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FILE NUMBER

MONTHLY REPORT

TO:

N. R. C.

FROM:

Duke Power Company
Charlotte, North Carolina
Mr. William O. Parker, Jr.

DATE OF DOCUMENT

9/9/76

DATE RECEIVED

9/20/76

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DESCRIPTION

LETTER TRANS THE FOLLOWING:

ENCLOSURE

MONTHLY REPORT FOR August, 1976
PLANT & COMPONENT OPERABILITY & AVAILABILITY. THIS REPORT TO BE USED IN
PREPARING GRAY BOOK BY PLANS & OPERATIONS.

PLANT NAME:

Oconee 1-2-3

(1-P)

(9-P)

ACKNOWLEDGED
DO NOT REMOVE

SAFETY

FOR ACTION/INFORMATION

ENVIRO 9/21/76

RJL

☒

MIPC

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INTERNAL DISTRIBUTION

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LPDR: Walhalla, S.C.

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TIC

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NSIC

CONTROL NUMBER

9537

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

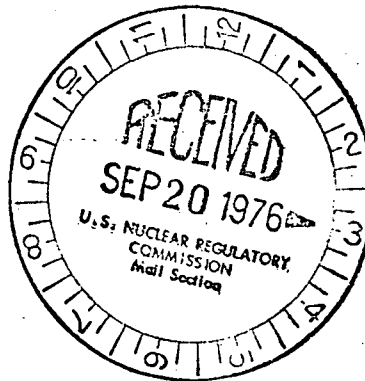
WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

September 9, 1976

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

Re: Oconee Nuclear Station
Docket Nos. 50-269, -270, -287

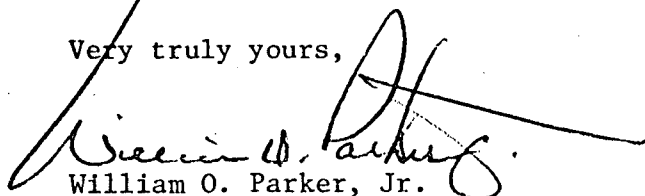


Dear Sir:

Please find attached information concerning the performance and operating status of the Oconee Nuclear Station for the month of August, 1976.

In response to your letter dated August 6, 1976 concerning the "Operating Units Status Report," a review of the data submitted for February, 1976 showed that Item No. 5 was in error. The correct number is 1,272.6 instead of the reported number 1,271.6.

Very truly yours,

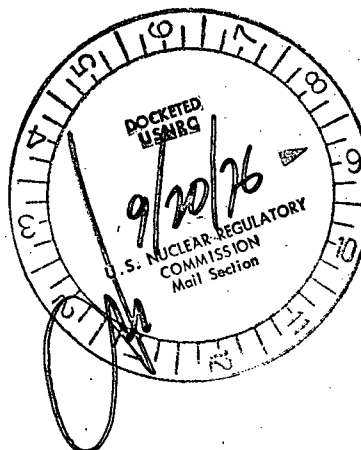

William O. Parker, Jr.

LJB:vr
Attachment

cc: Mr. Norman C. Moseley

9537

REGULATORY DOCKET FILE COPY



UNIT cone Unit 1
DATE 9/9/76
DOCKET NO. 50-269
PREPARED BY L. J. Bare

OPERATING STATUS

1. REPORTING PERIOD: August 1 THROUGH August 31, 1976

GROSS HOURS IN REPORTING PERIOD: 744.00

2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2568 NET CAPABILITY
(MWe-Net): 871

