## VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

July 8, 1977

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

Serial No. 279/021974
PO&M/TAP:dgt
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 June 1977 is attached.

Very truly yours,

C. M. Stallings

Vice President-Power Supply and Production Operations

Attachments

cc: Mr. Norman C. Moseley

Regulatory Docket File



UNIT Surry Unit #1

DATE July 1, 1977

COMPLITED BY E. P. DeWandel

DOCKET NO. 50-280

# OPERATING STATUS

| ı.         | REPORTING PERIOD: 0001 770601                                  | THROUGH   | 2400 7               | 70630  |
|------------|--|---|----------------------|--|
|            | HOURS IN REPORTING PERIOD: 720                                 |   |                      |  |
| 2.         | CURRENTLY AUTHORIZED POWER LEVEL                               | L (MWth) $\frac{2441}{}$ MAX. DEPEND            | ABLE CAPACITY (MWe   | NET) <u>775</u>  |
| 3.         | LOWEST POWER LEVEL TO WHICH SPECIF                             | FICALLY RESTRICTED (IF ANY) (M                  | [We-NET):            |  |
| 4.         | REASONS FOR RESTRICTION (IF ANY):                              |   |                      |  |
|            |  | :   | e<br>e               | ·  |
|            |  | THIS  |                      | CUMULATIVE   |
|            |  | REPORTING PERIOD                                | YR TO DATE           | TO DATE  |
|            | HOURS BEACTOR WAS CRITICAL                                     | 720   | · 2978.8             | 25,553.2   |
| 5.<br>6.   | HOURS REACTOR WAS CRITICAL                                     |   | 0                    | 0  |
| 0.<br>7.   | REACTOR RESERVE SHUTDOWN HOURS HOURS GENERATOR ON LINE         |   | 2906,1               | 24.806.1   |
| 7.<br>8.   |  | *****   | 0                    | 0  |
| o.<br>9.   | UNIT RESERVE SHUTDOWN HOURS GROSS THERMAL ENERGY               |   |                      |  |
| У.         |  | <b>1,757,5</b> 03                               | 7,040,335            | 56,128,691   |
| 10.        | GENERATED (MWH)  |   |                      | 30,120,503   |
| ıu.        |  | 580,035   | 2,332,375            | 18,410,738   |
|            | GENERATED (MWH)  |   |                      | 10,110,750   |
| 11.        |  | 551,480   | 2,220,065            | 17,463,830   |
|            | (MWH)  | 100%  | 68.6%                | 64.4%  |
| 12.<br>13. |  | 100%  | 66.9%                | 62.6%  |
|            | UNIT AVAILABILITY FACTOR (2)                                   | 98 8 <i>9</i>                                   | 66.0%                | 56.8%  |
| 14.        | UNIT CAPACITY FACTOR (3)                                       | 0%  | 2.9%                 | 20.2%  |
| 15.        | UNIT FORCED OUTAGE RATE (4) SHUTDOWNS SCHEDULED TO BEGIN IN NI |   | <del></del>          |  |
| 16.        | Steam Generator Inspectio                                      |   |                      | EACH):   |
| 17.        | IF SHUT DOWN AT END OF REPORT PERIO                            |   | 27/4                 | engalaga, palapunka kapancare for differ for followers a san feadigh for the san |
| 17.<br>18. | UNITS IN TEST STATUS (PRIOR TO COMMI                           |   | *                    | · · · · · · · · · · · · · · · · · · ·  |
| 10.        | ONITS IN TEST STATUS (FRIOR TO COMMI                           | ERCIAL OPERATION) REPORT THE                    |                      |  |
|            |  |   | DATE LAS             |  |
|            |  |   | FORECAS              | T ACHIEVED   |
| ٠.         |  | INITIAL CRITICALITY                             | , ·                  |  |
|            |  | INITIAL ELECTRICAL                              |                      |  |
|            |  | POWER GENERATION                                |                      | •  |
| ٠.         |  |   | ,                    |  |
|            |  | COMMERCIAL OPERATION                            | ON                   |  |
|            |  |   |                      |  |
|            | нс   | OURS REACTOR WAS CRITICAL                       |                      |  |
| (1)        | KEAUTOR AVAILABILITY FACTOR =                                  | OURS IN REPORTING PERIOD                        | -X 100               | •  |
|            | ·  |   | •                    |  |
| (2)        | UNIT AVAILABILITY FACTOR =                                     | OURS GENERATOR ON LINE OURS IN REPORTING PERIOD | -X 100               |  |
| •          | •  |   |                      |  |
| (3)        | UNIT CAPACITY FACTOR =   | ET ELECTRICAL POWER GENERAT                     |                      | ***************************************  |
|            | с . м.   | AX. DEPENDABLE CAPACITY (MW                     | e-NET) X HOURS IN RI | PORTING PERIOD   |
| (4)        | UNIT FORCED OUTAGE RATE = FC                                   | DRCED OUTAGE HOURS                              |                      | X 100  |
| . W.J      | OMIT FORCED OUT MOE KATE " IIC                                 | OURS GENERATOR ON LINE + FOR                    | CED OUTAGE HOURS     | - Y 100  |

