VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

February 12, 1996

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

Serial No. 96-075
NO/RPC:vlh
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

Enclosed is the Monthly Operating Report for Surry Power Station Units 1 and 2 for the month of January 1996.

Very truly yours,

M. L. Bowling, Manager
Nuclear Licensing & Operations Support

Enclosure

cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

Mr. M. W. Branch
NRC Senior Resident Inspector
Surry Power Station

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VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 96-01

Approved:

Station Manager

2-12-96
Date

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OPERATING DATA REPORT

Docket No.: 50-280
Date: 02-01-96
Completed By: D. Mason
Telephone: (804) 365-2459

1. Unit Name: ..... Surry Unit 1
2. Reporting Period: ..... January, 1996
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: _____

		This Month	YTD	Cumulative
11.	Hours In Reporting Period	744.0	744.0	202584.0
12.	Number of Hours Reactor Was Critical	744.0	744.0	138794.7
13.	Reactor Reserve Shutdown Hours	0	0	3774.5
14.	Hours Generator On-Line	744.0	744.0	136491.0
15.	Unit Reserve Shutdown Hours	0	0	3736.2
16.	Gross Thermal Energy Generated (MWH)	1893918.5	1893918.5	318291711.0
17.	Gross Electrical Energy Generated (MWH)	634205.0	634205.0	104211388.0
18.	Net Electrical Energy Generated (MWH)	614423.0	614423.0	99070396.0
19.	Unit Service Factor	100.0%	100.0%	67.4%
20.	Unit Availability Factor	100.0%	100.0%	69.2%
21.	Unit Capacity Factor (Using MDC Net)	103.1%	103.1%	63.0%
22.	Unit Capacity Factor (Using DER Net)	104.8%	104.8%	62.1%
23.	Unit Forced Outage Rate	0.0%	0.0%	16.0%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

25. If Shut Down at End of Report Period, Estimated Date of Start-up: _____

26. Unit In Test Status (Prior to Commercial Operation):

	FORECAST	ACHIEVED
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

OPERATING DATA REPORT

Docket No.: 50-281
Date: 02-01-96
Completed By: D. Mason
Telephone: (804) 365-2459

1. Unit Name: ..... Surry Unit 2
2. Reporting Period: ..... January, 1996
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:

		This Month	YTD	Cumulative
11.	Hours In Reporting Period	744.0	744.0	199464.0
12.	Number of Hours Reactor Was Critical	744.0	744.0	136246.9
13.	Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14.	Hours Generator On-Line	744.0	744.0	134300.1
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1887258.1	1887258.1	314422312.1
17.	Gross Electrical Energy Generated (MWH)	629355.0	629355.0	102784999.0
18.	Net Electrical Energy Generated (MWH)	608707.0	608707.0	97719122.0
19.	Unit Service Factor	100.0%	100.0%	67.3%
20.	Unit Availability Factor	100.0%	100.0%	67.3%
21.	Unit Capacity Factor (Using MDC Net)	102.1%	102.1%	62.8%
22.	Unit Capacity Factor (Using DER Net)	103.8%	103.8%	62.2%
23.	Unit Forced Outage Rate	0.0%	0.0%	13.0%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling, May 2, 1996, 37 Days

25. If Shut Down at End of Report Period, Estimated Date of Start-up:

26. Unit In Test Status (Prior to Commercial Operation):

	FORECAST	ACHIEVED
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

UNIT SHUTDOWN AND POWER REDUCTION
(EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: January, 1996

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 02-02-96
Completed by: Craig Olsen
Telephone: (804) 365-2155

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence

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)

(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: January, 1996

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 02-02-96
Completed by: Craig Olsen
Telephone: (804) 365-2155

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence

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)

(3)
METHOD:
1 - Manual
2 - Manual Scram.
3 - Automatic Scram.
4 - Other (Explain)

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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: 02-08-96
Completed by: Barry C. Bryant
Telephone: (804) 365-2786

MONTH: January, 1996

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	828	17	824
2	829	18	820
3	829	19	817
4	824	20	817
5	828	21	824
6	828	22	827
7	829	23	826
8	828	24	827
9	828	25	826
10	828	26	826
11	828	27	827
12	828	28	826
13	828	29	825
14	828	30	822
15	828	31	824
16	825		

