NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NUMBER 50-269/270/287

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TO:	FROM:	DATE OF DOCUMENT
NRC	Duke Power Co Charlotte, NC W O Parker	9-12-77
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DESCRIPTION

Letter trans the following:

1p

PLANT NAME: Oconee 1-3

9-16-77 ehf

ENCLOSURE

Monthly Report for August 1977
Plant & Component Operability & Availability.
This Report to be used in preparing Gray Book by Plans & Operations.

9p

1 cy Encl Rec'd *

FOR ACTION/INFORMATION

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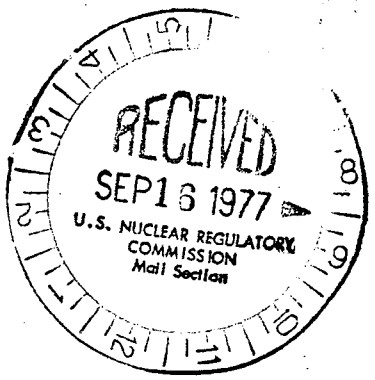
NRC FORM 195 (2-76)

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 12, 1977



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, 1977.

Very truly yours,

William O. Parker, Jr.

William O. Parker, Jr. By HBR

JAR:ge
Attachment

cc: Mr. J. P. O'Reilly

UNIT Oconee Unit 1
DATE 9/12/77
DOCKET NO. 50-269
PREPARED BY J. A. Reavis

OPERATING STATUS

1. REPORTING PERIOD: January THROUGH August, 1977
   GROSS HOURS IN REPORTING PERIOD: 744.00
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2568 NET CAPABILITY (MWe-Net): 860
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY):(MWe-Net)
4. REASONS FOR RESTRICTION (IF ANY)

	This Month	Year to Date	Cumulative
5. NUMBER OF HOURS THE REACTOR WAS CRITICAL	111.13	3835.41	25951.21
6. REACTOR RESERVE SHUTDOWN HOURS	-	-	-
7. HOURS GENERATOR ON-LINE	110.08	3777.64	23741.63
8. UNIT RESERVE SHUTDOWN HOURS	-	-	-
9. GROSS THERMAL ENERGY GENERATED(MWH)	231648	8879906	55265617
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	79940	3065630	19189060
11. NET ELECTRICAL ENERGY GENERATED (MWH)	71946	2902166	18134699
12. REACTOR SERVICE FACTOR	14.94	65.78	71.70
13. REACTOR AVAILABILITY FACTOR	14.80	67.03	68.05
14. UNIT SERVICE FACTOR	14.80	64.79	65.60
15. UNIT AVILABILITY FACTOR	14.80	64.79	65.68
16. UNIT CAPACITY FACTOR (Using Net Capability)	11.24	57.87	58.26
17. UNIT CAPACITY FACTOR (Using Design Mwe)	10.90	56.11	56.49
18. UNIT FORCED OUTAGE RATE	0	27.31	19.41

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

20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:
    September 23, 1977

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

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

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

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

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

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

DOCKET NO. 50-269
UNIT NAME Oconee Unit 1
DATE 9-12-77

UNIT SHUTDOWNS

REPORT MONTH August, 1977

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
14	77-08-05	S	633.92	C	1	Scheduled out for refueling.

(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
4-Other

SUMMARY:

Refueling

DOCKET NO. 50-269
UNIT Oconee Unit 1
DATE 9/12/77

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1977

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	719	17	-
2	707	18	-
3	702	19	-
4	687	20	-
5	327	21	-
6	-	22	-
7	-	23	-
8	-	24	-
9	-	25	-
10	-	26	-
11	-	27	-
12	-	28	-
13	-	29	-
14	-	30	-
15	-	31	-
16	-		

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 9/12/77
DOCKET NO. 50-270
PREPARED BY J. A. Reavis

OPERATING STATUS

1. REPORTING PERIOD: January THROUGH August, 1977
   GROSS HOURS IN REPORTING PERIOD: 744.00
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2568 NET CAPABILITY
   (MWe-Net): 860
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY): (MWe-Net)
4. REASONS FOR RESTRICTION (IF ANY)

