

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
December 11, 2001

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

Serial No. 01-733
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 2001 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

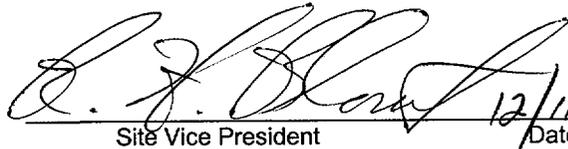
Mr. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

IE24

2/13/02

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 01-11**

Approved:


Site Vice President

12/11/01
Date

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OPERATING DATA REPORT

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

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: November 2001
- 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	253704.0
12. Hours Reactor Was Critical	0.0	6826.9	185131.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	0.0	6821.5	182542.2
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	0.0	17124496.0	433977243.8
17. Gross Electrical Energy Generated (MWH)	0.0	5699447.0	142637850.0
18. Net Electrical Energy Generated (MWH)	0.0	5515296.0	136166524.0
19. Unit Service Factor	0.0%	85.1%	72.0%
20. Unit Availability Factor	0.0%	85.1%	73.4%
21. Unit Capacity Factor (Using MDC Net)	0.0%	84.9%	68.7%
22. Unit Capacity Factor (Using DER Net)	0.0%	87.3%	68.1%
23. Unit Forced Outage Rate	0.0%	0.0%	12.8%

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	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
 Date: 12/01/01
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: November 2001
- 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	250585.0
12. Hours Reactor Was Critical	461.6	7485.1	183074.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	456.3	7463.4	180874.5
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1152989.3	18937675.2	431159236.1
17. Gross Electrical Energy Generated (MWH)	387565.0	6339500.0	141749632.0
18. Net Electrical Energy Generated (MWH)	374240.0	6115515.0	135351822.0
19. Unit Service Factor	63.4%	93.1%	72.2%
20. Unit Availability Factor	63.4%	93.1%	72.2%
21. Unit Capacity Factor (Using MDC Net)	63.8%	93.6%	68.8%
22. Unit Capacity Factor (Using DER Net)	66.0%	96.8%	68.5%
23. Unit Forced Outage Rate	0.0%	0.6%	10.2%

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

April 2002

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 2001

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 12/01/01
 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
11/0101	S	720H	C	1	N/A	N/A	N/A	Refueling Outage/Reactor Head Repairs

(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 2001

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 12/01/01
 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
11/20/01	S	263H 43M	H	1	N/A	AB	RCT	Voluntary Shutdown for Reactor Head Inspection and Repairs

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

MONTH: November 2001

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
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.

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 12/01/01
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: November 2001

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	823	17	825
2	823	18	827
3	824	19	708
4	830	20	1
5	829	21	0
6	828	22	0
7	827	23	0
8	828	24	0
9	828	25	0
10	828	26	0
11	829	27	0
12	828	28	0
13	827	29	0
14	827	30	0
15	828		
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: November 2001

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:

11/01/01	0000	Unit started the month at 0% / 0 MWe. Unit offline for refueling outage and reactor head inspection and repair.
11/30/01	2400	Unit finished the month at 0% / 0 MWe.

UNIT TWO:

11/01/01	0000	Unit started the month at 100% / 850 MWe.
11/19/01	1730	Commenced ramp for reactor head inspection. Unit at 100% / 856 MWe.
11/20/01	0017	Output breakers opened. Unit offline.
11/20/01	0028	Reactor tripped.
11/24/01	1115	Head inspection complete.
11/30/01	1806	Commenced reactor startup.
11/30/01	1852	Reactor critical.
11/30/01	2400	Unit finished the month at 2% / 0 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2001

None during the Reporting Period

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

MONTH/YEAR: November 2001

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: November 2001

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: November 2001

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	6.83E-3	6.41E-4	1.64E-3	1.76E-1	5.64E-3	8.15E-2
Suspended Solids, ppm	0.075	0.01	0.03	0.25	0.01	0.03
Gross Tritium, $\mu\text{Ci/ml}$	4.16E-2	4.16E-2	4.16E-2	7.95E-1	2.09E-1	5.45E-1
I^{131} , $\mu\text{Ci/ml}$	2.05E-6	2.05E-6	2.05E-6	1.65E-4	3.98E-5	9.84E-5
I^{131}/I^{133}	-	-	-	0.09	0.04	0.07
Hydrogen, cc/kg	-	-	-	40.3	1.6	19
Lithium, ppm	0.33	0.22	0.31	3.7	0.1	1.45
Boron - 10, ppm*	487.3	477.1	482	580.7	78.4	318.9
Oxygen, (DO), ppm	6	3	4.9	5	≤ 0.005	1.492
Chloride, ppm	0.019	0.001	0.007	0.006	0.001	0.002
pH @ 25 degree Celsius	5.28	4.86	5.03	7.15	4.66	5.97

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: November 2001

<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 2001

None during the Reporting Period