

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

May 4, 2005

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

Serial No. 05-266
SPS Lic/JSA R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

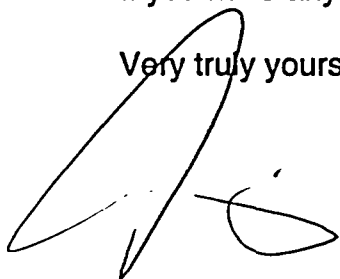
Gentlemen:

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 April 2005 is provided in the attachment.

If you have any questions or require additional information, please contact us.

Very truly yours,



Donald E. Jernigan,
Site Vice President
Surry Power Station

Attachment

Commitments made by this letter: None

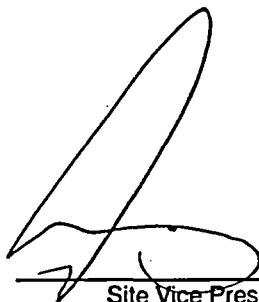
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

Mr. N. P. Garrett
NRC Senior Resident Inspector
Surry Power Station

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 05-04**

Approved:

A large, stylized handwritten signature in black ink, consisting of a large loop at the top and a horizontal stroke at the bottom.

Site Vice President

5/4/2005

Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 05/01/05
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
 - 2. Reporting Period:..... April 2005
 - 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):.... 840
 - 7. Maximum Dependable Capacity (Net MWe):..... 799
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	719.00	2879.00	283631.00
12. Hours Reactor Was Critical	719.00	2787.53	212188.93
13. Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14. Hours Generator On-Line	719.00	2756.97	209306.19
15. Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16. Gross Thermal Energy Generated (MWH)	1829921.20	6999649.60	501484327.40
17. Gross Electrical Energy Generated (MWH)	614164.00	2341694.00	165186969.00
18. Net Electrical Energy Generated (MWH)	583771.00	2229581.00	156916980.00
19. Unit Service Factor	100.00%	95.76%	73.80%
20. Unit Availability Factor	100.00%	95.76%	75.11%
21. Unit Capacity Factor (Using MDC Net)	101.62%	96.92%	70.52%
22. Unit Capacity Factor (Using DER Net)	103.04%	98.28%	70.21%
23. Unit Forced Outage Rate	0.00%	4.24%	11.56%

- 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: 05/01/05
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... April 2005
- 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):.... 840
- 7. Maximum Dependable Capacity (Net MWe):..... 799

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	719.00	2879.00	280512.00
12. Hours Reactor Was Critical	551.60	2711.60	210303.42
13. Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14. Hours Generator On-Line	551.15	2711.15	207764.32
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	1394298.10	6891800.60	499394192.40
17. Gross Electrical Energy Generated (MWH)	469068.00	2318510.00	164611355.00
18. Net Electrical Energy Generated (MWH)	446079.00	2205846.00	156382291.00
19. Unit Service Factor	76.66%	94.17%	74.07%
20. Unit Availability Factor	76.66%	94.17%	74.07%
21. Unit Capacity Factor (Using MDC Net)	77.65%	95.89%	70.74%
22. Unit Capacity Factor (Using DER Net)	78.73%	97.23%	70.75%
23. Unit Forced Outage Rate	0.00%	0.00%	9.15%

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: April 2005

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 05/01/05
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: April 2005

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 05/01/05
 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
04/24/05	S	167.85	C	1	N/A	N/A	N/A	Unit offline for refueling

(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:
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 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: 05/01/05
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: April 2005

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	814	17	812
2	814	18	813
3	780	19	813
4	814	20	814
5	814	21	814
6	814	22	814
7	814	23	812
8	814	24	791
9	813	25	808
10	814	26	809
11	812	27	810
12	813	28	810
13	814	29	810
14	813	30	810
15	814		
16	814		

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: 05/01/05
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: April 2005

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	816	17	817
2	816	18	815
3	781	19	815
4	813	20	814
5	815	21	814
6	813	22	814
7	814	23	394
8	815	24	0
9	815	25	0
10	815	26	0
11	816	27	0
12	815	28	0
13	815	29	0
14	814	30	0
15	815		
16	815		

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: April 2005

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:

04/01/05	0000	Unit started the month at 100% / 854 MWe.
04/30/05	2400	Unit finished the month at 100% / 854 MWe

UNIT TWO:

04/01/05	0000	Unit started the month at 100% / 857 MWe.
04/23/05	1707	Commenced ramp down for refueling shutdown. Unit at 100% / 854 MWe.
04/23/05	2158	Stopped ramp for turnover. Unit at 20% / 110 MWe.
04/23/05	2326	Recommenced ramp. Unit at 20% / 108 MWe.
04/24/05	0000	Unit at 7% / 25 MWe.
04/24/05	0009	Unit offline.
04/24/05	0036	Reactor tripped.
04/30/05	2400	Unit finished the month at 0% / 0 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: April 2005

None during the Reporting Period.

