VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

June 14, 2004

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

Serial No. 04-349
SPS Lic/JSA R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

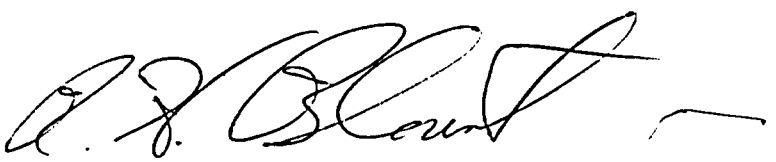
Gentlemen:

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 May 2004 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. 04-05

Approved: _____ 6/14/04
Site Vice President Date

TABLE OF CONTENTS

OPERATING DATA REPORT

Docket No.: 50-280
Date: 06/01/04
Completed By: R. Stief
Telephone: (757) 365-2486

1. Unit Name: ..... Surry Unit 1
2. Reporting Period: ..... May 2004
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:

		This Month	Year-To-Date	Cumulative
11.	Hours in Reporting Period	744.00	3647.00	275615.00
12.	Hours Reactor Was Critical	744.00	3647.00	205050.48
13.	Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14.	Hours Generator On-Line	715.43	3618.43	202223.20
15.	Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16.	Gross Thermal Energy Generated (MWH)	1793524.60	9141964.90	483533888.50
17.	Gross Electrical Energy Generated (MWH)	592520.00	3054302.00	159193567.00
18.	Net Electrical Energy Generated (MWH)	567018.00	2944236.00	152106336.00
19.	Unit Service Factor	96.16%	99.22%	73.37%
20.	Unit Availability Factor	96.16%	99.22%	74.73%
21.	Unit Capacity Factor (Using MDC Net)	94.09%	99.67%	70.41%
22.	Unit Capacity Factor (Using DER Net)	96.72%	102.45%	70.04%
23.	Unit Forced Outage Rate	3.84%	0.78%	11.87%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
November 2004
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		

OPERATING DATA REPORT

Docket No.: 50-281
Date: 06/01/04
Completed By: R. Stief
Telephone: (757) 365-2486

1. Unit Name: ..... Surry Unit 2
2. Reporting Period: ..... May 2004
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:

		This Month	Year-To-Date	Cumulative
11.	Hours in Reporting Period	744.00	3647.00	272496.00
12.	Hours Reactor Was Critical	589.52	3492.52	202454.82
13.	Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14.	Hours Generator On-Line	566.75	3469.75	199916.17
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1403778.90	8790109.90	479436453.70
17.	Gross Electrical Energy Generated (MWH)	469948.00	2943602.00	157921916.00
18.	Net Electrical Energy Generated (MWH)	453461.00	2842554.00	150935390.00
19.	Unit Service Factor	76.18%	95.14%	73.36%
20.	Unit Availability Factor	76.18%	95.14%	73.36%
21.	Unit Capacity Factor (Using MDC Net)	74.78%	95.63%	70.36%
22.	Unit Capacity Factor (Using DER Net)	77.35%	98.91%	70.29%
23.	Unit Forced Outage Rate	23.82%	4.86%	9.48%

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: May 2004

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 06/01/04
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
05/13/04	F	28.25	B	N/A	N/A	EL	XFMR	Unit 1 ramped due to "A" Main Transformer bushing high temperatures
05/15/04	F	28.57	B	1	N/A	EL	XFMR	Unit 1 taken offline for "A" Main Transformer Bushing 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: May 2004

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 06/01/04
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
05/21/04	F	177.25	A	3	N/A	EL	CAP	Unit 2 reactor trip due to a failed Main Transformer Phase Coupling Capacitor

(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: 06/01/04
Completed by: R. Stief
Telephone: (757) 365-2486

MONTH: May 2004

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	818	17	818
2	824	18	818
3	824	19	817
4	824	20	818
5	824	21	814
6	824	22	789
7	823	23	792
8	823	24	802
9	823	25	800
10	823	26	798
11	823	27	788
12	821	28	796
13	814	29	805
14	458	30	819
15	2	31	819
16	382		

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: 06/01/04
Completed by: R. Stief
Telephone: (757) 365-2486

MONTH: May 2004

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	825	17	822
2	826	18	822
3	826	19	821
4	826	20	823
5	826	21	724
6	825	22	0
7	826	23	0
8	826	24	0
9	826	25	0
10	824	26	0
11	823	27	0
12	822	28	0
13	821	29	348
14	822	30	644
15	823	31	703
16	822		

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: May 2004

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:

05/01/04	0000	Unit started the month at 100% / 854 MWe.
05/01/04	0221	Commence ramp to 90% for performance of Turbine Inlet Valve Freedom Test.
05/01/04	0311	Stop ramp at 90% / 770 MWe.
05/01/04	0405	Testing SAT. Commence ramp to full power.
05/01/04	0518	Stop ramp at 100% / 853 MWe.
05/13/04	2223	Due to degrading condition of 1A Main Transformer high side bushing, initiated ramp to 70%.
05/13/04	2354	Stop ramp at 80% / 680 MWe.
05/14/04	0819	Decision made to ramp to 65% due to high bushing temps.
05/14/04	0925	Secured ramp at 65% / 538 MWe.
05/14/04	1701	Initiated ramp offline for "A" Main Transformer bushing repairs.
05/14/04	1950	Stopped ramp at 20% / 107 MWe.
05/15/04	0138	Output breakers opened – unit offline.
05/16/04	0200	Bushing repairs complete.
05/16/04	0612	Closed output breakers – unit online. Commence ramping unit.
05/16/04	0923	Stopped ramp at 45% / 315 MWe to place feedwater pump 1A in service.
05/16/04	1234	Recommenced ramp. Unit at 50% / 343 MWe.
05/16/04	1424	Stopped ramp for calorimetric. Unit at 70% / 566 MWe.
05/16/04	1623	Commenced ramp to full power. Unit at 70% / 569 MWe.
05/16/04	2100	Unit at 100% / 847 MWe.
05/31/04	2400	Unit finished the month at 100% / 851 MWe.

