

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261
August 11, 2000

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

Serial No. 00-412
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 July 2000 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

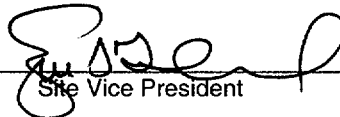
cc: United States Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
Atlanta, Georgia 30303-8931

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

IE24

**VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT No. 00-07**

Approved:


Site Vice President

8/11/2000

Date

TABLE OF CONTENTS

| Section | Page |
|--|------|
| Operating Data Report - Unit No. 1 | 3 |
| Operating Data Report - Unit No. 2 | 4 |
| Unit Shutdowns and Power Reductions - Unit No. 1 | 5 |
| Unit Shutdowns and Power Reductions - Unit No. 2 | 6 |
| Average Daily Unit Power Level - Unit No. 1 | 7 |
| Average Daily Unit Power Level - Unit No. 2 | 8 |
| Summary of Operating Experience - Unit Nos. 1 and 2 | 9 |
| Facility Changes That Did Not Require NRC Approval | 10 |
| Procedure or Method of Operation Changes That Did Not Require NRC Approval | 12 |
| Tests and Experiments That Did Not Require NRC Approval | 13 |
| Chemistry Report | 14 |
| Fuel Handling - Unit Nos. 1 and 2 | 15 |
| Description of Periodic Test(s) Which Were Not Completed Within the Time Limits Specified in Technical Specifications | 17 |

OPERATING DATA REPORT

Docket No.: 50-280
 Date: 08/01/00
 Completed By: R. Stief
 Telephone: (757) 365-2486

1. Unit Name: Surry Unit 1
 2. Reporting Period: July 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 | 5111.0 | 242015.0 |
| 12. Hours Reactor Was Critical | 744.0 | 4574.0 | 174650.5 |
| 13. Reactor Reserve Shutdown Hours | 0.0 | 0.0 | 3774.5 |
| 14. Hours Generator On-Line | 744.0 | 4544.0 | 172075.4 |
| 15. Unit Reserve Shutdown Hours | 0.0 | 0.0 | 3736.2 |
| 16. Gross Thermal Energy Generated (MWH) | 1893466.4 | 11143451.0 | 407583699.4 |
| 17. Gross Electrical Energy Generated (MWH) | 627952.0 | 3703106.0 | 133848439.0 |
| 18. Net Electrical Energy Generated (MWH) | 605793.0 | 3571354.0 | 127674157.0 |
| 19. Unit Service Factor | 100.0% | 88.9% | 71.1% |
| 20. Unit Availability Factor | 100.0% | 88.9% | 72.6% |
| 21. Unit Capacity Factor (Using MDC Net) | 101.7% | 87.2% | 67.6% |
| 22. Unit Capacity Factor (Using DER Net) | 103.3% | 88.7% | 66.9% |
| 23. Unit Forced Outage Rate | 0.0% | 0.0% | 13.5% |
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: 08/01/00
 Completed By: R. Stief
 Telephone: (757) 365-2486

1. Unit Name: Surry Unit 2
2. Reporting Period: July 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 | 5111.0 | 238896.0 |
| 12. Hours Reactor Was Critical | 744.0 | 5111.0 | 172640.1 |
| 13. Reactor Reserve Shutdown Hours | 0.0 | 0.0 | 328.1 |
| 14. Hours Generator On-Line | 744.0 | 5111.0 | 170499.4 |
| 15. Unit Reserve Shutdown Hours | 0.0 | 0.0 | 0.0 |
| 16. Gross Thermal Energy Generated (MWH) | 1893429.6 | 13009164.0 | 405037157.2 |
| 17. Gross Electrical Energy Generated (MWH) | 630680.0 | 4368439.0 | 133001337.0 |
| 18. Net Electrical Energy Generated (MWH) | 607836.0 | 4217484.0 | 126914341.0 |
| 19. Unit Service Factor | 100.0% | 100.0% | 71.4% |
| 20. Unit Availability Factor | 100.0% | 100.0% | 71.4% |
| 21. Unit Capacity Factor (Using MDC Net) | 102.0% | 103.0% | 67.8% |
| 22. Unit Capacity Factor (Using DER Net) | 103.7% | 104.7% | 67.4% |
| 23. Unit Forced Outage Rate | 0.0% | 0.0% | 10.7% |

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

October 2000

_____ 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: July 2000

Docket No.: 50-280

Unit Name: Surry Unit 1

Date: 08/01/00

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)

(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: July 2000

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 08/01/00
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)

(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: 08/01/00
 Completed by: R. Stief
 Telephone: (757) 365-2486