3. POWER LEVEL TO WHICH RESTRICTED (IF ANY): (MWe-Net) -

4. REASONS FOR RESTRICTION (IF ANY)

| | <u>This Month</u> | <u>Year to Date</u> | <u>Cumulative</u> |
|---|-------------------|---------------------|-------------------|
| 5. NUMBER OF HOURS THE REACTOR WAS CRITICAL | <u>721.8</u> | <u>3523.5</u> | <u>20295.6</u> |
| 6. REACTOR RESERVE SHUTDOWN HOURS | <u>-</u> | <u>-</u> | <u>-</u> |
| 7. HOURS GENERATOR ON-LINE | <u>709.7</u> | <u>3274.8</u> | <u>18205.6</u> |
| 8. UNIT RESERVE SHUTDOWN HOURS | <u>-</u> | <u>-</u> | <u>-</u> |
| 9. GROSS THERMAL ENERGY GENERATED (MWH) | <u>1728588</u> | <u>7829809</u> | <u>42053951</u> |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH) | <u>595600</u> | <u>2738560</u> | <u>14633280</u> |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH) | <u>566897</u> | <u>2588310</u> | <u>13826959</u> |
| 12. REACTOR SERVICE FACTOR | <u>97.0</u> | <u>60.2</u> | <u>74.0</u> |
| 13. REACTOR AVAILABILITY FACTOR | <u>95.4</u> | <u>57.4</u> | <u>67.5</u> |
| 14. UNIT SERVICE FACTOR | <u>95.4</u> | <u>55.9</u> | <u>66.4</u> |
| 15. UNIT AVAILABILITY FACTOR | <u>95.4</u> | <u>55.9</u> | <u>66.5</u> |
| 16. UNIT CAPACITY FACTOR (Using Net Capability) | <u>87.5</u> | <u>50.8</u> | <u>57.9</u> |
| 17. UNIT CAPACITY FACTOR (Using Design Mwe) | <u>85.9</u> | <u>49.8</u> | <u>56.8</u> |
| 18. UNIT FORCED OUTAGE RATE | <u>4.6</u> | <u>4.5</u> | <u>14.8</u> |

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE & DURATION OF EACH:)

20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

$$\text{REACTOR SERVICE FACTOR} = \frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{REACTOR AVAILABILITY FACTOR} = \frac{\text{HOURS REACTOR WAS AVAILABLE TO OPERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT SERVICE FACTOR} = \frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT AVAILABILITY FACTOR} = \frac{\text{HOURS UNIT WAS AVAILABLE TO GENERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT CAPACITY FACTOR} = \frac{\text{NET ELECTRICAL POWER GENERATED}}{[\text{Net Capability or Design (Mwe-Net.)}] \times \text{HOURS IN REPORTING PERIOD}} \times 100$$

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

DOCKET NO. 50-269
UNIT Oconee Unit 1
DATE 9/9/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1976

| DAY | AVERAGE DAILY POWER LEVEL (MWe-net) |
|-----|--|
| 1 | <u>839</u> |
| 2 | <u>835</u> |
| 3 | <u>835</u> |
| 4 | <u>833</u> |
| 5 | <u>848</u> |
| 6 | <u>851</u> |
| 7 | <u>851</u> |
| 8 | <u>851</u> |
| 9 | <u>835</u> |
| 10 | <u>634</u> |
| 11 | <u>641</u> |
| 12 | <u>639</u> |
| 13 | <u>639</u> |
| 14 | <u>374</u> |
| 15 | <u>-</u> |
| 16 | <u>689</u> |

| DAY | AVERAGE DAILY POWER LEVEL (MWe-net) |
|-----|--|
| 17 | <u>821</u> |
| 18 | <u>847</u> |
| 19 | <u>847</u> |
| 20 | <u>846</u> |
| 21 | <u>847</u> |
| 22 | <u>848</u> |
| 23 | <u>846</u> |
| 24 | <u>845</u> |
| 25 | <u>843</u> |
| 26 | <u>841</u> |
| 27 | <u>840</u> |
| 28 | <u>840</u> |
| 29 | <u>725</u> |
| 30 | <u>842</u> |
| 31 | <u>772</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.

DOCKET NO. 50-270
UNIT Oconee Unit 2
DATE 9/9/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1976

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

| | |
|----|-----|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 56 |
| 5 | 677 |
| 6 | 789 |
| 7 | 817 |
| 8 | 823 |
| 9 | 826 |
| 10 | 824 |
| 11 | 826 |
| 12 | 826 |
| 13 | 828 |
| 14 | 822 |
| 15 | 826 |
| 16 | 827 |

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

| | |
|----|-----|
| 17 | 827 |
| 18 | 822 |
| 19 | 817 |
| 20 | 818 |
| 21 | 824 |
| 22 | 822 |
| 23 | 818 |
| 24 | 810 |
| 25 | 816 |
| 26 | 817 |
| 27 | 813 |
| 28 | 603 |
| 29 | 281 |
| 30 | 754 |
| 31 | 818 |