		This Month	Year to Date	Cumulative
5.	NUMBER OF HOURS THE REACTOR WAS CRITICAL	131.76	3680.43	17907.46
6.	REACTOR RESERVE SHUTDOWN HOURS	-	-	-
7.	HOURS GENERATOR ON-LINE	80.42	3619.89	17385.43
8.	UNIT RESERVE SHUTDOWN HOURS	-	-	-
9.	GROSS THERMAL ENERGY GENERATED (MWH)	105199	8969716	41730978
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	31190	3038760	14194366
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	17514	2891656	13475779
12.	REACTOR SERVICE FACTOR	17.71	63.12	68.58
13.	REACTOR AVAILABILITY FACTOR	10.81	62.20	67.01
14.	UNIT SERVICE FACTOR	10.81	62.08	66.58
15.	UNIT AVILABILITY FACTOR	10.81	62.08	66.58
16.	UNIT CAPACITY FACTOR (Using Net Capability)	2.74	57.66	60.01
17.	UNIT CAPACITY FACTOR (Using Design Mwe)	2.65	55.91	58.18
18.	UNIT FORCED OUTAGE RATE	0	2.26	21.52

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

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

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

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

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

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

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

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

DOCKET NO. 50-270
UNIT NAME Oconee Unit 2
DATE 9-12-77

UNIT SHUTDOWNS

REPORT MONTH August, 1977

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
3	77-08-01	S	663.58	A	1	Steam Generator Maintenance Control rod drive stator failure.

(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
4-Other

SUMMARY:

One major outage this month.

DOCKET NO. 50-270
UNIT Oconee Unit 2
DATE 9/12/77

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1977

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	-	17	-
2	-	18	-
3	-	19	-
4	-	20	-
5	-	21	-
6	-	22	-
7	-	23	-
8	-	24	-
9	-	25	-
10	-	26	-
11	-	27	-
12	-	28	30
13	-	29	301
14	-	30	300
15	-	31	540
16	-		

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 3
DATE 9/12/77
DOCKET NO. 50-287
PREPARED BY J. A. Reavis

OPERATING STATUS

1. REPORTING PERIOD: January THROUGH August, 1977
   GROSS HOURS IN REPORTING PERIOD: 744.00
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2568 NET CAPABILITY (MWe-Net): 860
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY):(MWe-Net) _____
4. REASONS FOR RESTRICTION (IF ANY) _____

		This Month	Year to Date	Cumulative
5.	NUMBER OF HOURS THE REACTOR WAS CRITICAL	716.21	4886.61	18289.31
6.	REACTOR RESERVE SHUTDOWN HOURS	-	-	-
7.	HOURS GENERATOR ON-LINE	708.41	4835.84	17859.34
8.	UNIT RESERVE SHUTDOWN HOURS	-	-	-
9.	GROSS THERMAL ENERGY GENERATED(MWH)	1729016	11995745	42363962
10.	GROSS ELECTRICAL ENERGY GENERATED (MWH)	591700	4167840	14607284
11.	NET ELECTRICAL ENERGY GENERATED (MWH)	562746	3974272	13907914
12.	REACTOR SERVICE FACTOR	96.26	83.80	76.98
13.	REACTOR AVAILABILITY FACTOR	95.22	83.02	77.25
14.	UNIT SERVICE FACTOR	95.22	82.93	75.17
15.	UNIT AVILABILITY FACTOR	95.22	82.93	75.17
16.	UNIT CAPACITY FACTOR (Using Net Capability)	87.95	79.25	68.07
17.	UNIT CAPACITY FACTOR (Using Design Mwe)	85.27	76.84	65.99
18.	UNIT FORCED OUTAGE RATE	4.78	17.07	14.83

19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE & DURATION OF EACH:)
    Refueling - October 15, 1977
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP:

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

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

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

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

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

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

DOCKET NO. 50-287
UNIT NAME Oconee Unit 3
DATE 9-12-77

UNIT SHUTDOWNS

REPORT MONTH August, 1977

NO.	DATE	TYPE F-FORCED S-SCHEDULED	DURATION (HOURS)	REASON (1)	METHOD OF SHUTTING DOWN THE REACTOR (2)	CORRECTIVE ACTIONS/COMMENTS
9	77-08-20	F	35.59	A	1	Short in stator caused control rod to drop into core.

(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
4-Other

SUMMARY:

No major outage this month.

DOCKET NO. 50-287
UNIT Oconee Unit 3
DATE 9/12/77

AVERAGE DAILY UNIT POWER LEVEL

MONTH August, 1977

DAY	AVERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	742	17	845
2	824	18	850
3	837	19	849
4	837	20	467
5	842	21	-
6	849	22	299
7	851	23	450
8	850	24	640
9	851	25	678
10	847	26	750
11	851	27	839
12	847	28	842
13	848	29	847
14	850	30	847
15	850	31	851
16	849		

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.