MONTH: July 2000

| Day | Average Daily Power Level (MWe - Net) | Day | Average Daily Power Level (MWe - Net) |
|-----|--|-----|--|
| 1 | 813 | 17 | 814 |
| 2 | 814 | 18 | 813 |
| 3 | 814 | 19 | 813 |
| 4 | 814 | 20 | 814 |
| 5 | 813 | 21 | 814 |
| 6 | 813 | 22 | 810 |
| 7 | 815 | 23 | 815 |
| 8 | 815 | 24 | 818 |
| 9 | 815 | 25 | 817 |
| 10 | 814 | 26 | 817 |
| 11 | 813 | 27 | 815 |
| 12 | 813 | 28 | 816 |
| 13 | 815 | 29 | 815 |
| 14 | 814 | 30 | 813 |
| 15 | 815 | 31 | 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: 08/01/00

Completed by: R. Stief

Telephone: (757) 365-2486

MONTH: July 2000

| Day | Average Daily Power Level (MWe - Net) | Day | Average Daily Power Level (MWe - Net) |
|-----|--|-----|--|
| 1 | 818 | 17 | 818 |
| 2 | 817 | 18 | 817 |
| 3 | 817 | 19 | 816 |
| 4 | 817 | 20 | 818 |
| 5 | 812 | 21 | 818 |
| 6 | 812 | 22 | 818 |
| 7 | 814 | 23 | 819 |
| 8 | 816 | 24 | 820 |
| 9 | 816 | 25 | 822 |
| 10 | 814 | 26 | 822 |
| 11 | 813 | 27 | 819 |
| 12 | 816 | 28 | 818 |
| 13 | 813 | 29 | 816 |
| 14 | 814 | 30 | 819 |
| 15 | 818 | 31 | 820 |
| 16 | 819 | | |

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: July 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:

| | | |
|----------|------|--|
| 07/01/00 | 0000 | Unit started the month at 100% / 842 MWe. |
| 07/31/00 | 2400 | Unit finished the month at 100% / 844 MWe. |

UNIT TWO:

| | | |
|----------|------|--|
| 07/01/00 | 0000 | Unit started the month at 100% / 845 MWe. |
| 07/31/00 | 2400 | Unit finished the month at 100% / 845 MWe. |

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 2000

| | | |
|-------------------------|--|----------|
| DCP 99-092 FS 99-064 | Design Change Package UFSAR Change Request (Safety Evaluation 99-123) | 12/23/99 |
| | Design Change Package 99-092, "Chemical Injection of the Circulating Water (CW) System", chemically treats Units 1 and 2 CW system with Calgon H-940 (sodium bromide at 40%) mixed with 15% solution of sodium hypochlorite to control biofouling of the Unit 1 and 2 condensers. | |
| TM S2-00-005 | Temporary Modification (Safety Evaluation 00-083) | 07/07/00 |
| | Temporary Modification S2-00-005 installed recorders to the Unit 2 Inadequate Core Cooling Monitors, Trains A and B alarm circuitry, to assist in troubleshooting recent spurious alarms. | |
| FS 00-016 | UFSAR Change Request (Safety Evaluation 00-084) | 07/12/00 |
| | As a result of the Integrated Configuration Management Project review, UFSAR Change Request FS 00-016 corrects the statements in the UFSAR that discuss Surry's Plant Safety Analysis. These changes are to enhance clarity and do not alter the technical basis of the UFSAR description. | |
| TM S1-00-027 | Temporary Modification (Safety Evaluation 00-085) | 07/13/00 |
| | Temporary Modification S1-00-027 installed a jumper hose from the Unit 2 Fish Spray system to the Low Level Intake Structure (LLIS) Vacuum Priming System to maintain makeup capability while the "A" well pump, at the LLIS, is inoperable. | |
| SE 00-087 | Safety Evaluation | 07/27/00 |
| | Safety Evaluation 00-087 provides documentation that evaluates contamination of the storm drain systems in accordance with IE Bulletin 80-10. | |
| TM S2-00-007 | Temporary Modification (Safety Evaluation 00-089) | 07/27/00 |
| | Temporary Modification S2-00-007 installs spool pieces in place of Flow Control Valves 1-CP-FCV-100 and 2-CP-FCV-200 to allow the Condensate Polishing Building Water Neutralization sumps to be neutralized using NaOH prior to discharge to the Settling Pond or Discharge Canal. It is believed the Flow Control Valves are creating a flow restriction causing an unacceptable injection time for sump neutralization. | |

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 2000

TM S1-00-022

Temporary Modification
(Safety Evaluation 00-090)

07/27/00

Temporary Modification S1-00-022 installs two pieces of flex ductwork to the existing Unit 1 Control Room ventilation system that runs through and discharges to the Unit 1 P-250 computer room to provide additional cooling for the computer.

