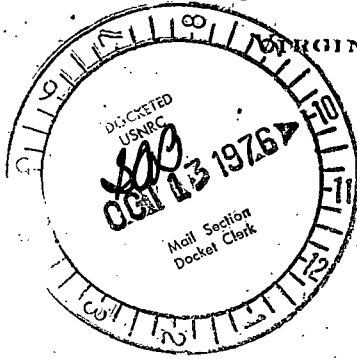
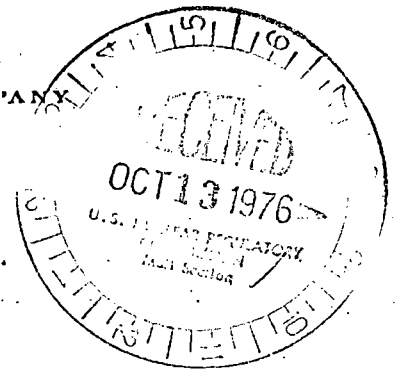


Regulatory File Cy

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261



October 8, 1976



Mr. William McDonald, Director
Office of Management Information and
Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No. 237/021974
PO&M/ALH:jlf

Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

Dear Mr. McDonald:

Operating information for Surry Power Station, Unit Nos. 1 and 2,
for the month of September, 1976 is attached. A corrected copy of data for
August 1976 is also attached.

Very truly yours,

C. M. Stallings
Vice President-Power Supply
and Production Operations

10329

DOCKET NO. 50-280UNIT Surry //1DATE Oct. 1, 1976COMPLETED BY E. P. DeWandel

AVERAGE DAILY UNIT POWER LEVEL

MONTH September 1976

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	<u>755.1</u>	17	<u>725.4</u>
2	<u>756.5</u>	18	<u>713.0</u>
3	<u>757.0</u>	19	<u>743.0</u>
4	<u>756.9</u>	20	<u>743.4</u>
5	<u>739.8</u>	21	<u>743.2</u>
6	<u>753.3</u>	22	<u>745.0</u>
7	<u>741.1</u>	23	<u>750.4</u>
8	<u>754.4</u>	24	<u>422.3</u>
9	<u>752.5</u>	25	<u>0</u>
10	<u>753.8</u>	26	<u>0</u>
11	<u>756.2</u>	27	<u>0</u>
12	<u>755.3</u>	28	<u>0</u>
13	<u>754.8</u>	29	<u>0</u>
14	<u>754.3</u>	30	<u>0</u>
15	<u>750.4</u>	31	<u>0</u>
16	<u>740.5</u>		

DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

On this form, list the average daily unit power level in MWe-net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

UNIT Surry Unit #1

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

DOCKET NO. 50-280

OPERATING STATUS

1. REPORTING PERIOD: 0001 760901 THROUGH 2400 760930
HOURS IN REPORTING PERIOD: 720
2. CURRENTLY AUTHORIZED POWER LEVEL (MWh) 2441 MAX. DEPENDABLE CAPACITY (MWe-NET) 788
3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET): _____
4. REASONS FOR RESTRICTION (IF ANY): _____

	THIS REPORTING PERIOD	YR TO DATE	CUMULATIVE TO DATE
5. HOURS REACTOR WAS CRITICAL	<u>568.5</u>	<u>5658.6</u>	<u>22155.0</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE	<u>567.3</u>	<u>5619.8</u>	<u>21464.3</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>1,378,119</u>	<u>13,369,442</u>	<u>48,152,130</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>444,215</u>	<u>4,324,495</u>	<u>15,776,038</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>422,821</u>	<u>4,109,960</u>	<u>14,956,840</u>
12. REACTOR AVAILABILITY FACTOR (1)	<u>79.0%</u>	<u>86.1%</u>	<u>66.9%</u>
13. UNIT AVAILABILITY FACTOR (2)	<u>78.8%</u>	<u>85.5%</u>	<u>64.9%</u>
14. UNIT CAPACITY FACTOR (3)	<u>74.5%</u>	<u>79.3%</u>	<u>57.4%</u>
15. UNIT FORCED OUTAGE RATE (4)	<u>21.2%</u>	<u>14.5%</u>	<u>22.4%</u>
16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): <u>Refueling - November 1, 1976 - 6 weeks</u>			
17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: <u>October 1, 1976</u>			
18. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING:			