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

DOCKET NO. 50-269

UNIT NAME Oconee Unit 1

DATE 9/9/76

REPORT MONTH August, 1976

| NO. | DATE | TYPE F-FORCED S-SCHEDULED | DURATION (HOURS) | REASON (1) | METHOD OF SHUTTING DOWN THE REACTOR (2) | CORRECTIVE ACTIONS/COMMENTS |
|--|----------|---------------------------------|---------------------|------------|---|--|
| 10 | 76-08-14 | F | 32.41 | A | 3 | Control rod drive malfunction. |
| 11 | 76-08-31 | F | 1.94 | B | 3 | Control rod drive power supply malfunction during scheduled test. |
| <p>(1) REASON</p> <p>A-EQUIPMENT FAILURE (EXPLAIN)</p> <p>B-MAINT. OR TEST</p> <p>C-REFUELING</p> <p>D-REGULATORY RESTRICTION</p> <p>E-OPERATOR TRAINING AND LICENSE EXAMINATION</p> <p>F-ADMINISTRATIVE</p> <p>G-OPERATIONAL ERROR (EXPLAIN)</p> <p>H-OTHER (EXPLAIN)</p> | | | | | | <p>(2) METHOD</p> <p>1-MANUAL</p> <p>2-MANUAL SCRAM</p> <p>3-AUTOMATIC SCRAM</p> |

SUMMARY:

No major outages this month.

UN Oconee Unit 2
 DATE 9/9/76
 DOCKET NO. 50-270
 PREPARED BY L. J. Bare

OPERATING STATUS

1. REPORTING PERIOD: August 1 THROUGH August 31, 1976
 GROSS HOURS IN REPORTING PERIOD: 744.00
2. CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 2568 NET CAPABILITY
 (MWe-Net): 871
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY): (MWe-Net) _____
4. REASONS FOR RESTRICTION (IF ANY) _____
5. NUMBER OF HOURS THE REACTOR WAS CRITICAL

| | <u>This Month</u> | <u>Year to Date</u> | <u>Cumulative</u> |
|---|-------------------|---------------------|-------------------|
| 6. REACTOR RESERVE SHUTDOWN HOURS | <u>-</u> | <u>-</u> | <u>-</u> |
| 7. HOURS GENERATOR ON-LINE | <u>641.5</u> | <u>3088.2</u> | <u>11367.6</u> |
| 8. UNIT RESERVE SHUTDOWN HOURS | <u>-</u> | <u>-</u> | <u>-</u> |
| 9. GROSS THERMAL ENERGY GENERATED (MWH) | <u>1583848</u> | <u>7257430</u> | <u>26929858</u> |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH) | <u>535100</u> | <u>2463630</u> | <u>9164186</u> |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH) | <u>507592</u> | <u>2332796</u> | <u>8687947</u> |
| 12. REACTOR SERVICE FACTOR | <u>90.4</u> | <u>55.3</u> | <u>68.0</u> |
| 13. REACTOR AVAILABILITY FACTOR | <u>86.2</u> | <u>53.0</u> | <u>66.0</u> |
| 14. UNIT SERVICE FACTOR | <u>86.2</u> | <u>52.7</u> | <u>65.5</u> |
| 15. UNIT AVAILABILITY FACTOR | <u>86.2</u> | <u>52.7</u> | <u>65.5</u> |
| 16. UNIT CAPACITY FACTOR (Using Net Capability) | <u>78.3</u> | <u>45.7</u> | <u>57.5</u> |
| 17. UNIT CAPACITY FACTOR (Using Design Mwe) | <u>76.9</u> | <u>44.9</u> | <u>56.5</u> |
| 18. UNIT FORCED OUTAGE RATE | <u>12.3</u> | <u>31.0</u> | <u>26.8</u> |
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE & DURATION OF EACH:)
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

$$\text{REACTOR SERVICE FACTOR} = \frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{REACTOR AVAILABILITY FACTOR} = \frac{\text{HOURS REACTOR WAS AVAILABLE TO OPERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT SERVICE FACTOR} = \frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT AVAILABILITY FACTOR} = \frac{\text{HOURS UNIT WAS AVAILABLE TO GENERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT CAPACITY FACTOR} = \frac{\text{NET ELECTRICAL POWER GENERATED}}{[\text{Net Capability or Design (Mwe-Net)}] \times \text{HOURS IN REPORTING PERIOD}} \times 100$$

