

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

October 8, 2004

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

Serial No. 04-611
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 September 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

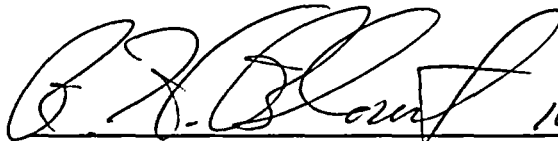
cc: United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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

JEZ4

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 04-09**

Approved:



Site Vice President

10/19/04
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: 10/04/04
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period:..... September 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: _____

	<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11. Hours in Reporting Period	720.00	6575.00	278543.00
12. Hours Reactor Was Critical	720.00	6575.00	207978.48
13. Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14. Hours Generator On-Line	720.00	6546.43	205151.20
15. Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16. Gross Thermal Energy Generated (MWH)	1832484.50	16594159.90	490986083.50
17. Gross Electrical Energy Generated (MWH)	612110.00	5537746.00	161677011.00
18. Net Electrical Energy Generated (MWH)	590169.00	5337698.00	154499798.00
19. Unit Service Factor	100.00%	99.57%	73.65%
20. Unit Availability Factor	100.00%	99.57%	74.99%
21. Unit Capacity Factor (Using MDC Net)	101.19%	100.22%	70.74%
22. Unit Capacity Factor (Using DER Net)	104.02%	103.02%	70.39%
23. Unit Forced Outage Rate	0.00%	0.43%	11.72%

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):

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
Date: 10/04/04
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... September 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: _____

		<u>This Month</u>	<u>Year-To-Date</u>	<u>Cumulative</u>
11.	Hours in Reporting Period	720.00	6575.00	275424.00
12.	Hours Reactor Was Critical	720.00	6420.52	205382.82
13.	Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14.	Hours Generator On-Line	720.00	6397.75	202844.17
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1832557.80	16242585.90	486888929.70
17.	Gross Electrical Energy Generated (MWH)	611939.00	5426252.00	160404566.00
18.	Net Electrical Energy Generated (MWH)	589558.00	5235516.00	153328352.00
19.	Unit Service Factor	100.00%	97.30%	73.65%
20.	Unit Availability Factor	100.00%	97.30%	73.65%
21.	Unit Capacity Factor (Using MDC Net)	100.47%	97.70%	70.69%
22.	Unit Capacity Factor (Using DER Net)	103.91%	101.05%	70.65%
23.	Unit Forced Outage Rate	0.00%	2.70%	9.35%

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: September 2004

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 10/04/04
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: September 2004

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 10/04/04
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: 10/04/04
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: September 2004

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	818	17	819
2	816	18	821
3	817	19	822
4	816	20	822
5	819	21	821
6	820	22	820
7	819	23	821
8	819	24	821
9	819	25	821
10	819	26	822
11	818	27	822
12	819	28	821
13	818	29	822
14	819	30	822
15	820		
16	820		

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: 10/04/04
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: September 2004

<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	818
2	815	18	820
3	818	19	822
4	818	20	822
5	817	21	823
6	818	22	821
7	817	23	821
8	817	24	821
9	818	25	821
10	816	26	820
11	816	27	818
12	818	28	821
13	818	29	821
14	819	30	821
15	818		
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: September 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:

09/01/04	0000	Unit started the month at 100% / 847 MWe.
09/30/04	2400	Unit finished the month at 100% / 851 MWe.

UNIT Two:

09/01/04	0000	Unit started the month at 100% / 845 MWe.
09/30/04	2400	Unit finished the month at 100% / 854 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: September 2004

None during the Reporting Period.

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

MONTH/YEAR: September 2004

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: September 2004

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: September 2004

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.04E-1	2.03E-1	2.47E-1	2.74E-1	1.49E-1	2.00E-1
Suspended Solids, ppm	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01
Gross Tritium, $\mu\text{Ci/ml}$	4.21E-1	3.43E-1	3.85E-1	1.38E+0	1.07E+0	1.26E+0
^{131}I , $\mu\text{Ci/ml}$	2.63E-4	1.42E-4	1.98E-4	2.15E-4	6.25E-5	1.04E-4
$^{131}\text{I}/^{133}\text{I}$	0.09	0.05	0.07	0.54	0.16	0.25
Hydrogen, cc/kg	37.1	35.7	36.3	42.2	39.2	41.1
Lithium, ppm	1.74	1.21	1.46	2.28	2.14	2.2
Boron - 10, ppm*	44	25	34	164	137	155
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.002	0.001	0.001	0.007	0.004	0.005
pH @ 25 degree Celsius	7.43	7.12	7.29	6.86	6.66	6.74

* Boron - 10 = Total Boron x 0.196

Comments:

Unit 1: Unit at 100% power.

Unit 2: Unit at 100% power.

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: September 2004

<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>
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None during the Reporting Period

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

MONTH/YEAR: September 2004

None during the Reporting Period