UNIT Surry #1

DATE July 1, 1977

COMPLETED BY E. P. DeWandel

#### AVERAGE DAILY UNIT POWER LEVEL

| THJUNE 1977                         |  |   |
|-------------------------------------|--|---|
| AVERAGE DAILY POWER LEVEL (MWe-net) | DAY  | ERAGE DAILY POWER LEVEL (MWe-net)   |
| 770.7                               | 17   | 770.0   |
| 770.6                               | -18  | 765.7   |
| 769.7                               | 19   | 765.4   |
| 765.3                               | 20   | 765.8   |
| 752.9                               | 21   | 767.2   |
| 766.9                               | 22   | 766.5   |
| 768.2                               | 23   | 767.0   |
| 769.8                               | 24   | 767.9   |
| 769.6                               | 25   | 767.4   |
| 772.1                               | 26   | 766.1   |
| 771.8                               | 27   | 763.4   |
| 770.2                               | 28   | 761.9   |
| 767.1                               | 29   | 760.0   |
| 745.6                               | 30   | 757.4   |
| 768.6                               | 31   |   |
| 767.8                               |  |   |
|                                     | AVERAGE DAILY POWER LEVEL (MWe-net)  770.7  770.6  769.7  765.3  752.9  766.9  768.2  769.8  769.6  772.1  771.8  770.2  767.1  745.6  768.6 | AVERAGE DAILY POWER LEVEL (MWe-net) DAY  770.7 17 770.6 18 769.7 19 765.3 20 752.9 21 766.9 22 768.2 23 769.8 24 769.6 25 772.1 26 771.8 27 770.2 28 767.1 29 745.6 30 768.6 31 |

#### 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 Shutdowns

UNIT NAME Surry #1

COMPLETED BY E. P. DeWandel

REPORT MONTH \_\_ JUNE, 1977.

| NO. | DATE | TYPE F-FORCED S-SCHEDULED | DURATION<br>(HOURS) | REASON (1) | METHOD OF<br>SHUTTING DOWN<br>THE REACTOR (2) | CORRECTIVE ACTIONS/COMMENTS   |
|-----|------|---------------------------|---------------------|------------|---|---|
| NO. | DATE | S-SCHEDULED               | (HOURS)             | REASON (1) | THE REACTOR (2)                               | (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)   |

SUMMARY:

DATE July 1, 1977

COMPLETED BY E. P. DeWandel

DOCKET NO. 50-281

### **OPERATING STATUS**

|          | REPORTING PERIOD: 0001 770601  | THROUGH  | 2400 770630                              |                     |
|----------|--|--|--|---------------------|
|          | HOURS IN REPORTING PERIOD: 720   |  |  |                     |
| 2.       | CURRENTLY AUTHORIZED POWER LEVEL (MWth) 244  | •  |  | e-NET) 775          |
| 3.       | LOWEST POWER LEVEL TO WHICH SPECIFICALLY REST  | RICTED (IF ANY) (MW  | 'e-NET):                                 | <del></del>         |
| 3.       | REASONS FOR RESTRICTION (IF ANY):  | :  |  |                     |
|          |  | TITIC  |  | CUMULATIVE          |
| •        | DEDO   | THIS   | VD TO DATE                               |                     |
|          | REN  | ORTING PERIOD  | YR TO DATE                               | TO DATE             |
|          | HOURS BEACTOR WAS CRITICAL   | 720  | 2915.1                                   | _23,234             |
| 5.       | HOURS REACTOR WAS CRITICAL   | 0  | 0  | $\frac{25,257}{0}$  |
| 5.       | REACTOR RESERVE SHUTDOWN HOURS   | 720  | 2897.6                                   | 22,843              |
| 7.       | HOURS GENERATOR ON LINE  | 0  | 0  | 0                   |
| 3.       | UNIT RESERVE SHUTDOWN HOURS  | · · · · · · · · · · · · · · · · · · ·  |  |                     |
| ₹.       | GROSS THERMAL ENERGY   | 1 75/ 020  | 6 0/0 762                                | 52 202 200          |
| _        | -  | 1,754,029  | 6,948,763                                | 52,293,390          |
| ).       | GROSS ELECTRICAL ENERGY  | E70 00E  | 9 903 930                                | 17 16/ 50/          |
|          | GENERATED (MWH)  | 572,225  | 2,293,220                                | 17,164,594          |
| ١.       | NET ELECTRICAL ENERGY GENERATED  | 543,470  | 2,179,063                                | 16,274,765          |
|          | (MWH)  | 100%   | 67.1%                                    | 63.6%               |
|          | REACTOR AVAILABILITY FACTOR (1)  | 100%   | 66.7%                                    | 62.5%               |
| 3.       | UNIT AVAILABILITY FACTOR (2)   | 97.4%  | 64.7%                                    | 57.5%               |
| ١.       | UNIT CAPACITY FACTOR (3)   | 0%   | 33.3%                                    | 26.7%               |
| i.       | UNIT FORCED OUTAGE RATE (4)  |  |  |                     |
| j.       | SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS  |  |  |                     |
| ٠.       | Steam Generator Inspection and Refu  | eling - 8-05-7   | , and duration of<br>7 - 6 weeks         | F EACH):            |
|          | SHUTDOWNS SCHEDULED TO BEGIN IN NEXT 6 MONTHS Steam Generator Inspection and Refu  | · · · · · · · · · · · · · · · · · · ·  |  | F EACH):            |
| 1.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED  | D DATE OF STARTUP  | :  | F EACH):            |
| 7.       |  | D DATE OF STARTUP  | :  | F EACH):            |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED  | D DATE OF STARTUP  | :  |                     |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED  | D DATE OF STARTUP  | :FOLLOWING:                              | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERA  | D DATE OF STARTUP<br>TION) REPORT THE  | FOLLOWING:                               | ST DATE             |
| 7.<br>3. | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INIT)   | D DATE OF STARTUP<br>TION) REPORT THE  | FOLLOWING:                               | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITEDIAL PERIOR PERIOR INITEDIAL PERIOR PERIO | D DATE OF STARTUP<br>TION) REPORT THE<br>IAL CRITICALITY   | FOLLOWING:                               | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITEDIAL PERIOR PERIOR INITEDIAL PERIOR PERIO | D DATE OF STARTUP<br>TION) REPORT THE  | FOLLOWING:                               | ST DATE             |
| ١.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITED INITED INITED POWER IN THE POWE | D DATE OF STARTUP<br>TION) REPORT THE<br>IAL CRITICALITY   | FOLLOWING:  DATE LA  FORECA:             | ST DATE             |
| 1.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITED INITED INITED POWER IN THE POWE | D DATE OF STARTUP<br>TION) REPORT THE I  | FOLLOWING:  DATE LA  FORECA:             | ST DATE             |
| ١.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITY POWER COMMERCIAL OPERAL INITY POWER COMMERCIAL OPERAL OPERAL INITY POWER COMMERCIAL OPERAL OPER | D DATE OF STARTUP<br>TION) REPORT THE I<br>IAL CRITICALITY<br>IAL ELECTRICAL<br>ER GENERATION<br>MERCIAL OPERATION   | FOLLOWING:  DATE LA  FORECA:             | ST DATE             |
| 7.<br>3. | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INIT)  INIT  POW  COM  REACTOR AVAILABILITY FACTOR = HOURS REACTOR  | D DATE OF STARTUP. TION) REPORT THE I IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL  | FOLLOWING:  DATE LA  FORECA:             | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INIT)  INIT  POW  COM  HOURS REACTOR  | D DATE OF STARTUP. TION) REPORT THE I IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL  | FOLLOWING:  DATE LA FORECA               | ST DATE             |
| 7.<br>3. | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITY POWER | D DATE OF STARTUP. TION) REPORT THE I  IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL EXTING PERIOD TOR ON LINE   | FOLLOWING:  DATE LA FORECA:  N  100      | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INIT)  INIT  POWE  COM  REACTOR AVAILABILITY FACTOR = HOURS REACTOR HOURS IN REPORT   | D DATE OF STARTUP TION) REPORT THE I IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL RTING PERIOD TOR ON LINE  | FOLLOWING:  DATE LA FORECA               | ST DATE             |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITY POWER COMMERCIAL OPERAL | D DATE OF STARTUP TION) REPORT THE I IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL RTING PERIOD TOR ON LINE  | FOLLOWING:  DATE LA FORECA  N  100       | ST DATE             |
| 7.<br>3. | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITY POWE COMMERCIAL OPERAL INITY  | D DATE OF STARTUP. TION) REPORT THE I  IAL CRITICALITY IAL ELECTRICAL ER GENERATION MERCIAL OPERATION R WAS CRITICAL ETING PERIOD TOR ON LINE RTING PERIOD                             | FOLLOWING:  DATE LA FORECA:  100  100  D | ST DATE ST ACHIEVED |
| 7.       | IF SHUT DOWN AT END OF REPORT PERIOD, ESTIMATED UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERAL INITY POWE COMMERCIAL OPERAL INITY  | D DATE OF STARTUP. TION) REPORT THE PARTICULAR CRITICALITY EAL ELECTRICAL ER GENERATION MERCIAL OPERATION RETURN PERIOD TOR ON LINE RETURN PERIOD L POWER GENERATE BLE CAPACITY (MWe-1 | FOLLOWING:  DATE LA FORECA:  100  100  D | ST DATE ST ACHIEVED |