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

MONTH/YEAR: July 2000

1/2-OP-CS-003
1/2-OP-CS-005

Operating Procedures
(Safety Evaluation 00-091)

07/27/00

Operating Procedures 1/2-OP-CS-003, "Refueling Water Storage Tank Temperature Control" and 1/2-OP-CS-005, "Purifying Unit 1/2 RWST", were changed to establish a contingency seismic isolation for the Refueling Water Storage Tank lower suction line in case the normal valve 1/2-CS-27 cannot be closed.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 2000

None during the Reporting Period

CHEMISTRY REPORT

MONTH/YEAR: July 2000

| Primary Coolant Analysis | Unit No. 1 | | | Unit No. 2 | | |
|--|--------------|--------------|--------------|-----------------------|-----------------------|-----------------------|
| | Max. | Min. | Avg. | Max. | Min. | Avg. |
| Gross Radioactivity, $\mu\text{Ci/ml}$ | 3.25E-1 | 2.16E-1 | 2.68E-1 | 1.64E-1 | 1.02E-1 | 1.27E-1 |
| Suspended Solids, ppm | - | - | - | - | - | - |
| Gross Tritium, $\mu\text{Ci/ml}$ | 8.27E-1 | 5.76E-1 | 7.14E-1 | 4.35E-1 | 9.18E-2 | 2.53E-1 |
| I^{131} , $\mu\text{Ci/ml}$ | 2.18E-4 | 1.28E-4 | 1.65E-4 | $\leq 1.00\text{E-4}$ | $\leq 6.98\text{E-5}$ | $\leq 8.41\text{E-5}$ |
| I^{131}/I^{133} | 0.1 | 0.06 | 0.07 | ≤ 0.19 | ≤ 0.11 | ≤ 0.15 |
| Hydrogen, cc/kg | 39.8 | 36.9 | 38.2 | 41 | 36.8 | 38.5 |
| Lithium, ppm | 2.39 | 2.15 | 2.29 | 1.79 | 1.35 | 1.59 |
| Boron - 10, ppm* | 253 | 241.5 | 247.4 | 48.8 | 28.6 | 39 |
| Oxygen, (DO), ppm | ≤ 0.005 | ≤ 0.005 | ≤ 0.005 | ≤ 0.005 | ≤ 0.005 | ≤ 0.005 |
| Chloride, ppm | 0.023 | 0.014 | 0.018 | 0.002 | ≤ 0.001 | ≤ 0.001 |
| pH @ 25 degree Celsius | 6.92 | 6.3 | 6.46 | 7.45 | 7.23 | 7.32 |

* Boron - 10 = Total Boron x 0.196

Comments:

None

**FUEL HANDLING
UNITS 1 & 2**

MONTH/YEAR: May 2000

| 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 |
|-------------------------------------|----------------------------|---|--------------------|----------------|-----------------------|--|
| Spent Fuel Cask TN-32-01 | 07/11/00 | 32 | N40 | NOANSI | 2.5560 | Fuel on-load from spent fuel pool after cask maintenance |
| | | | 6P2 | LM05YN | 3.6070 | |
| | | | N44 | NOANSI | 2.5560 | |
| | | | N46 | NOANSI | 2.5560 | |
| | | | N33 | NOANSI | 2.5560 | |
| | | | D02 | LM007P | 3.3250 | |
| | | | D25 | LM007D | 3.3250 | |
| | | | D39 | LM0075 | 3.3250 | |
| | | | 2E8 | LM0DEP | 2.5933 | |
| | | | N34 | NOANSI | 2.5560 | |
| | | | D31 | LM0084 | 3.3250 | |
| | | | 5S4 | LM0ERU | 3.6005 | |
| | | | D14 | LM007U | 3.3250 | |
| | | | D41 | LM00CA | 3.3250 | |
| | | | D50 | LM0073 | 3.3250 | |
| | | | N42 | NOANSI | 2.5560 | |
| | | | N38 | NOANSI | 2.5590 | |

**FUEL HANDLING
 UNITS 1 & 2**

MONTH/YEAR: May 2000

| 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 |
|-------------------------------------|----------------------------|---|--------------------|----------------|-----------------------|--|
| | | | D06 | LM008F | 3.3250 | |
| | | | D49 | LM007G | 3.3250 | |
| | | | D43 | LM007J | 3.3250 | |
| | | | V17 | LM041K | 2.9060 | |
| | | | 6P4 | LM05YR | 3.6070 | |
| | | | N39 | NOANSI | 2.5560 | |
| | | | 2E7 | LM0DFH | 3.6028 | |
| | | | D33 | LM008K | 3.3250 | |
| | | | D46 | LM00CD | 3.3250 | |
| | | | V19 | LM042H | 2.9060 | |
| | | | N45 | NOANSI | 2.5560 | |
| | | | N41 | NOANSI | 2.5560 | |
| | | | N43 | NOANSI | 2.5560 | |
| | | | 6P8 | LM009PA | 3.6070 | |
| | | | N47 | NOANSI | 2.5580 | |

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

MONTH/YEAR: July 2000

None during the Reporting Period