## 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

JEZY

# VIRGINIA ELECTRIC AND POWER COMPANY SURRY POWER STATION MONTHLY OPERATING REPORT REPORT No. 00-12

Approved:

Site Vice President

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#### **OPERATING DATA REPORT**

		Comp	cket No.: 50-280	
1. 2. 3. 4. 5. 6. 7.	Unit Name:			
8.	If Changes Occur in Capacity Ratings (Items Numl	per 3 Through 7) Since	e Last Report, Give	Reasons:
9.	Power Level To Which Restricted, If Any (Net MW)	e):		
10.	Reasons For Restrictions, If Any:			
		This Month	Year-To-Date	Cumulative
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
<b>16</b> .	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 schedu	led shutdowns are no	longer provided.	
	[Reference: Letter S/N	00-069, dated Februa	ry 7, 2000]	
25.	If Shut Down at End of Report Period, Estimated D	pro	imated start-up date vided. [Reference: L ed February 7, 2000	etter S/N 00-069,
26.	Unit In Test Status (Prior to Commercial Operation	):		
		FORECAS	ST ACHIE	EVED
	INITIAL CRITICAL	ITY		
	INITIAL CRITICAL INITIAL ELECTRIC COMMERCIAL OPERAT	ITY		

#### **OPERATING DATA REPORT**

		Complet	et No.: Date: ed By: bhone:	50-281 01/04/01 R. Stief (757) 365-24	486
1. 2. 3. 4. 5. 6. 7.	Unit Name:  Reporting Period:  Licensed Thermal Power (MWt):  Nameplate Rating (Gross MWe):  Design Electrical Rating (Net MWe):  Maximum Dependable Capacity (Gross MWe):  Maximum Dependable Capacity (Net MWe):	December 2000 2546 847.5			
8.	If Changes Occur in Capacity Ratings (Items Num	ber 3 Through 7) Since L	ast Repo	ort, Give Reas	sons:
9.	Power Level To Which Restricted, If Any (Net MW	e):			
10.	Reasons For Restrictions, If Any:				
		This Month	Year-	-To-Date	Cumulative
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	201	193567.7	412221560.9
17.	Gross Electrical Energy Generated (MWH)	638265.0		777234.0	135410132.0
18.	Net Electrical Energy Generated (MWH)	616065.0	65	39450.0	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 Ea	ach):		
	Type and duration of schedu	lled shutdowns are no lor 00-069, dated February		rided.	
		00-069, dated February	7, 2000]		
25.	If Shut Down at End of Report Period, Estimated D	provid	ed. (Refe	t-up dates are erence: Letter / 7, 2000]	e no longer S/N 00-069,
26.	Unit In Test Status (Prior to Commercial Operation	n):			
		FORECAST		ACHIEVE	<u>D</u>
	INITIAL CRITICAL	_ITY			
	INITIAL ELECTRIC				<del></del>
	COMMERCIAL OPERAT	ION			_

#### **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) Forced S: Scheduled

(2) REASON:

(3) METHOD:

A - Equipment Failure (Explain)

Manual

B -C -D -Maintenance or Test

Manual Scram

Refueling Regulatory Restriction Automatic Scram Other (Explain)

Operator Training & Licensing Examination E -

F -Administrative

G-Operational Error (Explain)

Other (Explain)

(4) Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

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

(2) REASON:

(3) METHOD:

S: Scheduled

Equipment Failure (Explain)

Manual

В -Maintenance or Test

Manual Scram

С Refueling 3 -Automatic Scram

D

Other (Explain)

Regulatory Restriction
Operator Training & Licensing Examination Ε

Administrative

F

G Operational Error (Explain)

Other (Explain)

Exhibit G - Instructions for Preparation of Data Entry Sheets

Exhibit 1 - Same Source

for Licensee Event Report (LER) File (NUREG 0161)

#### **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

02/24/00

(Safety Evaluation 00-008)

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** 

12/01/00

(Safety Evaluation 00-139)

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** 

12/07/00

(Safety Evaluation 00-141)

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** 

12/27/00

(Safety Evaluation 00-145)

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.

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

MONTH/YEAR: December 2000

#### TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: December 2000

#### **CHEMISTRY REPORT**

MONTH/YEAR: December 2000

	Unit No. 1		Unit No. 2			
Primary Coolant Analysis	Max.			Max.	Min.	Avg.
Gross Radioactivity, μCi/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, μCi/ml	1.05E+0	1.00E+0	1.02E+0	5.76E-1	3.60E-1	4.66E-1
I <sup>131</sup> , μCi/ml	2.35E-4	1.44E-4	1.97E-4	≤ 1.15E-4	≤ 7.00E-5	≤ 9.49E-5
1131/1133	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

<sup>\*</sup> Boron - 10 = Total Boron x 0.196

Comments:

None

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#### FUEL HANDLING UNITS 1 & 2

MONTH/YEAR: December 2000

New Fuel		Number of				New or Spent
Shipment or	Date Stored or	Assemblies	Assembly	ANSI	Initial	Fuel Shipping
Cask No.	Received	per Shipment	Number	Number	Enrichment	Cask Activity

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

MONTH/YEAR: December 2000