

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

June 13, 2005

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

Serial No. 05-363
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 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

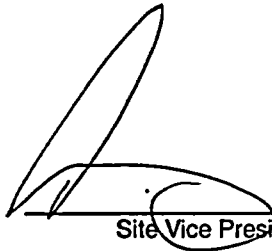
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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. 05-05**

Approved:



Site Vice President

6/13/05
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: 06/01/05
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
 - 2. Reporting Period:..... May 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	744.00	3623.00	284375.00
12. Hours Reactor Was Critical	744.00	3531.53	212932.93
13. Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14. Hours Generator On-Line	744.00	3500.97	210050.19
15. Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16. Gross Thermal Energy Generated (MWH)	1893527.40	8893177.00	503377854.80
17. Gross Electrical Energy Generated (MWH)	635321.00	2977015.00	165822290.00
18. Net Electrical Energy Generated (MWH)	602130.00	2831711.00	157519110.00
19. Unit Service Factor	100.00%	96.63%	73.86%
20. Unit Availability Factor	100.00%	96.63%	75.18%
21. Unit Capacity Factor (Using MDC Net)	101.29%	97.82%	70.60%
22. Unit Capacity Factor (Using DER Net)	102.70%	99.19%	70.29%
23. Unit Forced Outage Rate	0.00%	3.37%	11.52%

- 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: 06/01/05
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... May 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	744.00	3623.00	281256.00
12. Hours Reactor Was Critical	234.22	2945.82	210537.64
13. Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14. Hours Generator On-Line	198.12	2909.27	207962.44
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	455567.00	7347367.60	499849759.40
17. Gross Electrical Energy Generated (MWH)	150945.00	2469455.00	164762300.00
18. Net Electrical Energy Generated (MWH)	137807.00	2343653.00	156520098.00
19. Unit Service Factor	26.63%	80.30%	73.94%
20. Unit Availability Factor	26.63%	80.30%	73.94%
21. Unit Capacity Factor (Using MDC Net)	23.18%	80.96%	70.61%
22. Unit Capacity Factor (Using DER Net)	23.51%	82.09%	70.62%
23. Unit Forced Outage Rate	0.00%	0.00%	9.14%

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: May 2005

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 06/01/05
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: May 2005

Docket No.: 50-281
 Unit Name: Surry Unit 2
 Date: 06/01/05
 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
05/01/05	S	545.88	C	1	N/A	N/A	N/A	Unit offline for refueling
05/30/05	F	8.48	A	1	N/A	JA	LIC	Unit ramped to 75% due to secondary drain control system 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: 06/01/05
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: May 2005

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	812	17	807
2	812	18	803
3	812	19	801
4	813	20	797
5	813	21	796
6	813	22	796
7	813	23	799
8	813	24	809
9	813	25	810
10	813	26	810
11	813	27	809
12	812	28	809
13	812	29	809
14	812	30	809
15	812	31	808
16	812		

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: 06/01/05
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: May 2005

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	20
8	0	24	374
9	0	25	722
10	0	26	812
11	0	27	812
12	0	28	812
13	0	29	812
14	0	30	753
15	0	31	811
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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: May 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:

05/01/05 0000 Unit started the month at 100% / 854 MWe.
05/31/05 2400 Unit finished the month at 100% / 853 MWe

UNIT TWO:

05/01/05 0000 Unit started the month at 0% / 0 MWe.
05/22/05 0547 Reactor Critical.
05/23/05 1753 Unit online.
05/24/05 0302 Commenced ramp to 40%. Unit at 26% / 170 MWe.
05/24/05 0344 Secured ramp at 40% / 273 MWe.
05/24/05 0524 Commenced ramp to 70% power. Unit at 40% / 273 MWe.
05/24/05 0650 Stopped ramp for turnover. Unit at 45% / 328 MWe.
05/24/05 0721 Commenced ramp.
05/24/05 0816 Unit at 49% / 358 MWe.
05/24/05 1341 Unit at 62% / 458 MWe.
05/24/05 1543 Stopped ramp due to high turbine vibrations. Unit at 67% / 528 MWe.
05/24/05 2303 Commenced ramp.
05/25/05 0001 Unit at 73% / 565 MWe.
05/25/05 0453 Unit at 82% / 695 MWe.
05/25/05 1026 Unit at 90% / 760 MWe.
05/25/05 1523 Unit at 96% / 815 MWe.
05/25/05 2140 Unit at 100% / 852 MWe.
05/30/05 1121 Commenced unit ramp to 75% for Network 90 repairs.
05/30/05 1145 Stopped ramp at 96% / 815 MWe to place turbine in IMP IN.
05/30/05 1156 Commenced ramp.
05/30/05 1321 Secured ramp for Network 90 repairs. Unit at 73% / 635 MWe.
05/30/05 1738 Commenced ramp to 100%. Unit at 75% / 640 MWe.
05/30/05 1900 Stopped ramp at 93% / 794 MWe to place turbine in IMP OUT.
05/30/05 1950 Unit at 100% / 854 MWe.
05/31/05 2400 Unit finished the month at 100% / 854 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: May 2005

None during the Reporting Period.

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

MONTH/YEAR: May 2005

None during the Reporting Period.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: May 2005

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: May 2005

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.73E-1	1.76E-1	2.46E-1	2.59E-1	2.71E-4	2.77E-2
Suspended Solids, ppm	-	-	-	0.150	≤ 0.010	0.025
Gross Tritium, $\mu\text{Ci/ml}$	1.20E+0	9.86E-1	1.12E+0	1.07E-1	3.89E-2	7.28E-2
^{131}I , $\mu\text{Ci/ml}$	1.87E-4	8.06E-5	1.18E-4	1.84E-4	8.00E-6	6.78E-5
$^{131}\text{I}/^{133}\text{I}$	0.11	0.05	0.07	0.19	0.19	0.19
Hydrogen, cc/kg	40.7	36.1	37.4	36	15.9	29.9
Lithium, ppm	3.29	2.97	3.11	5.95	0.10	2.45
Boron - 10, ppm*	224	209	217	482	268	390
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	6.00	≤ 0.005	2.69
Chloride, ppm	0.012	0.009	0.010	0.025	0.001	0.008
pH @ 25 degree Celsius	6.70	6.62	6.66	6.53	4.62	5.09

* Boron - 10 = Total Boron x 0.196

Comments:

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

Unit 2: Unit startup on 05/23/2005 from RFO.

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: May 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
--	------------------------------------	--	----------------------------	------------------------	-------------------------------	---

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 2005

None during the Reporting Period