	DATE LAST FORECAST	DATE ACHIEVED
--	-----------------------	------------------

INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICAL POWER GENERATION	_____	_____
COMMERCIAL OPERATION	_____	_____

- (1) REACTOR AVAILABILITY FACTOR = $\frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (2) UNIT AVAILABILITY FACTOR = $\frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (3) UNIT CAPACITY FACTOR = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET)} \times \text{HOURS IN REPORTING PERIOD}}$
- (4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE} + \text{FORCED OUTAGE HOURS}} \times 100$

UNIT SHUTDOWNS

DOCKET NO. 50-280

UNIT NAME Surry #1

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

REPORT MONTH September, 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
76-13	9/24/76	F	152.7	A	1 & 3	<p>Primary to secondary leakage in steam generator. Plugged leaking tubes in "C: S/G.</p> <p>Automatic trip near end of rampdown resulted during manual feed water control.</p> <p>NOTE: Unit still down at the end of the reporting period.</p> <p>(1) REASON A- EQUIPMENT FAILURE (EXPLAIN) B- MAINT. OR TEST C- REFUELING D- REGULATORY RESTRICTION E- OPERATOR TRAINING AND LICENSE EXAMINATION F- ADMINISTRATIVE G- OPERATIONAL ERROR (EXPLAIN) H- OTHER (EXPLAIN)</p> <p>(2) METHOD 1- MANUAL 2- MANUAL SCRAM 3- AUTOMATIC SCRAM</p>

SUMMARY:

DOCKET NO. 50-281

UNIT Surry #2

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

AVERAGE DAILY UNIT POWER LEVEL

MONTH September 1976

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	<u>685.1</u>	17	<u>0</u>
2	<u>684.2</u>	18	<u>0</u>
3	<u>753.0</u>	19	<u>0</u>
4	<u>751.8</u>	20	<u>0</u>
5	<u>749.9</u>	21	<u>0</u>
6	<u>749.7</u>	22	<u>0</u>
7	<u>750.5</u>	23	<u>0</u>
8	<u>749.8</u>	24	<u>0</u>
9	<u>744.0</u>	25	<u>0</u>
10	<u>713.6</u>	26	<u>0</u>
11	<u>753.9</u>	27	<u>0</u>
12	<u>753.3</u>	28	<u>0</u>
13	<u>752.2</u>	29	<u>0</u>
14	<u>750.1</u>	30	<u>0</u>
15	<u>430.3</u>	31	<u>0</u>
16	<u>0</u>		

DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

On this form, list the average daily unit power level in MWe-net for each day in the reporting month. Compute to the nearest whole megawatt.

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

UNIT Surry Unit #2

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

DOCKET NO. 50-281

OPERATING STATUS

1. REPORTING PERIOD: 0001 760901 THROUGH 2400 760930
HOURS IN REPORTING PERIOD: 720
2. CURRENTLY AUTHORIZED POWER LEVEL (MWh) 2441 MAX. DEPENDABLE CAPACITY (MWe-NET) 788
3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET): _____
4. REASONS FOR RESTRICTION (IF ANY): _____

	THIS REPORTING PERIOD	YR TO DATE	CUMULATIVE TO DATE
5. HOURS REACTOR WAS CRITICAL	<u>349.8</u>	<u>4483.1</u>	<u>20112.7</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE	<u>349.8</u>	<u>4393.5</u>	<u>19748.0</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>837,867</u>	<u>10,401,391</u>	<u>44,909,524</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>272,635</u>	<u>3,388,560</u>	<u>14,734,119</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>258,516</u>	<u>3,213,702</u>	<u>13,966,083</u>
12. REACTOR AVAILABILITY FACTOR (1)	<u>48.6%</u>	<u>68.2%</u>	<u>67.1%</u>
13. UNIT AVAILABILITY FACTOR (2)	<u>48.6%</u>	<u>66.8%</u>	<u>65.9%</u>
14. UNIT CAPACITY FACTOR (3)	<u>45.6%</u>	<u>62.0%</u>	<u>59.1%</u>
15. UNIT FORCED OUTAGE RATE (4)	<u>51.4%</u>	<u>18.7%</u>	<u>19.8%</u>
16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): <u>N/A</u>			