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: 02-08-96
Completed by: Barry C. Bryant
Telephone: (804) 365-2786

MONTH: January, 1996

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	822	17	823
2	822	18	751
3	823	19	786
4	823	20	819
5	823	21	819
6	822	22	820
7	823	23	819
8	823	24	818
9	823	25	819
10	822	26	820
11	823	27	821
12	823	28	819
13	822	29	822
14	823	30	822
15	822	31	821
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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: January, 1996

The following chronological sequence by unit is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

UNIT ONE:

01/01/96	0000	The reporting period began with the unit operating at 100% power, 850 MWe.
01/31/96	2400	The reporting period ended with the unit operating at 100% power, 855 MWe.

UNIT TWO:

01/01/96	0000	The reporting period began with the unit operating at 100% power, 850 MWe.
01/18/96	0920	Started power reduction to maintain condenser vacuum while "B" waterbox was removed from service.
	1030	Stopped power reduction at 88%, 740 MWe.
01/19/96	0547	Started power increase.
	1245	Stopped power increase at 100%, 840 MWe.
01/31/96	2400	The reporting period ended with the unit operating at 100% power, 845 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: January, 1996

DR S-95-2650

Deviation Report 1-02-96
(Safety Evaluation No. 96-001)

Safety Evaluation 96-001 assessed Deviation Report S-95-2650 concerning the loss of capability to obtain a sample from the Unit 1 pressurizer vapor space. The sampling capability was lost as a result of inoperable sample system trip valves which must be maintained in a closed position to satisfy containment integrity requirements.

The evaluation concluded that this condition is acceptable since there are alternate means of sampling the Reactor Coolant System (RCS). Compliance with Technical Specification sampling surveillance requirements continues to be maintained using routine samples obtained from the RCS Letdown Subsystem. Therefore, an unreviewed safety question does not exist.

FS 95-41

Updated Final Safety Analysis Report Change 1/16/96
(Safety Evaluation No. 96-003)

UFSAR Change 95-41 revised Section 14.2.6, "Startup of an Inactive Reactor Coolant Loop," to delete references to the loop stop valve interlocks and discussions regarding at-power Startup of an Inactive Loop (SUIL) accidents.

The requirements regarding loop stop valve interlocks were removed from the Technical Specifications by Amendment Nos. 177/176 since the interlocks are no longer credited in the SUIL accident analysis. The discussions of at-power SUIL accidents were removed from the UFSAR since the Technical Specifications preclude the occurrence of such accidents at conditions other than Refueling or Cold Shutdown. These changes are consistent with the current licensing basis. Therefore, an unreviewed safety question does not exist.

FS 96-03

Updated Final Safety Analysis Report Change 1/30/96
(Safety Evaluation No. 96-006)

UFSAR Change 96-03 revised Section 11.2.3, "Liquid Waste Disposal System," to reflect the replacement of the radioactive liquid waste demineralization system with an ion exchange/demineralization system at the Surry Radwaste Facility.

The new system will ensure that the effluent release will not exceed 0.1 curies per year, as well as minimizing solid waste disposal. This change will not affect any safety-related systems and will not reduce the margin of safety as defined by the Technical Specifications. Therefore, an unreviewed safety question does not exist.

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

MONTH/YEAR: January, 1996

0-OPT-VS-002 **Operations Periodic Test Procedure** 1-20-96
(Safety Evaluation No. 96-004)

Operations Periodic Test Procedure 0-OPT-VS-002, "Auxiliary Ventilation Filter Train Test," was temporarily changed to provide instructions for administratively controlling the exhaust damper, 2-VS-MOD-201B, for the Unit 2 "B" charging pump cubicle.

2-VS-MOD-201B is designed to automatically close when the Unit 2 "B" charging pump is secured. This change allows the damper to be manually cycled to support maintenance activities while the charging pump is removed from service. Appropriate administrative controls are provided in the procedure to allow 2-VS-MOD-201B to be manually closed (in lieu of the normal automatic closure function) within five minutes following the initiation of a safety injection on either unit. The procedure also prohibits refueling activities on either unit while the subject damper is under administrative control. These measures will ensure adequate charging pump cooling and proper operation of the Auxiliary Ventilation system. Therefore, an unreviewed safety question does not exist.

