

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 13, 1999

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No. 99-368
SPS Lic/JCS R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

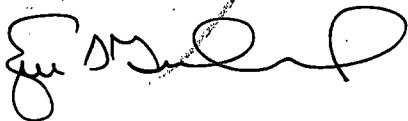
Gentlemen:

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 June 1999 is provided in the attachment.

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

Very truly yours,



E. S. Grecheck, Site Vice President
Surry Power Station

Attachment

Commitments made by this letter: None

cc: U. S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, S. W.
Suite 23T85
Atlanta, Georgia 30303

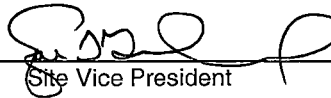
Mr. R. A. Musser
NRC Senior Resident Inspector
Surry Power Station

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**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 99-06**

Approved:


Site Vice President

7/13/99
Date

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OPERATING DATA REPORT

Docket No.: 50-280
Date: 07/06/99
Completed By: R. Stief
Telephone: (757) 365-2486

1. Unit Name: Surry Unit 1
2. Reporting Period: June 1999
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	720.0	4343.0	232487.0
12. Hours Reactor Was Critical	720.0	4343.0	165659.5
13. Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14. Hours Generator On-Line	720.0	4343.0	163114.4
15. Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16. Gross Thermal Energy Generated (MWH)	1831714.6	11053713.7	385244671.2
17. Gross Electrical Energy Generated (MWH)	605798.0	3673266.0	126443422.0
18. Net Electrical Energy Generated (MWH)	584277.0	3545127.0	120531731.0
19. Unit Service Factor	100.0%	100.0%	70.2%
20. Unit Availability Factor	100.0%	100.0%	71.8%
21. Unit Capacity Factor (Using MDC Net)	101.3%	101.9%	66.5%
22. Unit Capacity Factor (Using DER Net)	103.0%	103.6%	65.8%
23. Unit Forced Outage Rate	0.0%	0.0%	14.1%

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):

	<u>FORECAST</u>	<u>ACHIEVED</u>
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

OPERATING DATA REPORT

Docket No.: 50-281
Date: 07/06/99
Completed By: R. Stief
Telephone: (757) 365-2486

1. Unit Name: Surry Unit 2
2. Reporting Period: June 1999
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	720.0	4343.0	229368.0
12. Hours Reactor Was Critical	720.0	3443.5	163353.8
13. Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14. Hours Generator On-Line	720.0	3325.5	161219.0
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	1771344.0	7751134.2	381546783.2
17. Gross Electrical Energy Generated (MWH)	588525.0	2599480.0	125147373.0
18. Net Electrical Energy Generated (MWH)	568044.0	2506309.0	119328336.0
19. Unit Service Factor	100.0%	76.6%	70.3%
20. Unit Availability Factor	100.0%	76.6%	70.3%
21. Unit Capacity Factor (Using MDC Net)	98.5%	72.0%	66.5%
22. Unit Capacity Factor (Using DER Net)	100.1%	73.2%	66.0%
23. Unit Forced Outage Rate	0.0%	0.0%	11.1%

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):

	<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: June 1999

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 07/07/99
Completed by: J. R. Pincus
Telephone: (757) 365-2863

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: June 1999

Docket No.: 50-281

Unit Name: Surry Unit 2

Date: 07/07/99

Completed by: J. R. Pincus

Telephone: (757) 365-2863

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
06/01/99	S	66.4	C	N/A	N/A	N/A	N/A	Power Escalation Following Refueling Outage

(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

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
 Unit Name: Surry Unit 1
 Date: 07/06/99
 Completed by: J. C. Steinert
 Telephone: (757) 365-2161

MONTH: June 1999

<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>	<u>Day</u>	<u>Average Daily Power Level (MWe - Net)</u>
1	803	17	815
2	803	18	816
3	807	19	815
4	802	20	816
5	812	21	816
6	812	22	816
7	806	23	815
8	812	24	814
9	810	25	813
10	810	26	813
11	812	27	812
12	813	28	812
13	813	29	810
14	812	30	809
15	813		
16	814		

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: 07/06/99

Completed by: J. C. Steinert

Telephone: (757) 365-2161

MONTH: June 1999

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	507	17	822
2	556	18	822
3	795	19	821
4	822	20	822
5	823	21	822
6	822	22	820
7	819	23	819
8	817	24	815
9	815	25	815
10	818	26	751
11	822	27	752
12	648	28	816
13	822	29	814
14	819	30	813
15	819		
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: June 1999

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:

06/01/99	0000	Unit started the month at 100% / 841 MWe.
06/04/99	0840	Commenced ramp down to perform Turbine Trip Test and Turbine Inlet Valve Freedom Test
06/04/00	0933	Stopped ramp, unit at 90.5% / 765 Mwe
06/04/99	1120	Commenced ramp to 100%
06/04/99	1355	Unit at 100% / 840 MWe
06/30/99	2400	Unit finished the month at 100% / 844 MWe.

