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FILE NUMBER
MONTHLY REPORT

TO: NRC

FROM: Duke Power Co.
Charlotte, N.C.
W.O. Parker, Jr.

DATE OF DOCUMENT
4-9-76

DATE RECEIVED
4-13-76

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DESCRIPTION
LETTER TRANS THE FOLLOWING:

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

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: Oconee # 1,2, & 3

SAFETY

FOR ACTION/INFORMATION

ENVIRO

SAB 4-13-76

MIPC
W/4 CYS FOR ACTION

INTERNAL DISTRIBUTION

REG FILE
NRC PDR
MCDONALD
S. CHAPMAN
BRANCH CHIEF(L)
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Purple

Sheppard

EXTERNAL DISTRIBUTION

CONTROL NUMBER

LPDR: Walhalla, S.C.
TIC
NSIC

3712

DUKE POWER COMPANY

Regulatory

File 974

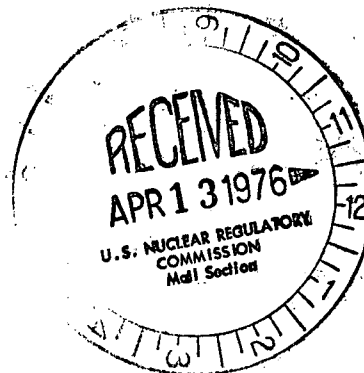
POWER BUILDING

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

April 9, 1976



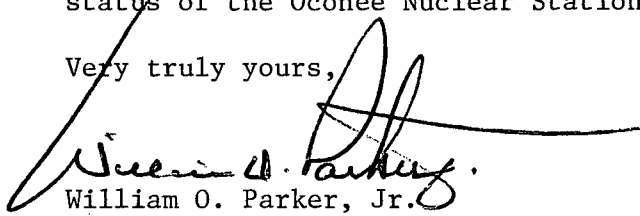
Director
Office of Management Information
and Program Control
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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 March 1976.

Very truly yours,


William O. Parker, Jr.

EDB:mmb

Attachment

CC Mr. Norman C. Moseley

3712

UNIT Oconee Unit 1
 DATE 04/09/76
 DOCKET NO. 50-269
 PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: March 1 THROUGH March 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) NONE
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:)
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

	<u>This Month</u>	<u>Year to Date</u>	<u>Cumulative</u>
5. NUMBER OF HOURS THE REACTOR WAS CRITICAL	<u>9.8</u>	<u>903.0</u>	<u>17675.1</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
7. HOURS GENERATOR ON-LINE	<u>-0-</u>	<u>828.9</u>	<u>1759.6</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>-0-</u>	<u>2084465</u>	<u>36308607</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>-0-</u>	<u>712180</u>	<u>12606900</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>(-)4969</u>	<u>671195</u>	<u>11909844</u>
12. REACTOR SERVICE FACTOR	<u>1.3</u>	<u>41.4</u>	<u>74.4</u>
13. REACTOR AVAILABILITY FACTOR	<u>-0-</u>	<u>41.7</u>	<u>67.7</u>
14. UNIT SERVICE FACTOR	<u>-0-</u>	<u>38.0</u>	<u>66.3</u>
15. UNIT AVAILABILITY FACTOR	<u>-0-</u>	<u>38.0</u>	<u>66.5</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>-0-</u>	<u>35.3</u>	<u>57.6</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>-0-</u>	<u>34.7</u>	<u>56.6</u>
18. UNIT FORCED OUTAGE RATE	<u>-0-</u>	<u>9.0</u>	<u>16.4</u>

Unit became critical on March 31, 1976.

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

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

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

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

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

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

DOCKET NO. 50-269

UNIT Oconee Unit 1

DATE 04/09/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH March 1976

DAY **AVERAGE DAILY POWER LEVEL
(MWe-net)**

1	_____ - _____
2	_____ - _____
3	_____ - _____
4	_____ - _____
5	_____ - _____
6	_____ - _____
7	_____ - _____
8	_____ - _____
9	_____ - _____
10	_____ - _____
11	_____ - _____
12	_____ - _____
13	_____ - _____
14	_____ - _____
15	_____ - _____
16	_____ - _____

DAY **AVERAGE DAILY POWER LEVEL
(MWe-net)**

17	_____ - _____
18	_____ - _____
19	_____ - _____
20	_____ - _____
21	_____ - _____
22	_____ - _____
23	_____ - _____
24	_____ - _____
25	_____ - _____
26	_____ - _____
27	_____ - _____
28	_____ - _____
29	_____ - _____
30	_____ - _____
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

DOCKET NO. 50-269

UNIT NAME Oconee Unit 1

DATE 04/09/76

REPORT MONTH March 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
2	760301	S	744	C	1	Continuation of previous outage (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:

Reactor remained shutdown for refueling. Reactor made critical March 31, 1976.