1[2]-CSP-HRS-003 **Chemistry Surveillance Procedures** 1-23-96
(Safety Evaluation No. 96-005)

Chemistry Surveillance Procedures 1[2]-CSP-HRS-003, "High Radiation Sampling System: Sampling Containment Air Chemistry Test and Operator Training," were revised to provide instructions for administratively controlling specific containment isolation valves while performing the subject procedure.

The specified containment isolation valves are required to be closed to maintain post accident containment integrity. The administrative controls provided by this change allow the valves to be opened during testing while ensuring compliance with the Technical Specifications. Therefore, an unreviewed safety question does not exist.

0-OPT-VS-002 **Operations Periodic Test Procedure** 1-30-96
(Safety Evaluation No. 96-007)

Operations Periodic Test Procedure 0-OPT-VS-002, "Auxiliary Ventilation Filter Train Test," was temporarily changed to provide instructions for administratively controlling exhaust damper, 2-VS-MOD-201C, for the Unit 2 "C" charging pump cubicle.

2-VS-MOD-201C is designed to automatically close when the Unit 2 "C" charging pump is secured. This change allows the damper to be manually cycled to support maintenance activities while the charging pump is removed from service. Appropriate administrative controls are provided in the procedure to allow 2-VS-MOD-201C to be manually closed (in lieu of the normal automatic closure function) within five minutes following the initiation of a safety injection on either unit. The procedure also prohibits refueling activities on either unit while the subject damper is under administrative control. These measures will ensure adequate charging pump cooling and proper operation of the Auxiliary Ventilation system. Therefore, an unreviewed safety question does not exist.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: January, 1996

1-ST-314 **Special Test** 1-12-96
(Safety Evaluation 95-077)

Special Test 1-ST-314, "Steam Generator Moisture Carryover Measurement," was conducted to determine the moisture carryover performance for the Unit 1 steam generators (SG) at the 98% and 100% power levels in order to predict the moisture carryover value at core uprated conditions (i.e., 2546 MWt).

The tests involved the injection of a radioactive tracer (Sodium-24) into each main feedwater (MFW) line downstream of the MFW regulating valves and sampling the main steam lines, SG blowdown, and the common feedwater pump discharge header.

The testing procedures employed controls to prevent any impact on feedwater system performance or the reactor protection function of the SG level circuitry. Therefore, an unreviewed safety question does not exist.

CHEMISTRY REPORT

MONTH/YEAR: January, 1996

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, µCi/ml	8.95E-1	6.65E-1	8.02E-1	2.11E-1	1.20E-1	1.62E-1
Suspended Solids, ppm	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01	≤0.01
Gross Tritium, µCi/ml	6.55E-1	5.28E-1	5.91E-1	3.20E-1	2.46E-1	2.86E-1
I^{131}, µCi/ml	2.58E-2	1.17E-2	1.79E-2	2.36E-4	8.43E-5	1.31E-4
I^{131}/I^{133}	1.23	0.81	0.95	0.12	0.05	0.08
Hydrogen, cc/kg	40.6	34.8	36.7	41.4	32.8	35.9
Lithium, ppm	2.33	2.06	2.20	2.25	2.06	2.16
Boron - 10, ppm*	210.3	198.2	204.3	112.3	95.6	103.9
Oxygen, (DO), ppm	≤0.005	≤0.005	≤0.005	≤0.005	≤0.005	≤0.005
Chloride, ppm	0.009	0.004	0.006	0.005	≤0.001	0.003
pH at 25 degree Celsius	6.69	6.53	6.61	7.12	6.88	7.04

* Boron - 10 = Total Boron x 0.196

Comments:

None

FUEL HANDLING
UNITS 1 & 2

MONTH/YEAR: January, 1996

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity

No Fuel Received or Stored During the Reporting Period

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

MONTH/YEAR: January, 1996

None During the Reporting Period