

NRC FORM 195  
(2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER

50-269-270-287

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FILE NUMBER

MONTHLY REPORT

TO: U.S. NRC

FROM:

Duke Power CO.  
Charlotte, N.C.  
W. O. Parker Jr.

DATE OF DOCUMENT

7-9-76

DATE RECEIVED

7-16-76

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DESCRIPTION

LETTER TRANS THE FOLLOWING:

PLANT & COMPONENT  
OPERABILITY & AVAILABILITY

ENCLOSURE

MONTHLY REPORT FOR June 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

CRG 7-16-76

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W/4 CYS FOR ACTION

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## DUKE POWER COMPANY

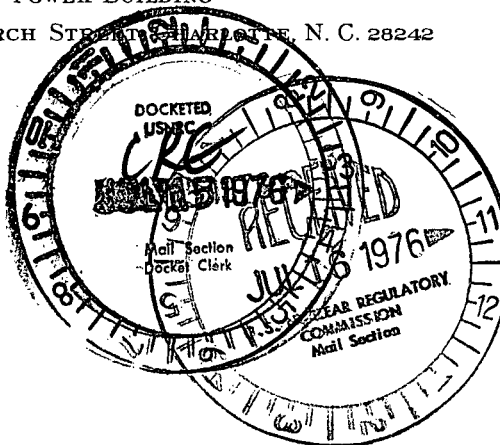
POWER BUILDING

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

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

TELEPHONE: AREA 704  
373-4083

July 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, 50-270, 50-287

Dear Sir:

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

Very truly yours,

William O. Parker, Jr.

EDB:vr  
Attachment

cc: Mr. Norman C. Moseley

UNIT Oconee Unit 1  
DATE 7/9/76  
DOCKET NO. 50-269  
PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: June 1 THROUGH June 30, 1976  
GROSS HOURS IN REPORTING PERIOD: 720.00

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>716.1</u>	<u>2059.0</u>	<u>18831.1</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
7. HOURS GENERATOR ON-LINE	<u>698.3</u>	<u>1833.9</u>	<u>16764.7</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>1680737</u>	<u>4297366</u>	<u>38521508</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>598510</u>	<u>1504760</u>	<u>13399480</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>570643</u>	<u>1412757</u>	<u>12651406</u>
12. REACTOR SERVICE FACTOR	<u>99.5</u>	<u>47.2</u>	<u>72.6</u>
13. REACTOR AVAILABILITY FACTOR	<u>97.9</u>	<u>44.0</u>	<u>65.9</u>
14. UNIT SERVICE FACTOR	<u>97.0</u>	<u>42.0</u>	<u>64.6</u>
15. UNIT AVAILABILITY FACTOR	<u>97.0</u>	<u>42.0</u>	<u>64.7</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>91.0</u>	<u>37.1</u>	<u>56.0</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>89.4</u>	<u>36.5</u>	<u>55.0</u>
18. UNIT FORCED OUTAGE RATE	<u>3.0</u>	<u>5.5</u>	<u>15.6</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 SHUTDOWNS

UNIT NAME Oconee Unit 1DATE 7/9/76REPORT MONTH June, 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
5	760608	F	11.00	H	1	Group 5 control rods dropped during testing
6	760621	F	6.28	A	1	Oil leak on the supply to #12 alterex bearing
7	760627	F	4.44	A	3	Failure of Reactor Coolant System flow indicator
<div><div>(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)</div><div>(2) METHOD 1-MANUAL 2-MANUAL   SCRAM 3-AUTOMATIC   SCRAM</div></div>						

## SUMMARY:

No major outages this month.

DOCKET NO. 50-269  
UNIT Oconee Unit 1  
DATE 7/9/76

### AVERAGE DAILY UNIT POWER LEVEL

MONTH June, 1976

DAY AVERAGE DAILY POWER LEVEL  
(MWe-net)

1	680
2	822
3	785
4	852
5	853
6	855
7	852
8	787
9	333
10	784
11	843
12	849
13	860
14	861
15	859
16	858

DAY AVERAGE DAILY POWER LEVEL  
(MWe-net)

17	857
18	854
19	855
20	853
21	501
22	707
23	839
24	851
25	849
26	851
27	559
28	778
29	838
30	850
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 Oconee Unit 2  
DATE 7/9/76  
DOCKET NO. 50-270  
PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: June 1 THROUGH June 30, 1976  
GROSS HOURS IN REPORTING PERIOD: 720.00

