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

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

10329

DOCKET NO. 50-280
UNIT Surry #1
DATE Oct. 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	755.1	17	725.4
2	756.5	18	713.0
3	757.0	19	743.0
4	756.9	20	743.4
5	739.8	21	743.2
6	753.3	22	745.0
7	741.1	23	750.4
8	754.4	24	422.3
9	752.5	25	0
10	753.8	26	0
11	756.2	27	0
12	755.3	28	0
13	754.8	29	0
14	754.3	30	0
15	750.4	31	
16	740.5		

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 (MWth) 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	568.5	5658.6	22155.0
6.	REACTOR RESERVE SHUTDOWN HOURS	0	0	0
7.	HOURS GENERATOR ON LINE	567.3	5619.8	21464.3
8.	UNIT RESERVE SHUTDOWN HOURS	0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1,378,119	13,369,442	48,152,130
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	444,215	4,324,495	15,776,038
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	422,821	4,109.960	14,956,840
12.	REACTOR AVAILABILITY FACTOR (1)	79.0%	86.1%	66.9%
13.	UNIT AVAILABILITY FACTOR (2)	78.8%	85.5%	64.9%
14.	UNIT CAPACITY FACTOR (3)	74.5%	79.3%	57.4%
15.	UNIT FORCED OUTAGE RATE (4)	21.2%	14.5%	22.4%

16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH):
    Refueling - November 1, 1976 - 6 weeks
17. IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: October 1, 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 = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET) X HOURS IN REPORTING PERIOD}}$

(4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE + FORCED OUTAGE HOURS}} \times 100$

DOCKET NO. 50-280
UNIT NAME Surry #1
DATE October 1, 1976
COMPLETED BY E. P. DeWandel

UNIT SHUTDOWNS

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	Primary to secondary leakage in steam generator. Plugged leaking tubes in "C: S/G. Automatic trip near end of rampdown resulted during manual feed water control. NOTE: Unit still down at the end of the reporting period.

(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)

(2) METHOD
1-MANUAL
2-MANUAL SCRAM
3-AUTOMATIC SCRAM

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	685.1	17	0
2	684.2	18	0
3	753.0	19	0
4	751.8	20	0
5	749.9	21	0
6	749.7	22	0
7	750.5	23	0
8	749.8	24	0
9	744.0	25	0
10	713.6	26	0
11	753.9	27	0
12	753.3	28	0
13	752.2	29	0
14	750.1	30	0
15	430.3	31	
16	0		

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 (MWth) 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	349.8	4483.1	20112.7
6.	REACTOR RESERVE SHUTDOWN HOURS	0	0	0
7.	HOURS GENERATOR ON LINE	349.8	4393.5	19748.0
8.	UNIT RESERVE SHUTDOWN HOURS	0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWH)	837,867	10,401,391	44,909,524
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	272,635	3,388,560	14,734,119
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	258,516	3,213,702	13,966,083
12.	REACTOR AVAILABILITY FACTOR (1)	48.6%	68.2%	67.1%
13.	UNIT AVAILABILITY FACTOR (2)	48.6%	66.8%	65.9%
14.	UNIT CAPACITY FACTOR (3)	45.6%	62.0%	59.1%
15.	UNIT FORCED OUTAGE RATE (4)	51.4%	18.7%	19.8%

16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH):
    N/A
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 = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET) X HOURS IN REPORTING PERIOD}}$

(4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE + FORCED OUTAGE HOURS}} \times 100$

DOCKET NO. 50-281

UNIT NAME Surry #2

DATE October 1, 1976

COMPLETED BY E. P. DeWandel

UNIT SHUTDOWNS

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	Steam Generator Tube Leak Extensive investigation of ruptured tube and plug tube. Remove leaking tube for further investigation, perform Eddy Current Investigation and plug affected tubes. Note: Unit still down at end of reporting period.

(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)

(2) METHOD
1-MANUAL
2-MANUAL SCRAM
3-AUTOMATIC SCRAM

SUMMARY:

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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 (MWth) 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	691.8	4133.3	19,762.9
6.	REACTOR RESERVE SHUTDOWN HOURS	0	0	0
7.	HOURS GENERATOR ON LINE	690.4	4043.7	19,398.2
8.	UNIT RESERVE SHUTDOWN HOURS	0	0	0
9.	GROSS THERMAL ENERGY GENERATED (MWH)	1,661,570	9,563,524	44,071,657
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	533,525	3,115,925	14,461,484
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	505,862	2,955,136	13,707,567
12.	REACTOR AVAILABILITY FACTOR (1)	93.0%	70.6%	67.6%
13.	UNIT AVAILABILITY FACTOR (2)	92.8%	69.1%	66.3%
14.	UNIT CAPACITY FACTOR (3)	86.3%	64.1%	59.5%
15.	UNIT FORCED OUTAGE RATE (4)	7.2%	13.6%	18.8%

16. SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS (STATE TYPE, DATE, AND DURATION OF EACH):
    None
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 = $\frac{\text{NET ELECTRICAL POWER GENERATED}}{\text{MAX. DEPENDABLE CAPACITY (MWe-NET) X HOURS IN REPORTING PERIOD}}$

(4) UNIT FORCED OUTAGE RATE = $\frac{\text{FORCED OUTAGE HOURS}}{\text{HOURS GENERATOR ON LINE + FORCED OUTAGE HOURS}} \times 100$