.47E+0
^{131}I , $\mu\text{Ci/ml}$	2.85E-4	1.10E-4	1.90E-4	1.84E-4	4.90E-5	1.03E-4
$^{131}\text{I}/^{133}\text{I}$	0.11	0.06	0.08	0.1	0.07	0.08
Hydrogen, cc/kg	37.8	35.2	36.5	40.5	36.2	38.4
Lithium, ppm	2.32	2.07	2.19	2.69	2.06	2.29
Boron - 10, ppm*	117	97	107	288	194	235
Oxygen, (DO), ppm	≤ 0.005					
Chloride, ppm	0.004	0.002	0.003	0.003	0.002	0.002
pH @ 25 degree Celsius	7.2	6.87	7	6.77	6.4	6.55

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: November 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: November 2002

None during the Reporting Period