UNIT Oconee Unit 2
 DATE 04/09/76
 DOCKET NO. 50-270
 PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: March 1 THROUGH March 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) NONE
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:)
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

	<u>This Month</u>	<u>Year to Date</u>	<u>Cumulative</u>
5. NUMBER OF HOURS THE REACTOR WAS CRITICAL	<u>744.0</u>	<u>1946.1</u>	<u>10505.2</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
7. HOURS GENERATOR ON-LINE	<u>744.0</u>	<u>1916.3</u>	<u>10195.7</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>1755743</u>	<u>4624626</u>	<u>24297054</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>598960</u>	<u>1574400</u>	<u>8274956</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>572700</u>	<u>1501397</u>	<u>7856548</u>
12. REACTOR SERVICE FACTOR	<u>100.0</u>	<u>89.1</u>	<u>76.8</u>
13. REACTOR AVAILABILITY FACTOR	<u>100.0</u>	<u>88.1</u>	<u>75.1</u>
14. UNIT SERVICE FACTOR	<u>100.0</u>	<u>87.7</u>	<u>74.5</u>
15. UNIT AVAILABILITY FACTOR	<u>100.0</u>	<u>87.7</u>	<u>74.5</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>88.4</u>	<u>78.9</u>	<u>65.9</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>86.8</u>	<u>77.5</u>	<u>64.7</u>
18. UNIT FORCED OUTAGE RATE	<u>-</u>	<u>12.2</u>	<u>22.9</u>

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

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

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

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

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

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

DOCKET NO. 50-270

UNIT Oconee Unit 2

DATE 04/09/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH March 1976

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	<u>601</u>	17	<u>833</u>
2	<u>692</u>	18	<u>835</u>
3	<u>819</u>	19	<u>834</u>
4	<u>823</u>	20	<u>831</u>
5	<u>817</u>	21	<u>830</u>
6	<u>662</u>	22	<u>831</u>
7	<u>686</u>	23	<u>829</u>
8	<u>831</u>	24	<u>830</u>
9	<u>830</u>	25	<u>829</u>
10	<u>830</u>	26	<u>743</u>
11	<u>828</u>	27	<u>608</u>
12	<u>829</u>	28	<u>616</u>
13	<u>831</u>	29	<u>614</u>
14	<u>833</u>	30	<u>616</u>
15	<u>834</u>	31	<u>616</u>
16	<u>833</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. 50-270

UNIT NAME Oconee Unit 2

DATE 04/09/76

REPORT MONTH March 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <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> </div> <div style="width: 35%;"> <p>(2) METHOD 1-MANUAL 2-MANUAL SCRAM 3-AUTOMATIC SCRAM</p> </div> </div>						

SUMMARY:

No outages this month. Unit operated at reduced power level (3 RCP operation) during latter part of month due to low oil level in RCP motor.

UNIT Oconee Unit 3
 DATE 04/09/76
 DOCKET NO. 50-287
 PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: March 1 THROUGH March 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) NONE

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>419.9</u>	<u>1692.6</u>	<u>8836.8</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
7. HOURS GENERATOR ON-LINE	<u>413.0</u>	<u>1673.5</u>	<u>8622.2</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>945930</u>	<u>3830101</u>	<u>19748151</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>322590</u>	<u>1316160</u>	<u>6761074</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>305928</u>	<u>1256282</u>	<u>6434716</u>
12. REACTOR SERVICE FACTOR	<u>56.4</u>	<u>77.5</u>	<u>78.0</u>
13. REACTOR AVAILABILITY FACTOR	<u>55.5</u>	<u>76.9</u>	<u>80.3</u>
14. UNIT SERVICE FACTOR	<u>55.5</u>	<u>76.6</u>	<u>76.1</u>
15. UNIT AVAILABILITY FACTOR	<u>55.5</u>	<u>76.6</u>	<u>76.1</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>47.2</u>	<u>66.0</u>	<u>65.2</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>46.4</u>	<u>64.9</u>	<u>64.0</u>
18. UNIT FORCED OUTAGE RATE	<u>44.5</u>	<u>23.4</u>	<u>14.0</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:

April 19, 1976

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

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

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

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

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

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

DOCKET NO. 50-287

UNIT Oconee Unit 3

DATE 04/09/76

AVERAGE DAILY UNIT POWER LEVEL

MONTH March 1976

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	-	17	786
2	-	18	786
3	154	19	785
4	624	20	478
5	674	21	-
6	674	22	-
7	677	23	-
8	809	24	-
9	807	25	-
10	810	26	-
11	805	27	-
12	794	28	-
13	792	29	-
14	792	30	-
15	792	31	-
16	789		

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 04/09/76

REPORT MONTH March 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
3	760301	F	59.13	A	1	Continuation of previous outage.
4	760320	F	271.87	H	1	Unit shutdown for inspection of specimen surveillance tubes.

(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:

Replacement of reactor coolant pump seals completed. Reactor remained shutdown at end of month for inspection of surveillance tubes.