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

MONTH/YEAR: April 2005

None during the Reporting Period.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: April 2005

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: April 2005

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	4.93E-1	2.49E-1	3.43E-1	6.21E-1	1.64E-3	1.59E-1
Suspended Solids, ppm	-	-	-	0.100	≤ 0.010	0.043
Gross Tritium, $\mu\text{Ci/ml}$	1.00E+0	8.45E-1	9.44E-1	4.41E-1	2.68E-1	3.69E-1
^{131}I , $\mu\text{Ci/ml}$	9.56E-4	8.44E-5	1.52E-4	1.20E-4	3.04E-5	6.28E-5
$^{131}\text{I}/^{133}\text{I}$	0.11	0.05	0.08	0.21	0.09	0.15
Hydrogen, cc/kg	38.6	36.0	37.1	43.4	1.6	24.9
Lithium, ppm	3.51	3.13	3.32	1.31	0.10	0.62
Boron - 10, ppm*	238	224	231	495	13	263
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	8.00	≤ 0.005	2.815
Chloride, ppm	0.013	0.010	0.012	0.003	0.001	0.001
pH @ 25 degree Celsius	6.71	6.43	6.60	7.56	4.62	6.11

* Boron - 10 = Total Boron x 0.196

Comments:

Unit 1: Unit at 100% power. Quarterly Suspended Solids not required.

Unit 2: Unit shutdown 04/24/2005 for RFO.

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: April 2005

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 22 Shipment #1	04/04/05	12	06T	LM1L3Y	4.1022	565.27 GBq
			07T	LM1L40	4.1008	
			08T	LM1L41	4.1037	
			09T	LM1L42	4.1042	
			10T	LM1L43	4.0990	
			17T	LM1L4A	4.1028	
			29T	LM1L4R	4.2509	
			39T	LM1L52	4.2498	
			40T	LM1L53	4.2489	
			44T	LM1L57	4.2547	
			46T	LM1L59	4.2554	
			48T	LM1L5C	4.2538	
Unit 2 Batch 22 Shipment #2	04/05/05	12	02T	LM1L3U	4.1014	565.41GBq
			03T	LM1L3V	4.1031	
			23T	LM1L4J	4.1175	
			24T	LM1L4K	4.1062	
			26T	LM1L4M	4.1045	
			27T	LM1L4N	4.0947	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: April 2005

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
			31T	LM1L4T	4.2473	
			32T	LM1L4U	4.2469	
			33T	LM1L4V	4.2476	
			35T	LM1L4X	4.2551	
			54T	LM1L5K	4.2537	
			55T	LM1L5L	4.2508	
Unit 2 Batch 22 Shipment #3	04/06/05	12	04T	LM1L3W	4.1015	565.29 GBq
			05T	LM1L3X	4.0984	
			13T	LM1L46	4.1024	
			19T	LM1L4D	4.1028	
			20T	LM1L4E	4.1200	
			25T	LM1L4L	4.1042	
			30T	LM1L4S	4.2551	
			43T	LM1L56	4.2524	
			45T	LM1L58	4.2504	
			47T	LM1L5A	4.2539	
			50T	LM1L5E	4.2589	
			53T	LM1L5J	4.2515	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: April 2005

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 22 Shipment #4	04/07/05	12	01T	LM1L3T	4.1002	565.61 GBq
			11T	LM1L44	4.1031	
			12T	LM1L45	4.1019	
			14T	LM1L47	4.1048	
			18T	LM1L4C	4.1025	
			22T	LM1L4H	4.1111	
			37T	LM1L50	4.2525	
			41T	LM1L54	4.2475	
			42T	LM1L55	4.2486	
			49T	LM1L5D	4.2537	
			51T	LM1L5G	4.2597	
			52T	LM1L5H	4.2563	
			Unit 2 Batch 22 Shipment #5	04/08/05	8	
16T	LM1L49	4.1034				
21T	LM1L4G	4.1044				
28T	LM1L4P	4.1061				
34T	LM1L4W	4.2546				
36T	LM1L4Y	4.2465				

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: April 2005

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
			38T	LM1L51	4.2502	
			56T	LM1L5M	4.2538	

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

MONTH/YEAR: April 2005

None during the Reporting Period