DOCKET NO. 50-281

UNIT Surry #2

DATE July 1, 1977

COMPLETED BY E. P. DeWandel

#### AVERAGE DAILY UNIT POWER LEVEL

| YAC | AVERAGE DAILY POWER LEVEI (MWe-net) | . AV<br>DAY  | ERAGE DAILY POWER LEVE<br>(MWe-net) |
|-----|-------------------------------------|--------------|-------------------------------------|
| 1   | 764.7                               | 17           | 752.6                               |
| 2   | 764.6                               | 18           | 741.0                               |
| 3   | 765.4                               | 19           | 743.5                               |
| 4   | 765.5                               | 20           | 756.5                               |
| . 2 | 762.1                               | 21           | 756.6                               |
| 6   | 762.1                               | 5-7.<br>6-6. | 756.7                               |
| 7   | 764.5                               | 23           | 753.0                               |
| 8   | 764.0                               | 24           | 754.9                               |
| 9   | 749.3                               | 25           | 758.7                               |
| 10  | 764.3                               | 26           | 746.7                               |
| 71  | 761.1                               | 27           | 741.4                               |
| 12  | 763.2                               | . 28         | 729.4                               |
| 13  | 761.7                               | 29           | 719.0                               |
| 14  | 759.8                               | 30           | 741.0                               |
| 15  | 762.3                               | 31           |                                     |
| 16  | 759.1                               |              |                                     |

### 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.

| l  | INI    | Ŧ. | \$ | 49  | 17.        | 17 | n!         | ΛI | A  | 18  |
|----|--------|----|----|-----|------------|----|------------|----|----|-----|
| ŧ. | 31 H 6 | 8  | 01 | T . | <i>3</i> 8 | ノ  | <b>.</b> . | 14 | 11 | ت د |

DOCKET NO. 50-281

UNIT NAME Surry 2

DATE 7-1-77

COMPLETED BY E. P. DeWandel

REPORT MONTH \_\_JUNE, 1977

|   | NO. | DATE | TYPE F-FORCED S-SCHEDULED | DURATION<br>(HOURS) | REASON (1)    | METHOD OF<br>SHUTTING DOWN<br>THE REACTOR (2) | CORRECTIVE ACTIONS/COMMENTS  |
|---|-----|------|---------------------------|---------------------|---------------|---|--|
|   |     |      | THERE V                   | VERE NO SHU         | TDOWNS DURING | JUNE, 1977                                    |  |
|   |     |      |                           |                     |               |   |  |
|   | •   |      |                           |                     |               |   | (1) REASON A- EQUIPMENT FAILURE (EXPLAIN) B- MAINT. OR TEST C-REFUELING D-REGULATORY RESTRICTION 3-AUTOMATIC |
|   |     |      |                           |                     |               |   | E-OPERATOR TRAINING AND LICENSE EXAMINATION F-ADMINISTRATIVE G-OPERATIONAL ERROR (EXPLAIN) H-OTHER (EXPLAIN) |
| • |     | • •• |                           |                     |               |   |  |

SUMMARY

# RECEIVED DOCUMENT PROCESSING UNIT

1977 JUL II PM 2 39