17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: October 15, 1976
18. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING:

	DATE LAST FORECAST	DATE ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICAL POWER GENERATION	_____	_____
COMMERCIAL OPERATION	_____	_____

- (1) REACTOR AVAILABILITY FACTOR = $\frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (2) UNIT AVAILABILITY FACTOR = $\frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (3) UNIT CAPACITY FACTOR = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET)} \times \text{HOURS IN REPORTING PERIOD}}$
- (4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE} + \text{FORCED OUTAGE HOURS}} \times 100$

UNIT SHUTDOWNS

DOCKET NO. 50-281

UNIT NAME Surry #2

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

REPORT MONTH September 1976

.NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
76-9	9/15/76	F	370.2	A	2	<p>Steam Generator Tube Leak</p> <p>Extensive investigation of ruptured tube and plug tube. Remove leaking tube for further investigation, perform Eddy Current Investigation and plug affected tubes.</p> <p>Note: Unit still down at end of reporting period.</p> <p>(1) REASON A - EQUIPMENT FAILURE (EXPLAIN) B - MAINT. OR TEST C - REFUELING D - REGULATORY RESTRICTION E - OPERATOR TRAINING AND LICENSE EXAMINATION F - ADMINISTRATIVE G - OPERATIONAL ERROR (EXPLAIN) H - OTHER (EXPLAIN)</p> <p>(2) METHOD 1 - MANUAL 2 - MANUAL SCRAM 3 - AUTOMATIC SCRAM</p>

SUMMARY:

UNIT Surry Unit #2

DATE Sept. 2, 1976

COMPLETED BY E. P. DeWandel

DOCKET NO. 50-281

OPERATING STATUS

1. REPORTING PERIOD: 0001 760801 THROUGH 2400 760831
HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWh) 2441 MAX. DEPENDABLE CAPACITY (MWe-NET) 789
3. LOWEST POWER LEVEL TO WHICH SPECIFICALLY RESTRICTED (IF ANY) (MWe-NET): _____
4. REASONS FOR RESTRICTION (IF ANY): _____

	THIS REPORTING PERIOD	YR TO DATE	CUMULATIVE TO DATE
5. HOURS REACTOR WAS CRITICAL	<u>691.8</u>	<u>4133.3</u>	<u>19,762.9</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
7. HOURS GENERATOR ON LINE	<u>690.4</u>	<u>4043.7</u>	<u>19,398.2</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>0</u>	<u>0</u>	<u>0</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>1,661,570</u>	<u>9,563,524</u>	<u>44,071,657</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>533,525</u>	<u>3,115,925</u>	<u>14,461,484</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>505,862</u>	<u>2,955,135</u>	<u>13,707,567</u>
12. REACTOR AVAILABILITY FACTOR (1)	<u>93.0%</u>	<u>70.6%</u>	<u>67.6%</u>
13. UNIT AVAILABILITY FACTOR (2)	<u>92.8%</u>	<u>69.1%</u>	<u>66.3%</u>
14. UNIT CAPACITY FACTOR (3)	<u>86.3%</u>	<u>64.1%</u>	<u>59.5%</u>
15. UNIT FORCED OUTAGE RATE (4)	<u>7.2%</u>	<u>13.6%</u>	<u>18.8%</u>
16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH): <u>None</u>			

17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: N/A
18. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION) REPORT THE FOLLOWING:

	DATE LAST FORECAST	DATE ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICAL POWER GENERATION	_____	_____
COMMERCIAL OPERATION	_____	_____

- (1) REACTOR AVAILABILITY FACTOR = $\frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (2) UNIT AVAILABILITY FACTOR = $\frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$
- (3) UNIT CAPACITY FACTOR = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET)} \times \text{HOURS IN REPORTING PERIOD}}$
- (4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE} + \text{FORCED OUTAGE HOURS}} \times 100$