

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
January 10, 2001

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

Serial No. 01-014
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 December 2000 is provided in the attachment.

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

Very truly yours,



R. H. Blount II, 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. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

JE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 00-12**

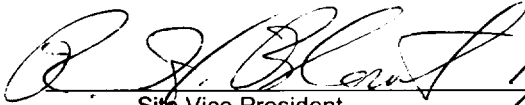
Approved:  1/10/01
Site Vice President Date

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OPERATING DATA REPORT

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

- 1. Unit Name: Surry Unit 1
- 2. Reporting Period: December 2000
- 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):..... 801

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	744.0	8784.0	245688.0
12. Hours Reactor Was Critical	744.0	8227.6	178304.1
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	744.0	8189.3	175720.7
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	1893979.6	20412499.4	416852747.8
17. Gross Electrical Energy Generated (MWH)	633108.0	6793070.0	136938403.0
18. Net Electrical Energy Generated (MWH)	611242.0	6548425.0	130651228.0
19. Unit Service Factor	100.0%	93.2%	71.5%
20. Unit Availability Factor	100.0%	93.2%	73.0%
21. Unit Capacity Factor (Using MDC Net)	102.6%	93.1%	68.1%
22. Unit Capacity Factor (Using DER Net)	104.3%	94.6%	67.5%
23. Unit Forced Outage Rate	0.0%	0.3%	13.2%

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

- 1. Unit Name: Surry Unit 2
- 2. Reporting Period: December 2000
- 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):..... 801

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	744.0	8784.0	242569.0
12. Hours Reactor Was Critical	744.0	8059.8	175588.9
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	744.0	8022.7	173411.1
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1894040.7	20193567.7	412221560.9
17. Gross Electrical Energy Generated (MWH)	638265.0	6777234.0	135410132.0
18. Net Electrical Energy Generated (MWH)	616065.0	6539450.0	129236307.0
19. Unit Service Factor	100.0%	91.3%	71.5%
20. Unit Availability Factor	100.0%	91.3%	71.5%
21. Unit Capacity Factor (Using MDC Net)	103.4%	92.9%	68.0%
22. Unit Capacity Factor (Using DER Net)	105.1%	94.5%	67.6%
23. Unit Forced Outage Rate	0.0%	0.0%	10.6%

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: December 2000

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 01/02/01
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: December 2000

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

MONTH: December 2000

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

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

MONTH: December 2000

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	828	17	828
2	829	18	828
3	828	19	829
4	828	20	828
5	829	21	828
6	829	22	828
7	829	23	828
8	828	24	828
9	828	25	827
10	828	26	827
11	828	27	828
12	828	28	827
13	828	29	828
14	828	30	827
15	828	31	827
16	828		

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: December 2000

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:

12/01/00	0000	Unit started the month at 100% / 851 MWe.
12/31/00	2400	Unit finished the month at 100% / 851 MWe.

UNIT TWO:

12/01/00	0000	Unit started the month at 100% / 860 MWe.
12/31/00	2400	Unit finished the month at 100% / 855 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: December 2000

DCP 99-019	Design Change Package (Safety Evaluation 00-008)	02/24/00
	Design Change Package 99-019, "Security System Upgrade" replaced the existing station security computer system with a new system. The new system incorporates plant intrusion alarm monitoring and access control functions in addition to alarm monitoring at the ISFSI pads.	
TM S1-00-033	Temporary Modification (Safety Evaluation 00-139)	12/01/00
	Troubleshooting on the Unit 1 circulating water discharge tunnel radiation monitor determined the power supply common cable had excessive noise that caused monitor spiking. Temporary Modification S1-00-033 swaps the noisy power supply common cable with the noise free check source cable.	
FS 00-052	UFSAR Change Request (Safety Evaluation 00-140)	12/07/00
	UFSAR Change Request 00-052 changes UFSAR section 9.6 to incorporate Westinghouse Owner's Group's new technical basis for Post Accident Sampling which relaxes and clarifies High Radiation Sampling System containment sump sampling times.	
FS 00-044	UFSAR Change Request (Safety Evaluation 00-141)	12/07/00
	UFSAR Change Request 00-044 changes UFSAR section 9.12.5.2 to delete the reference to lifting the reactor head one (1) inch in the refueling procedure. This level of detail is not needed in the UFSAR and is adequately controlled by VPAP-0809, "NUREG 0612 Heavy Load Program".	
DCP 00-003 FS 00-049	Design Change Package UFSAR Change Request (Safety Evaluation 00-143)	12/14/00
	Design Change Package 00-003, "Flux Thimble Tube Replacement" replaces the existing Westinghouse in-core instrument thimbles and high and low pressure seals with thimbles manufactured by Framatome and pressure seals manufactured by EGS. Several in-core thimbles will be replaced each outage starting in 2001.	
FS 00-043	UFSAR Change Request (Safety Evaluation 00-145)	12/27/00
	UFSAR Change Request 00-043 clarifies and reflects actual plant configuration of UFSAR section 9.4.4.3 that an air lockup device is present in each RCP thermal barrier Component Cooling return line inside and outside containment isolation trip valve actuator air set, to hold each trip valve open in the case of a loss of air pressure, until a valid close signal is received to close each valve.	

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

MONTH/YEAR: December 2000

None during the Reporting Period

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: December 2000

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: December 2000

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	2.92E-1	1.62E-1	2.15E-1	2.14E-1	1.54E-1	1.85E-1
Suspended Solids, ppm	≤ 0.010	≤ 0.010	≤ 0.010	≤ 0.010	≤ 0.010	≤ 0.010
Gross Tritium, $\mu\text{Ci/ml}$	1.05E+0	1.00E+0	1.02E+0	5.76E-1	3.60E-1	4.66E-1
^{131}I , $\mu\text{Ci/ml}$	2.35E-4	1.44E-4	1.97E-4	$\leq 1.15\text{E-}4$	$\leq 7.00\text{E-}5$	$\leq 9.49\text{E-}5$
$^{131}\text{I}/^{133}\text{I}$	0.08	0.05	0.07	0.1	0.06	0.08
Hydrogen, cc/kg	41.9	39.7	41.1	38.5	34	36.5
Lithium, ppm	2.32	2.11	2.21	2.51	2.26	2.38
Boron - 10, ppm*	183.3	166.4	174.4	261.1	250.1	255.2
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.016	0.012	0.014	0.008	0.005	0.006
pH @ 25 degree Celsius	6.83	6.49	6.65	6.46	6.27	6.42

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: December 2000

<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: December 2000

None during the Reporting Period