UNIT TWO:

06/01/99	0000	Unit started the month at 65% / 532 MWe from refueling outage.
06/02/99	1433	Commence ramp to up to 100%.
06/03/99	1842	Unit at 100% / 848 MWe.
06/30/99	2400	Unit finished the month at 100% / 845 MWe.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: June 1999

DCP 94-057 **Design Change Package** 06/10/99
(Safety Evaluation 94-197)

Design Change Package 94-057, "CP Chemical Injection for Ethanolamine in the Secondary", implemented the use of ethanolamine (ETA) in the secondary system chemistry to provide enhanced secondary system pH and corrosion control in two-phase regions (wet steam, high pressure heater drains, and moisture separator drains).

FS 99-002 **UFSAR Change Request** 06/10/99
(Safety Evaluation 99-022, Rev. 1)

As a result of the Integrated Configuration Management Project review, UFSAR Change Request FS 99-002 contains corrections and clarifications to the UFSAR sections that discuss Surry's Radiation Monitoring System. These changes are to enhance accuracy and do not affect any radiation monitoring system or structure, or any of its component's operation or performance. Revision 1 of Safety Evaluation 99-022 addresses the treatment of a previously approved UFSAR change (FS 92-059).

FS 99-014 **UFSAR Change Request** 06/03/99
(Safety Evaluation 99-053)

As a result of the Integrated Configuration Management Project review, UFSAR Change Request FS 99-014 contains corrections and clarifications to the UFSAR sections that discuss Surry's Circulating Water System. These changes are to enhance accuracy and do not affect any circulating water system or structure, or any of its component's operation or performance.

FS 98-048 **UFSAR Change Request** 06/03/99
(Safety Evaluation 99-054)

As a result of the Integrated Configuration Management Project review, UFSAR Change Request FS 98-048 contains corrections and clarifications to the UFSAR sections that discuss Surry's Reactor Protection System. These changes are to enhance accuracy and do not affect any reactor protection system or structure, or any of its component's operation or performance.

FS 99-016 **UFSAR Change Request** 06/10/99
(Safety Evaluation 99-055)

As a result of the Integrated Configuration Management Project review, UFSAR Change Request FS 99-016 contains corrections and clarifications to the UFSAR sections that discuss Surry's Radiological Protection System. These changes are to enhance accuracy and do not affect any radiological protection system or structure, or any of its component's operation or performance.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: June 1999

DCP 99-004
FS 99-023

**Design Change Package
UFSAR Change Request
(Safety Evaluation 99-056)**

06/21/99

Design Change Package 99-004, "Auxiliary Building Sump Pump Level Switch Replacement/Surry/Unit 1", replaced the problematic float switches that control the Auxiliary Building Sump Pumps with new ultrasonic level detectors.

ET S-99-0148

**Engineering Transmittal
(Safety Evaluation 99-058)**

06/24/99

Engineering Transmittal S-99-0148, "Repair of 1-FP-150 & 153 Auxiliary Building Fire Protection Valves", provides compensatory measures for inoperable Containment Fire Hose System stations in containment during power operations.

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

MONTH/YEAR: June 1999

1/2K-A7
1/2K-B7
1/2K-F7

Annunciator Response Procedures
(Safety Evaluation 99-057)

06/24/99

Annunciator Response Procedures 1/2K-A7, "Batt System 1A & 2A Trouble" 1/2K-B7, "Batt System 1B & 2B Trouble" and 1/2K-F7, "Batt HI/LO Volt", were changed to alert Operations if an unscheduled failure of a station battery charger occurs and additional restrictions that accompany such a failure.

0-OPT-VS-005 P-1

Operations Periodic Test Procedure
(Safety Evaluation 99-059)

06/25/99

Operations Periodic Test Procedure 0-OPT-VS-005, "Control Room Leakage Test", was changed to provide administrative control of the cable vault ventilation system to preclude going in and out of the appropriate Technical Specification Limiting Condition for Operation numerous times while troubleshooting leakage problems from the Main Control Room.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: June 1999

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: June 1999

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, $\mu\text{Ci/ml}$	3.76E-1	1.86E-1	2.75E-1	2.34E-1	1.23E-1	1.78E-1
Suspended Solids, ppm	0.01	0.01	0.01	0.01	0.01	0.01
Gross Tritium, $\mu\text{Ci/ml}$	1.01E+0	1.00E+0	1.01E+0	2.72E-1	9.02E-2	1.67E-1
I^{131} , $\mu\text{Ci/ml}$	5.92E-4	3.11E-4	3.99E-4	$\leq 2.01\text{E-}4$	4.05E-5	$\leq 8.53\text{E-}5$
I^{131}/I^{133}	0.12	0.05	0.08	≤ 0.42	≤ 0.18	≤ 0.29
Hydrogen, cc/kg	38.5	36.3	37.3	35.3	30.3	33.5
Lithium, ppm	2.34	2.06	2.2	2.72	2.07	2.3
Boron - 10, ppm*	179.93	164.05	172.76	289.49	235.2	246.3
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005	≤ 0.005
Chloride, ppm	0.02	0.014	0.017	0.006	0.003	0.005
pH @ 25 degree Celsius	6.73	6.63	6.69	6.64	6.3	6.42

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: June 1999

<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: June 1999

None during the Reporting Period