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>0</u>	<u>2112.4</u>	<u>10671.4</u>
6. REACTOR RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
7. HOURS GENERATOR ON-LINE	<u>0</u>	<u>2076.5</u>	<u>10356.0</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>0</u>	<u>4922491</u>	<u>24594919</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>0</u>	<u>1678100</u>	<u>8378656</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>-(2307)</u>	<u>1594674</u>	<u>7949825</u>
12. REACTOR SERVICE FACTOR	<u>0</u>	<u>48.4</u>	<u>67.3</u>
13. REACTOR AVAILABILITY FACTOR	<u>0</u>	<u>47.7</u>	<u>65.8</u>
14. UNIT SERVICE FACTOR	<u>0</u>	<u>47.6</u>	<u>65.3</u>
15. UNIT AVAILABILITY FACTOR	<u>0</u>	<u>47.6</u>	<u>65.3</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>0</u>	<u>41.9</u>	<u>57.5</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>0</u>	<u>41.2</u>	<u>56.5</u>
18. UNIT FORCED OUTAGE RATE	<u>0</u>	<u>36.4</u>	<u>27.6</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:

July 11, 1976

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

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

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

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

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

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

# UNIT SHUTDOWNS

DOCKET NO. 50-270

UNIT NAME Oconee Unit 2

DATE 7/9/76

REPORT MONTH June, 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
6	760601	S	720	C	1	Continuation of previous outage
<div> <div> (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) </div> <div> (2) METHOD  1-MANUAL  2-MANUAL    SCRAM  3-AUTOMATIC    SCRAM </div> </div>						

## SUMMARY:

Reactor remained shut down for refueling outage.

DOCKET NO. 50-270  
UNIT Oconee Unit 2  
DATE 7/6/76

**AVERAGE DAILY UNIT POWER LEVEL**

MONTH June, 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 Ocohee Unit 3  
 DATE 7/9/76  
 DOCKET NO. 50-287  
 PREPARED BY E. D. Blakeman

OPERATING STATUS

1. REPORTING PERIOD: June 1 THROUGH June 30, 1976  
 GROSS HOURS IN REPORTING PERIOD: 720.00
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
 

	<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>720.0</u>	<u>3444.6</u>	<u>10393.3</u>
8. UNIT RESERVE SHUTDOWN HOURS	<u>-</u>	<u>-</u>	<u>-</u>
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>1841499</u>	<u>8252928</u>	<u>24170978</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>639600</u>	<u>2847240</u>	<u>8292154</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>613377</u>	<u>2719856</u>	<u>7898290</u>
12. REACTOR SERVICE FACTOR	<u>100.0</u>	<u>79.6</u>	<u>78.6</u>
13. REACTOR AVAILABILITY FACTOR	<u>100.0</u>	<u>79.0</u>	<u>80.5</u>
14. UNIT SERVICE FACTOR	<u>100.0</u>	<u>78.9</u>	<u>76.9</u>
15. UNIT AVAILABILITY FACTOR	<u>100.0</u>	<u>78.9</u>	<u>76.9</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>97.8</u>	<u>71.5</u>	<u>67.1</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>96.0</u>	<u>70.2</u>	<u>65.9</u>
18. UNIT FORCED OUTAGE RATE	<u>0</u>	<u>21.1</u>	<u>14.8</u>
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE & DURATION OF EACH:)  
September 1, 1976 - Refueling (5 weeks)
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. 50-287

UNIT NAME Oconee Unit 3

DATE 7/9/76

REPORT MONTH June, 1976

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
						<div> <div> (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) </div> <div> (2) METHOD  1-MANUAL  2-MANUAL    SCRAM  3-AUTOMATIC    SCRAM </div> </div>

## SUMMARY:

No outages this month.

DOCKET NO. 50-287  
UNIT Oconee Unit 3  
DATE 7/9/76

### AVERAGE DAILY UNIT POWER LEVEL

MONTH June, 1976

DAY AVERAGE DAILY POWER LEVEL  
(MWe-net)

1	<u>853</u>
2	<u>859</u>
3	<u>857</u>
4	<u>856</u>
5	<u>858</u>
6	<u>858</u>
7	<u>858</u>
8	<u>857</u>
9	<u>845</u>
10	<u>856</u>
11	<u>855</u>
12	<u>856</u>
13	<u>858</u>
14	<u>858</u>
15	<u>847</u>
16	<u>790</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-net)

17	<u>854</u>
18	<u>858</u>
19	<u>856</u>
20	<u>854</u>
21	<u>853</u>
22	<u>854</u>
23	<u>857</u>
24	<u>859</u>
25	<u>858</u>
26	<u>854</u>
27	<u>849</u>
28	<u>838</u>
29	<u>850</u>
30	<u>844</u>
31	<u>-</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.