

VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

November 7, 2001

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

Serial No. 01-671
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 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

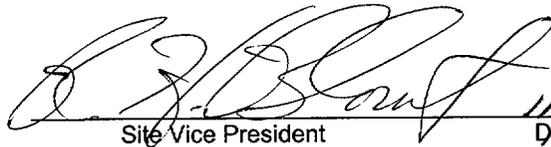
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 01-10**

Approved:


Site Vice President

11/7/01
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: 11/01/01
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: October 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	745.0	7296.0	252984.0
12. Hours Reactor Was Critical	313.0	6826.9	185131.0
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	312.6	6821.5	182542.2
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	661835.8	17124496.0	433977243.8
17. Gross Electrical Energy Generated (MWH)	222480.0	5699447.0	142637850.0
18. Net Electrical Energy Generated (MWH)	213556.0	5515296.0	136166524.0
19. Unit Service Factor	42.0%	93.5%	72.2%
20. Unit Availability Factor	42.0%	93.5%	73.6%
21. Unit Capacity Factor (Using MDC Net)	35.4%	93.3%	68.9%
22. Unit Capacity Factor (Using DER Net)	36.4%	95.9%	68.3%
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: 11/01/01
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: October 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	745.0	7296.0	249865.0
12. Hours Reactor Was Critical	745.0	7023.5	182612.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	745.0	7007.1	180418.2
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1896708.9	17784685.9	430006246.8
17. Gross Electrical Energy Generated (MWH)	635900.0	5951935.0	141362067.0
18. Net Electrical Energy Generated (MWH)	612859.0	5741275.0	134977582.0
19. Unit Service Factor	100.0%	96.0%	72.2%
20. Unit Availability Factor	100.0%	96.0%	72.2%
21. Unit Capacity Factor (Using MDC Net)	100.9%	96.6%	68.8%
22. Unit Capacity Factor (Using DER Net)	104.4%	99.9%	68.6%
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: October 2001

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 11/01/01
 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
10/14/01	S	431H 25M	C	1	N/A	N/A	N/A	Refueling Outage

(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 2001

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

MONTH: October 2001

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	719	17	0
2	711	18	0
3	701	19	0
4	698	20	0
5	695	21	0
6	696	22	0
7	690	23	0
8	687	24	0
9	682	25	0
10	677	26	0
11	672	27	0
12	667	28	0
13	603	29	0
14	1	30	0
15	0	31	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: 11/01/01
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: October 2001

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	818	17	820
2	817	18	824
3	818	19	825
4	823	20	826
5	819	21	826
6	822	22	826
7	823	23	826
8	823	24	825
9	824	25	823
10	823	26	821
11	823	27	822
12	823	28	824
13	823	29	826
14	815	30	828
15	821	31	825
16	818		

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 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:

10/01/01	0000	Unit started the month at 87% / 753 MWe. Unit on end of cycle coastdown.
10/14/01	0035	Opened output breakers. Unit 1 offline.
10/14/01	0100	Manually tripped Unit 1 Reactor IAW 1-GOP-2.2.01.
10/31/01	2400	Unit finished the month at 0% / 0 MWe.

UNIT TWO:

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

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: October 2001

- | | | |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| DCP 00-060 | <p>Design Change Package
(Safety Evaluation 01-037, Safety Reviews 01-051, 01-052)</p> <p>Design Change Package 00-060, "SW/CW Miscellaneous Repair" obtains access to the Service Water (SW) discharge piping from the Component Cooling Heat Exchangers (CCHX), Recirc Spray Heat Exchangers (RSHX) and Bearing Cooling Heat Exchangers (BCHX) in order to clean and repair pipe walls. An alternate SW flow path will be required to discharge SW flow from Units 1&2 Component Cooling heat loads and a procedurally controlled contingency plan will be in effect for providing restoration of a SW discharge flow path if specific plant conditions exist. The planned repair of piping from CCHX 1D may require removal of piping that will not support normal SW flow through 1D if the contingency plan is entered. Safety Review 01-051 proposes a change that provides a temporary flow path for 1D during the contingency plan. Safety Review 01-052 allows for use of a temporary pipe patch on the outlet piping of CCHX 1D if the contingency plan is entered.</p> | 05/17/01 |
| NE-1291 | <p>Reload Safety Evaluation Technical Report
(Safety Evaluations 01-050)</p> <p>Technical Report NE-1291, Rev. 0, "Reload Safety Evaluation, Surry Unit 1 Cycle 18 Pattern ST", examines refueling and operation of Surry Unit 1 Cycle 18.</p> | 10/04/01 |
| DCP 01-048 | <p>Design Change Package
(Safety Reviews 01-053)</p> <p>Design Change Package 01-048, "CRDM Head Penetration Repairs / Surry 1" addresses the modifications necessary for repairing the Reactor Vessel Head penetrations that have through-wall cracking.</p> | 10/31/01 |

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

MONTH/YEAR: October 2001

0-ST-VS-001

Special Test Procedure
(Safety Review 01-048, Rev.1)

10/03/01

Special Test Procedure 0-ST-VS-001, "58 Fan Flow Verification", was written to determine the maximum suction pressure during operation of the Auxiliary Building Ventilation Exhaust Fans (58A and 58B) and verify both fans will start and operate when both fans are set at 36,000 cfm. Revision 1 of Safety Review 01-048 allows for the dampers that align the fans to the Unit 1 & 2 Safeguards areas to be electrically disconnected during testing and operated manually under Administrative Control.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: October 2001

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: October 2001

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	2.19E-1	6.94E-4	6.68E-2	1.99E-1	1.08E-1	1.51E-1
Suspended Solids, ppm	0.15	0.01	0.04	-	-	-
Gross Tritium, $\mu\text{Ci/ml}$	5.02E-2	4.43E-2	4.73E-2	7.84E-1	7.62E-1	7.76E-1
I^{131} , $\mu\text{Ci/ml}$	3.44E-4	1.13E-4	2.54E-4	1.79E-4	7.89E-5	1.14E-4
I^{131}/I^{133}	0.09	0.07	0.08	0.12	0.05	0.07
Hydrogen, cc/kg	39.3	2.6	14.6	40.5	36.9	38.6
Lithium, ppm	0.78	0.1	0.38	2.29	2.14	2.21
Boron - 10, ppm*	484.3	0.196	351	112.9	94	103.6
Oxygen, (DO), ppm	5	≤ 0.005	2.829	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.009	0.001	0.004	0.003	0.001	0.002
pH @ 25 degree Celsius	9.62	4.38	5.74	6.99	6.77	6.89

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: October 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>
----------------------------------------------	------------------------------------	--------------------------------------------------	----------------------------	------------------------	-------------------------------	---------------------------------------------------------

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 2001

None during the Reporting Period