

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
July 9, 2003

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

Serial No. 03-394
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 June 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. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

JE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 03-06**

Approved:

M. Powers Jr *7/9/03*
Site Vice President 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.....	18

OPERATING DATA REPORT

Docket No.: 50-280
 Date: 07/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: June 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	720.0	4343.0	267551.0
12. Hours Reactor Was Critical	400.0	2725.5	197247.1
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	331.7	2603.2	194465.4
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	776020.8	6464762.4	463971079.1
17. Gross Electrical Energy Generated (MWH)	257502.0	2156978.0	152662302.0
18. Net Electrical Energy Generated (MWH)	247604.0	2078797.0	145821118.0
19. Unit Service Factor	46.1%	59.9%	72.7%
20. Unit Availability Factor	46.1%	59.9%	74.1%
21. Unit Capacity Factor (Using MDC Net)	42.5%	59.1%	69.6%
22. Unit Capacity Factor (Using DER Net)	43.6%	60.7%	69.2%
23. Unit Forced Outage Rate	0.0%	11.7%	12.2%

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: 07/01/03
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: June 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	720.0	4343.0	264432.0
12. Hours Reactor Was Critical	720.0	4280.1	196163.5
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	720.0	4255.3	193839.7
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1833120.0	10818972.4	464045956.9
17. Gross Electrical Energy Generated (MWH)	612930.0	3647790.0	152788323.0
18. Net Electrical Energy Generated (MWH)	591080.0	3502124.0	145982841.0
19. Unit Service Factor	100.0%	98.0%	73.3%
20. Unit Availability Factor	100.0%	98.0%	73.3%
21. Unit Capacity Factor (Using MDC Net)	100.7%	98.9%	70.2%
22. Unit Capacity Factor (Using DER Net)	104.2%	102.3%	70.1%
23. Unit Forced Outage Rate	0.0%	2.0%	9.6%

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

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

REPORT MONTH: June 2003

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 07/01/03
 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
030601	S	388H 19M	C	1	N/A	N/A	N/A	Unit offline for Refueling Outage/Reactor Vessel Head Replacement
030613	F	Included in RFO duration above	A	1	50-280/2003- 003-00	AA	84	During startup, Unit was manually tripped from critical during physics testing due to misaligned control rod

(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: June 2003

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 07/01/03
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

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 07/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: June 2003

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	0	17	98
2	0	18	443
3	0	19	750
4	0	20	820
5	0	21	822
6	0	22	823
7	0	23	822
8	0	24	821
9	0	25	820
10	0	26	820
11	0	27	820
12	0	28	820
13	0	29	819
14	0	30	819
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: 07/01/03
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: June 2003

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	825	17	822
2	824	18	821
3	824	19	821
4	827	20	829
5	827	21	821
6	827	22	821
7	824	23	821
8	821	24	820
9	821	25	820
10	821	26	818
11	819	27	818
12	813	28	819
13	818	29	819
14	819	30	817
15	820		
16	821		

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: June 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:

06/01/03	0000	Unit started the month at 0% / 0 MWe.
06/12/03	1821	Reactor Critical.
06/13/03	0536	Reactor Tripped due to rod J-7 misalignment.
06/14/03	1510	Containment entry revealed that the CRDM J-7 connector at the RPV Head was not properly made up.
06/14/03	1915	Reactor Critical.
06/17/03	0419	Unit on Line.
06/17/03	0436	Ramp stopped at 18% / 86 MWe due to "A" main feed regulating valve not shifting to auto.
06/17/03	1247	Replaced "A" main feed regulating valve controller and placed in auto.
06/17/03	1325	Commenced unit ramp to 30% IAW 1-OP-TM-001.
06/17/03	1413	Stopped ramp at 30% / 204 MWe's for Voltage Regulator Testing.
06/17/03	2346	Started ramp to 40% for placing moisture separator reheaters in service.
06/18/03	0700	Ramp stopped for turnover.
06/18/03	0715	Commenced ramp to 70% for voltage regulator testing.
06/18/03	1501	All 70% power testing complete.
06/18/03	2205	Commenced ramp from 70% / 574 MWe's.
06/19/03	0645	Stopped ramp at 90% / 767 MWe's to adjust NI rod stops and trip setpoints.
06/19/03	0855	Commenced ramp.
06/20/03	0219	Unit at 100% / 850 MWe.
06/30/03	2400	Unit finished the month at 100% / 848 MWe.