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

UNIT SHUTDOWNS

DOCKET NO. 50-270

UNIT NAME Oconee Unit 2

DATE 9/9/76

REPORT MONTH August, 1976

| NO. | DATE | TYPE F-FORCED S-SCHEDULED | DURATION (HOURS) | REASON (1) | METHOD OF SHUTTING DOWN THE REACTOR (2) | CORRECTIVE ACTIONS/COMMENTS |
|-----|----------|---------------------------------|---------------------|------------|---|--|
| 10 | 76-08-01 | F | 90.29 | B | 1 | Continuation of previous outage. |
| 11 | 76-08-28 | S | 12.19 | F | 1 | Investigation of noise on loose parts monitoring system. |
| | | | | | | <p>(1) REASON</p> <p>A-EQUIPMENT FAILURE (EXPLAIN)</p> <p>B-MAINT. OR TEST.</p> <p>C-REFUELING</p> <p>D-REGULATORY RESTRICTION</p> <p>E-OPERATOR TRAINING AND LICENSE EXAMINATION</p> <p>F-ADMINISTRATIVE</p> <p>G-OPERATIONAL ERROR (EXPLAIN)</p> <p>H-OTHER (EXPLAIN)</p> <p>(2) METHOD</p> <p>1-MANUAL</p> <p>2-MANUAL SCRAM</p> <p>3-AUTOMATIC SCRAM</p> |

SUMMARY:

Damage to pressurizer insulation resulting from quench tank relief repaired during first monthly outage.

UNIT Oconee Unit 3
DATE 9/9/76
DOCKET NO. 50-287
PREPARED BY L. J. Bare

OPERATING STATUS

1. REPORTING PERIOD: August 1 THROUGH August 31, 1976
GROSS HOURS IN REPORTING PERIOD: 744.00
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2568 NET CAPABILITY
(MWe-Net): 871
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY): (MWe-Net) -
4. REASONS FOR RESTRICTION (IF ANY)
5. NUMBER OF HOURS THE REACTOR WAS CRITICAL
6. REACTOR RESERVE SHUTDOWN HOURS
7. HOURS GENERATOR ON-LINE
8. UNIT RESERVE SHUTDOWN HOURS
9. GROSS THERMAL ENERGY GENERATED (MWH)
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)
11. NET ELECTRICAL ENERGY GENERATED (MWH)
12. REACTOR SERVICE FACTOR
13. REACTOR AVAILABILITY FACTOR
14. UNIT SERVICE FACTOR
15. UNIT AVAILABILITY FACTOR
16. UNIT CAPACITY FACTOR (Using Net Capability)
17. UNIT CAPACITY FACTOR (Using Design Mwe)
18. UNIT FORCED OUTAGE RATE
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE & DURATION OF EACH:)
September 18 - Refueling - 46 days
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

$$\text{REACTOR SERVICE FACTOR} = \frac{\text{HOURS REACTOR WAS CRITICAL}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{REACTOR AVAILABILITY FACTOR} = \frac{\text{HOURS REACTOR WAS AVAILABLE TO OPERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT SERVICE FACTOR} = \frac{\text{HOURS GENERATOR ON LINE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT AVAILABILITY FACTOR} = \frac{\text{HOURS UNIT WAS AVAILABLE TO GENERATE}}{\text{HOURS IN REPORTING PERIOD}} \times 100$$

$$\text{UNIT CAPACITY FACTOR} = \frac{\text{NET ELECTRICAL POWER GENERATED}}{[\text{Net Capability or Design (Mwe-Net)}] \times \text{HOURS IN REPORTING PERIOD}} \times 100$$

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

DOCKET NO. 50-287
UNIT Oconee Unit 3
DATE 9/9/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1976

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

| | |
|----|------------|
| 1 | <u>632</u> |
| 2 | <u>748</u> |
| 3 | <u>837</u> |
| 4 | <u>840</u> |
| 5 | <u>851</u> |
| 6 | <u>857</u> |
| 7 | <u>857</u> |
| 8 | <u>746</u> |
| 9 | <u>857</u> |
| 10 | <u>857</u> |
| 11 | <u>853</u> |
| 12 | <u>850</u> |
| 13 | <u>848</u> |
| 14 | <u>844</u> |
| 15 | <u>849</u> |
| 16 | <u>847</u> |

DAY AVERAGE DAILY POWER LEVEL
(MWe-net)

| | |
|----|------------|
| 17 | <u>726</u> |
| 18 | <u>547</u> |
| 19 | <u>773</u> |
| 20 | <u>840</u> |
| 21 | <u>849</u> |
| 22 | <u>853</u> |
| 23 | <u>853</u> |
| 24 | <u>853</u> |
| 25 | <u>852</u> |
| 26 | <u>852</u> |
| 27 | <u>851</u> |
| 28 | <u>849</u> |
| 29 | <u>843</u> |
| 30 | <u>851</u> |
| 31 | <u>854</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 SHUTDOWNS

DOCKET NO. 50-287

UNIT NAME Oconee Unit 3

DATE 9/9/76

REPORT MONTH August, 1976

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

SUMMARY:

No outages this month.