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50-269/270/287

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TO: NRC

FROM: Duke Power Co
Charlotte, NC
W O Parker

MONTHLY REPORT
DATE OF DOCUMENT 9-12-77
DATE RECEIVED 9-16-77

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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

MIPC W/2 CYS FOR ACTION	

INTERNAL DISTRIBUTION

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CONTROL NUMBER

mon rpt
472590408/B

DUKE POWER COMPANY

POWER BUILDING

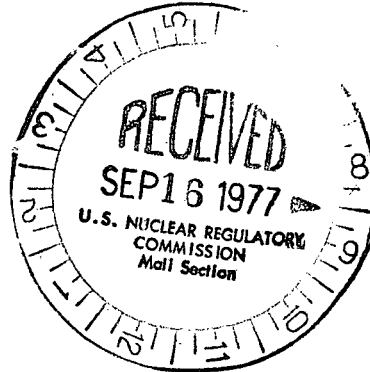
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

September 12, 1977

TELEPHONE: AREA 704
373-4083

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 [Signature]*

JAR:ge
Attachment

cc: Mr. J. P. O'Reilly

772590408

UN 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) _____
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	-	-	-
7. HOURS GENERATOR ON-LINE	<u>110.08</u>	<u>3777.64</u>	<u>23741.63</u>
8. UNIT RESERVE SHUTDOWN HOURS	-	-	-
9. GROSS THERMAL ENERGY GENERATED (MWH)	<u>231648</u>	<u>8879906</u>	<u>55265617</u>
10. GROSS ELECTRICAL ENERGY GENERATED (MWH)	<u>79940</u>	<u>3065630</u>	<u>19189060</u>
11. NET ELECTRICAL ENERGY GENERATED (MWH)	<u>71946</u>	<u>2902166</u>	<u>18134699</u>
12. REACTOR SERVICE FACTOR	<u>14.94</u>	<u>65.78</u>	<u>71.70</u>
13. REACTOR AVAILABILITY FACTOR	<u>14.80</u>	<u>67.03</u>	<u>68.05</u>
14. UNIT SERVICE FACTOR	<u>14.80</u>	<u>64.79</u>	<u>65.60</u>
15. UNIT AVILABILITY FACTOR	<u>14.80</u>	<u>64.79</u>	<u>65.68</u>
16. UNIT CAPACITY FACTOR (Using Net Capability)	<u>11.24</u>	<u>57.87</u>	<u>58.26</u>
17. UNIT CAPACITY FACTOR (Using Design Mwe)	<u>10.90</u>	<u>56.11</u>	<u>56.49</u>
18. UNIT FORCED OUTAGE RATE	<u>0</u>	<u>27.31</u>	<u>19.41</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:
September 23, 1977

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

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

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

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

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

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

UNIT SHUTDOWNS

DOCKET NO. 50-269

UNIT NAME Ocone Unit 1

DATE 9-12-77

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	<p>Scheduled out for refueling.</p> <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> <p>(2) METHOD 1-MANUAL 2-MANUAL SCRAM 3-AUTOMATIC SCRAM 4-Other</p>

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	<u>719</u>	17	<u>-</u>
2	<u>707</u>	18	<u>-</u>
3	<u>702</u>	19	<u>-</u>
4	<u>687</u>	20	<u>-</u>
5	<u>327</u>	21	<u>-</u>
6	<u>-</u>	22	<u>-</u>
7	<u>-</u>	23	<u>-</u>
8	<u>-</u>	24	<u>-</u>
9	<u>-</u>	25	<u>-</u>
10	<u>-</u>	26	<u>-</u>
11	<u>-</u>	27	<u>-</u>
12	<u>-</u>	28	<u>-</u>
13	<u>-</u>	29	<u>-</u>
14	<u>-</u>	30	<u>-</u>
15	<u>-</u>	31	<u>-</u>
16	<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.

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) _____
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	-	-	-
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:

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

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

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

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

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

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

UNIT SHUTDOWNS

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

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. <div style="display: flex; justify-content: space-between; font-size: small;"> <div style="width: 45%;"> <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> </div> <div style="width: 45%;"> <p>(2) METHOD</p> <p>1-MANUAL</p> <p>2-MANUAL SCRAM</p> <p>3-AUTOMATIC SCRAM</p> <p>4-Other</p> </div> </div>

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

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

UN 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) _____
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 AVILABILITY 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:)
 Refueling - October 15, 1977
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 9-12-77

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. <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <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> </div> <div style="width: 48%;"> <p>(2) METHOD</p> <p>1--MANUAL</p> <p>2--MANUAL SCRAM</p> <p>3--AUTOMATIC SCRAM</p> <p>4--Other</p> </div> </div>

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	<u>742</u>	17	<u>845</u>
2	<u>824</u>	18	<u>850</u>
3	<u>837</u>	19	<u>849</u>
4	<u>837</u>	20	<u>467</u>
5	<u>842</u>	21	<u>-</u>
6	<u>849</u>	22	<u>299</u>
7	<u>851</u>	23	<u>450</u>
8	<u>850</u>	24	<u>640</u>
9	<u>851</u>	25	<u>678</u>
10	<u>847</u>	26	<u>750</u>
11	<u>851</u>	27	<u>839</u>
12	<u>847</u>	28	<u>842</u>
13	<u>848</u>	29	<u>847</u>
14	<u>850</u>	30	<u>847</u>
15	<u>850</u>	31	<u>851</u>
16	<u>849</u>		

DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

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