UNIT TWO:

06/01/03	0000	Unit started the month at 100% / 854 MWe.
06/12/03	1300	Unit 2 Generator Output lowered from 850 to 837 MWe's while throttling waterboxes for 1G Bus Maintenance.
06/30/03	2400	Unit finished the month at 100% / 847 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: June 2003

None during the Reporting Period

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

MONTH/YEAR: June 2003

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: June 2003

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: June 2003

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.04E-1	2.24E-3	1.79E-1	2.30E-1	1.22E-1	1.73E-1
Suspended Solids, ppm	0.15	0.01	0.04	0.01	0.01	0.01
Gross Tritium, $\mu\text{Ci/ml}$	1.67E-1	3.55E-2	9.78E-2	6.42E-1	5.69E-1	6.15E-1
^{131}I , $\mu\text{Ci/ml}$	1.21E-4	3.71E-6	4.75E-5	1.96E-4	6.02E-5	1.04E-4
$^{131}\text{I}/^{133}\text{I}$	0.09	0.05	0.07	0.11	0.05	0.08
Hydrogen, cc/kg	33.5	5.3	25.7	37	34.8	35.3
Lithium, ppm	4	0.3	2.73	2.33	2.12	2.18
Boron - 10, ppm*	490	264	363	79.2	59.4	69.2
Oxygen, (DO), ppm	10	≤ 0.005	0.767	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.006	0.002	0.004	0.002	0.001	0.002
pH @ 25 degree Celsius	6.35	4.79	5.57	7.25	7.04	7.16

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: June 2003

New Fuel Shipment or Cask No.	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
Unit 2 Batch 21 Shipment #1	06/09/03	12	01S	LM1FAJ	4.1061	575.35 GBq
			05S	LM1FAN	4.0935	
			06S	LM1FAP	4.0963	
			08S	LM1FAR	4.0894	
			37S	LM1FBL	4.2490	
			38S	LM1FBM	4.2478	
			39S	LM1FBN	4.2524	
			40S	LM1FBP	4.2416	
			41S	LM1FBQ	4.2504	
			42S	LM1FBR	4.2378	
			43S	LM1FBS	4.2397	
			44S	LM1FBT	4.2411	
Unit 2 Batch 21 Shipment #2	06/10/03	12	02S	LM1FAK	4.0964	562.77 GBq
			03S	LM1FAL	4.1141	
			04S	LM1FAM	4.1172	
			09S	LM1FAS	4.0949	
			11S	LM1FAU	4.0978	
			12S	LM1FAV	4.0994	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: June 2003

New Fuel Shipment or Cask No.	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
			14S	LM1FAX	4.0961	
			46S	LM1FBV	4.2441	
			47S	LM1FBW	4.2448	
			48S	LM1FBX	4.2474	
			49S	LM1FBY	4.2419	
			52S	LM1FC1	4.2439	
Unit 2 Batch 21 Shipment #3	06/11/03	12	07S	LM1FAQ	4.1148	565.36 GBq
			10S	LM1FAT	4.0998	
			19S	LM1FB2	4.1109	
			23S	LM1FB6	4.1026	
			27S	LM1FBA	4.1067	
			28S	LM1FBB	4.1045	
			29S	LM1FBC	4.1078	
			30S	LM1FBD	4.1130	
			31S	LM1FBE	4.1118	
			32S	LM1FBF	4.1070	
			35S	LM1FBJ	4.1168	
			50S	LM1FBZ	4.2534	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: June 2003

New Fuel Shipment or Cask No.	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
Unit 2 Batch 21 Shipment #4	06/13/03	12	13S	LM1FAW	4.1015	572.02 GBq
			15S	LM1FAY	4.1005	
			20S	LM1FB3	4.1012	
			22S	LM1FB5	4.1076	
			24S	LM1FB7	4.0931	
			26S	LM1FB9	4.1116	
			45S	LM1FBU	4.2360	
			51S	LM1FC0	4.2417	
			54S	LM1FC3	4.2511	
			55S	LM1FC4	4.2527	
			56S	LM1FC5	4.2319	
			59S	LM1FC8	4.2307	
Unit 2 Batch 21 Shipment #5	06/17/03	12	16S	LM1FAZ	4.1046	568.69 GBq
			17S	LM1FB0	4.1062	
			18S	LM1FB1	4.1058	
			21S	LM1FB4	4.0989	
			25S	LM1FB8	4.1093	
			33S	LM1FBG	4.1061	

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: June 2003

New Fuel Shipment or Cask No.	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
			34S	LM1FBH	4.1044	
			36S	LM1FBK	4.1199	
			53S	LM1FC2	4.2524	
			57S	LM1FC6	4.2357	
			58S	LM1FC7	4.2338	
			60S	LM1FC9	4.2490	

**DESCRIPTION OF PERIODIC TEST(S) WHICH WERE NOT COMPLETED
WITHIN THE TIME LIMITS SPECIFIED IN TECHNICAL SPECIFICATIONS**

MONTH/YEAR: June 2003

None during the Reporting Period