

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

September 9, 2004

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

Serial No. 04-553
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 August 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. 04-08**

Approved:



(Site Vice President) 9/9/04
Date

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OPERATING DATA REPORT

Docket No.: 50-280
 Date: 09/01/04
 Completed By: R. Stief
 Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period:..... August 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	5855.00	277823.00
12. Hours Reactor Was Critical	744.00	5855.00	207258.48
13. Reactor Reserve Shutdown Hours	0.00	0.00	3774.50
14. Hours Generator On-Line	744.00	5826.43	204431.20
15. Unit Reserve Shutdown Hours	0.00	0.00	3736.20
16. Gross Thermal Energy Generated (MWH)	1893490.80	14761675.40	489153599.00
17. Gross Electrical Energy Generated (MWH)	631191.00	4925636.00	161064901.00
18. Net Electrical Energy Generated (MWH)	607855.00	4747529.00	153909629.00
19. Unit Service Factor	100.00%	99.51%	73.58%
20. Unit Availability Factor	100.00%	99.51%	74.93%
21. Unit Capacity Factor (Using MDC Net)	100.87%	100.10%	70.66%
22. Unit Capacity Factor (Using DER Net)	103.68%	102.90%	70.30%
23. Unit Forced Outage Rate	0.00%	0.49%	11.75%

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: 09/01/04
Completed By: R. Stief
Telephone: (757) 365-2486

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period:..... August 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	5855.00	274704.00
12. Hours Reactor Was Critical	744.00	5700.52	204662.82
13. Reactor Reserve Shutdown Hours	0.00	0.00	328.10
14. Hours Generator On-Line	744.00	5677.75	202124.17
15. Unit Reserve Shutdown Hours	0.00	0.00	0.00
16. Gross Thermal Energy Generated (MWH)	1893655.70	14410028.10	485056371.90
17. Gross Electrical Energy Generated (MWH)	630957.00	4814313.00	159792627.00
18. Net Electrical Energy Generated (MWH)	608399.00	4645958.00	152738794.00
19. Unit Service Factor	100.00%	96.97%	73.58%
20. Unit Availability Factor	100.00%	96.97%	73.58%
21. Unit Capacity Factor (Using MDC Net)	100.34%	97.36%	70.60%
22. Unit Capacity Factor (Using DER Net)	103.77%	100.70%	70.56%
23. Unit Forced Outage Rate	0.00%	3.03%	9.38%

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: August 2004

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 09/01/04
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: August 2004

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 09/01/04
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: 09/01/04
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: August 2004

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

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-281

Unit Name: Surry Unit 2

Date: 09/01/04

Completed by: R. Stief

Telephone: (757) 365-2486

MONTH: August 2004

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	815	17	821
2	814	18	821
3	815	19	820
4	814	20	819
5	816	21	817
6	817	22	818
7	819	23	818
8	819	24	818
9	818	25	818
10	818	26	817
11	820	27	816
12	819	28	815
13	820	29	815
14	821	30	816
15	822	31	815
16	821		

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: August 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:

08/01/04	0000	Unit started the month at 100% / 845 MWe.
08/31/04	2400	Unit finished the month at 100% / 847 MWe.

UNIT TWO:

08/01/04	0000	Unit started the month at 100% / 845 MWe.
08/31/04	2400	Unit finished the month at 100% / 845 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: August 2004

None during the Reporting Period.

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

MONTH/YEAR: August 2004

Regulatory Commitment Evaluation

08/18/04

Commitment Evaluation dated 08/18/04 documents revision of Dominion Virginia Power's commitment made in the Virginia Electric and Power Company letter, serial number 91-456 dated January 31, 1992, "Virginia Electric and Power Company Surry Power Station Units 1 and 2 North Anna Power Station Units 1 and 2 Response to Generic Letter 91-11". This commitment was changed to increase the allowed outage time for a vital bus redundant power supply (UPS) from 24 hours to 7 days. This condition continues to meet the intent of Generic Letter 91-11 by limiting outage time and was found to be of acceptable low risk.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: August 2004