UNIT TWO:

05/01/04	0000	Unit started the month at 100% / 855 MWe.
05/21/04	2108	Reactor Trip due to a failed "A" phase coupling capacitor.
05/23/04	2050	Unit taken to CSD due to leaks on the AFW recirc line.
05/26/04	2250	RCS temperature at 547°, Unit is at HSD.
05/27/04	2041	Commence reactor startup.
05/27/04	2137	Reactor is critical.
05/28/04	0943	Tripped reactor to allow troubleshooting of CERPI system.
05/28/04	1943	Reactor is critical.
05/29/04	0623	Output breakers closed. Unit online.

05/29/04	0932	Commence unit ramp. Unit at 28% / 187 MWe.
05/29/04	1422	Stopped ramp for calorimetric. Unit at 70% / 553 MWe.
05/29/04	1738	Recommenced ramp.
05/29/04	1813	Stop ramp. I&C investigating CERPI rod position. Unit at 78% / 653 MWe.
05/29/04	1947	Recommence ramp.
05/29/04	2246	Ramp stopped for EHC concerns. Unit at 90% / 769 MWe.
05/30/04	0057	Commence ramp down for #2 governor valve repair. Unit at 90% / 769 MWe.
05/30/04	0110	Stopped ramp at 80% / 670 MWe.
05/31/04	1333	Commence ramp to 100%.
05/31/04	1428	Stopped ramp due to #2 governor valve oscillations. Unit at 89% / 768 MWe.
05/31/04	1432	Recommenced ramp to 90% to allow Imp Out to stabilize #2 governor valve.
05/31/04	1438	Stopped ramp at 90% / 769 MWe. #2 governor valve stable.
05/31/04	1528	Commence ramp to 96%. Unit at 91% / 770 MWe.
05/31/04	1550	Stopped ramp for Alternate Power Verification. Unit at 96% / 830 MWe.
05/31/04	1752	Start ramp to 100%. Unit at 96% / 830 MWe.
05/31/04	1929	Unit at 100% / 845 MWe.
05/31/04	2400	Unit finished the month at 100% / 850 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: May 2004

None during the Reporting Period.

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

MONTH/YEAR: May 2004

SC-03-002, Revs. 1, 2, 3 **Justification for Continued Operation** 05/30/04

Justification for Continued Operation (JCO) SC-03-002, "Control of Auxiliary Feedwater to Steam Generators with One Emergency Bus De-energized" changes applicable procedures to maintain four of the six motor-operated valves (MOVs) to the steam generators (SGs) closed. With this configuration, in the event of a steam generator tube rupture, control room operators will be able to align the MOVs to isolate the ruptured SG. Revision 1 (dated 12/18/03) specified the mode of applicability for operating with four of six valves open when reactor coolant system conditions are greater than 350F/450 psig with Auxiliary Feedwater (AFW) not in service. Revision 2 (dated 05/25/04) made reference to an Engineering Transmittal (NAF-04-0045, Rev. 0) that provided justification for a risk-based period of time of 150 hours after the AFW MOV alignment is altered from the allowable JCO configuration for operators to restore the AFW MOVs into a configuration allowed by this JCO. Revision 3 (dated 05/30/04) stated the JCO configuration would not apply during a Technical Specification (TS) action statement due to an inoperable AFW component or during temporary system realignments required to initiate or perform TS surveillance testing.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: April 2004

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: May 2004

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, µCi/ml	4.06E-1	1.61E-1	2.62E-1	3.19E-1	6.22E-3	1.45E-1
Suspended Solids, ppm	-	-	-	0.1	0.01	0.03
Gross Tritium, µCi/ml	9.20E-1	4.87E-1	6.68E-1	1.30E+0	6.28E-1	1.04E+0
I^{131}, µCi/ml	2.89E-4	5.43E-5	1.52E-4	2.41E-4	5.28E-5	1.10E-4
I^{131}/I^{133}	0.12	0.04	0.07	0.42	0.17	0.26
Hydrogen, cc/kg	37.8	30.6	34.9	37.5	21.8	33.7
Lithium, ppm	2.27	2.02	2.17	3.58	0.26	2.19
Boron - 10, ppm*	178	100	122	329	217	280
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.008	0.003	0.003	0.012	0.003	0.007
pH @ 25 degree Celsius	7.08	6.85	6.95	6.57	5.44	6.29

* Boron - 10 = Total Boron x 0.196

Comments:
Unit 1: Unit at reduced power from 5/13 to 5/16. Quarterly Suspended Solids not required.
Unit 2: Unit at CSD from 5/21 to 5/28. Suspended Solids performed per startup guidelines.

FUEL HANDLING
UNITS 1 & 2

MONTH/YEAR: May 2004

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

None during the Reporting Period

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

MONTH/YEAR: May 2004

None during the Reporting Period