

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 10, 2004

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

Serial No. 04-477
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 July 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

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 04-07**

Approved:  _____ 8-10-04
Site Vice President Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 08/02/04
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period:..... July 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	744.00	5111.00	277079.00
12. Hours Reactor Was Critical	744.00	5111.00	206514.48
13. Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14. Hours Generator On-Line	744.00	5082.43	203687.20
15. Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16. Gross Thermal Energy Generated (MWH)	1893631.30	12868184.60	487260108.20
17. Gross Electrical Energy Generated (MWH)	628872.00	4294445.00	160433710.00
18. Net Electrical Energy Generated (MWH)	606049.00	4139674.00	153301774.00
19. Unit Service Factor	100.00%	99.44%	73.51%
20. Unit Availability Factor	100.00%	99.44%	74.86%
21. Unit Capacity Factor (Using MDC Net)	100.57%	99.99%	70.58%
22. Unit Capacity Factor (Using DER Net)	103.37%	102.79%	70.21%
23. Unit Forced Outage Rate	0.00%	0.56%	11.79%

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: 08/02/04
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... July 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	744.00	5111.00	273960.00
12.	Hours Reactor Was Critical	744.00	4956.52	203918.82
13.	Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14.	Hours Generator On-Line	744.00	4933.75	201380.17
15.	Unit Reserve Shutdown Hours	0.00	0.00	0.00
16.	Gross Thermal Energy Generated (MWH)	1893631.30	12516372.40	483162716.20
17.	Gross Electrical Energy Generated (MWH)	628275.00	4183356.00	159161670.00
18.	Net Electrical Energy Generated (MWH)	605834.00	4037559.00	152130395.00
19.	Unit Service Factor	100.00%	96.53%	73.51%
20.	Unit Availability Factor	100.00%	96.53%	73.51%
21.	Unit Capacity Factor (Using MDC Net)	99.91%	96.93%	70.52%
22.	Unit Capacity Factor (Using DER Net)	103.34%	100.25%	70.47%
23.	Unit Forced Outage Rate	0.00%	3.47%	9.41%

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: July 2004

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 08/02/04
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: July 2004

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 08/02/04
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: 08/01/04
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: July 2004

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	816	17	815
2	815	18	815
3	815	19	815
4	817	20	814
5	815	21	814
6	814	22	815
7	814	23	816
8	814	24	817
9	813	25	819
10	813	26	818
11	813	27	817
12	813	28	816
13	811	29	816
14	810	30	815
15	812	31	814
16	813		

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: 08/01/04
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: July 2004

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	816	17	816
2	816	18	815
3	813	19	815
4	813	20	814
5	813	21	814
6	812	22	814
7	812	23	815
8	814	24	816
9	813	25	818
10	811	26	818
11	812	27	817
12	813	28	816
13	811	29	817
14	812	30	816
15	813	31	815
16	813		

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: July 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:

07/01/04	0000	Unit started the month at 100% / 847 MWe.
07/31/04	2400	Unit finished the month at 100% / 845 MWe.

UNIT TWO:

07/01/04	0000	Unit started the month at 100% / 846 MWe.
07/31/04	2400	Unit finished the month at 100% / 845 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 2004

None during the Reporting Period.

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

MONTH/YEAR: July 2004

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 2004

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: July 2004

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.00E-1	1.74E-1	2.63E-1	2.70E-1	1.63E-1	2.25E-1
Suspended Solids, ppm	-	-	-	-	-	-
Gross Tritium, $\mu\text{Ci/ml}$	5.53E-1	5.13E-1	5.34E-1	9.14E-1	8.13E-1	8.68E-1
^{131}I , $\mu\text{Ci/ml}$	2.06E-4	8.52E-5	1.67E-4	1.08E-4	4.85E-5	7.52E-5
$^{131}\text{I}/^{133}\text{I}$	0.08	0.03	0.06	0.34	0.14	0.22
Hydrogen, cc/kg	37.1	29.9	34.4	42.6	37.7	40.1
Lithium, ppm	2.25	2.11	2.17	2.28	2.14	2.21
Boron - 10, ppm*	82	64	73	195	181	188
Oxygen, (DO), ppm	≤ 0.005					
Chloride, ppm	0.003	0.001	0.002	0.008	0.005	0.006
pH @ 25 degree Celsius	7.22	7.01	7.14	6.71	6.54	6.6

* Boron - 10 = Total Boron x 0.196

Comments:

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

Unit 2: Unit at 100% power. Quarterly Suspended Solids not required.

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: July 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
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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: July 2004

None during the Reporting Period