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: August 2004

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	2.97E-1	2.04E-1	2.47E-1	2.37E-1	1.47E-1	2.06E-1
Suspended Solids, ppm	-	-	-	-	-	-
Gross Tritium, $\mu\text{Ci/ml}$	5.21E-1	3.81E-1	4.75E-1	1.14E+0	9.39E-1	1.05E+0
^{131}I , $\mu\text{Ci/ml}$	2.77E-4	1.29E-4	2.07E-4	1.07E-4	4.10E-5	7.56E-5
$^{131}\text{I}/^{133}\text{I}$	0.10	0.05	0.07	0.26	0.11	0.19
Hydrogen, cc/kg	38.4	33.4	35.2	44	40.1	41.6
Lithium, ppm	2.19	1.72	1.91	2.29	2.15	2.21
Boron - 10, ppm*	63	44	54	181	165	172
Oxygen, (DO), ppm	≤ 0.005					
Chloride, ppm	0.007	0.001	0.002	0.007	0.004	0.005
pH @ 25 degree Celsius	7.35	7.18	7.27	6.8	6.55	6.68

* 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: August 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
Unit 1 Batch 22 Shipment #1	08/09/04	12	01G	LM1HVS	3.8033	541.59 GBq
			02G	LM1HVT	3.8040	
			10G	LM1HW2	3.8042	
			11G	LM1HW3	3.7973	
			12G	LM1HW4	3.7971	
			30G	LM1HWR	4.1027	
			32G	LM1HWT	4.1028	
			36G	LM1HWX	4.1000	
			38G	LM1HX0	4.1022	
			56G	LM1HXL	4.0992	
			58G	LM1HXN	4.0998	
			59G	LM1HXP	4.0969	
Unit 1 Batch 22 Shipment #2	08/12/04	12	05G	LM1HVV	3.8047	541.30 GBq
			06G	LM1HVX	3.8031	
			14G	LM1HW6	3.8014	
			15G	LM1HW7	3.8045	
			16G	LM1HW8	3.8042	
			31G	LM1HWS	4.1009	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: August 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
			33G	LM1HWU	4.0992	
			34G	LM1HWV	4.1018	
			46G	LM1HX8	4.0991	
			49G	LM1HXC	4.0984	
			50G	LM1HXD	4.0972	
			54G	LM1HXJ	4.1000	
Unit 1 Batch 22 Shipment #3	08/13/04	12	17G	LM1HW9	3.8034	550.01 GBq
			18G	LM1HWA	3.8032	
			29G	LM1HWP	4.1029	
			39G	LM1HX1	4.1059	
			40G	LM1HX2	4.1048	
			41G	LM1HX3	4.0967	
			42G	LM1HX4	4.1016	
			43G	LM1HX5	4.1026	
			44G	LM1HX6	4.0985	
			45G	LM1HX7	4.1035	
			48G	LM1HXA	4.0994	
			57G	LM1HXM	4.0993	

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: August 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
Unit 1 Batch 22 Shipment #4	08/16/04	12	04G	LM1HVV	3.8001	535.32 GBq
			08G	LM1HW0	3.7956	
			09G	LM1HW1	3.8006	
			13G	LM1HW5	3.8045	
			19G	LM1HWC	3.7958	
			20G	LM1HWD	3.7975	
			21G	LM1HWE	3.8019	
			35G	LM1HWW	4.1031	
			37G	LM1HWY	4.1051	
			47G	LM1HX9	4.1022	
			53G	LM1HXH	4.1002	
			55G	LM1HXK	4.1002	
Unit 1 Batch 22 Shipment #5	08/17/04	12	03G	LM1HVU	3.8029	531.08 GBq
			07G	LM1HVY	3.8021	
			22G	LM1HWG	3.8022	
			23G	LM1HWH	3.8062	
			24G	LM1HWJ	3.8079	
			25G	LM1HWK	3.8122	

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: August 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>
			26G	LM1HWL	3.8083	
			27G	LM1HWM	3.8080	
			28G	LM1HWN	3.8108	
			51G	LM1HXE	4.1007	
			52G	LM1HXG	4.0988	
			60G	LM1HXR	4.1093	

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

MONTH/YEAR: August 2004

None during the Reporting Period