



DUKE POWER COMPANY

POWER BUILDING

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

September 15, 1978

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

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, 1978.

Very truly yours,

*William O. Parker Jr.*

William O. Parker, Jr.

*by WAH*

JAR:scs  
Attachments

cc: Mr. T. Cintula  
Mr. J. P. O'Reilly

780880307

*Aug  
5/11*

OPERATING DATA REPORT

DOCKET NO. 50-269  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

OPERATING STATUS

1. Unit Name: Oconee Unit 1
2. Reporting Period: August, 1978
3. Licensed Thermal Power (MWt): 2568
4. Nameplate Rating (Gross MWe): 934
5. Design Electrical Rating (Net MWe): 887
6. Maximum Dependable Capacity (Gross MWe): 899
7. Maximum Dependable Capacity (Net MWe): 860
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  
None

Notes

Year-to-date and cumulative capacity factors are calculated using a weighted average for maximum dependable capacity.

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: \_\_\_\_\_

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>5,831.0</u>	<u>44,952.0</u>
12. Number Of Hours Reactor Was Critical	<u>695.9</u>	<u>4,844.1</u>	<u>32,583.1</u>
13. Reactor Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
14. Hours Generator On-Line	<u>670.4</u>	<u>4,780.4</u>	<u>30,202.1</u>
15. Unit Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,457,934</u>	<u>11,819,152</u>	<u>70,442,007</u>
17. Gross Electrical Energy Generated (MWH)	<u>495,800</u>	<u>4,113,750</u>	<u>24,423,390</u>
18. Net Electrical Energy Generated (MWH)	<u>466,991</u>	<u>3,914,326</u>	<u>23,091,253</u>
19. Unit Service Factor	<u>90.1</u>	<u>82.0</u>	<u>67.2</u>
20. Unit Availability Factor	<u>90.1</u>	<u>82.0</u>	<u>67.3</u>
21. Unit Capacity Factor (Using MDC Net)	<u>73.0</u>	<u>78.1</u>	<u>59.4</u>
22. Unit Capacity Factor (Using DER Net)	<u>70.8</u>	<u>75.7</u>	<u>57.9</u>
23. Unit Forced Outage Rate	<u>9.9</u>	<u>18.0</u>	<u>18.6</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling - 6 week</u>			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_

26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

**UNIT SHUTDOWNS AND POWER REDUCTIONS**

DOCKET NO. 50-269  
 UNIT NAME Oconee Unit 1  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

REPORT MONTH August, 1978

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
17	78-08-02	F	12.90	A	3		HA	INSTRU	Malfunction in trip mechanism while performing test PT/290/05.
18	78-08-03	F	42.11	A	--		RB	CRDRVE	Replaced CRD stator on Rod 10 Gp 1.
19	78-08-05	F	18.63	A	1		HJ	PIPEXX	Crack in turbine extraction line to "B" HP heaters.
20	78-08-07	F	--	D	--		RC	FUELXX	Xenon hold.
21	78-08-18	F	--	D	--		RC	FUELXX	Indicated incore tilt problem.
22	78-08-25	F	--	A	--		RB	CRDRVE	Control Rod 1 on Gp. 7 dropped because of a stator problem.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance of Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I - Same Source

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-269  
 UNIT Oconee Unit 1  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

MONTH August, 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	853	17	839
2	747	18	809
3	-	19	736
4	-	20	741
5	-	21	743
6	362	22	742
7	593	23	752
8	763	24	813
9	823	25	790
10	846	26	402
11	840	27	405
12	841	28	422
13	831	29	442
14	843	30	444
15	843	31	437
16	842		

**INSTRUCTIONS**

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

BUCKET NO: 50-269  
UNIT: Oconee Unit 1  
DATE: 9-15-78

NARRATIVE SUMMARY

MONTH: August, 1978

The month began with Unit 1 operating at near rated power. On August 2 during a weekly simulated turbine trip test PT/290/05, the unit tripped due to a malfunction in the trip mechanism. A reactor trip followed in which the CRD stator on Group 1 Rod 10 had to be changed out before returning to service.

Shortly after returning to service on August 5, the unit was forced off to repair a crack in the "B" HP heater extraction line near the turbine. The reactor remained critical during this period and the unit was returned to service again on August 6 at 00:03 hrs. After normal xenon hold, near rated power was reached on August 9.

Power was reduced to 80% on August 18 to investigate the indication of an incore tilt problem. After evaluation of the problem, power was increased and reached near rated power on August 23.

On August 25 control rod 1 on group 7 dropped because of a stator problem and caused a runback in power. Power level of 53% was established and a decision was reached to operate at this level until the refueling outage which is to begin on September 2.

MONTHLY REFUELING INFORMATION REQUEST

1. Facility name: Oconee Unit 1
2. Scheduled next refueling shutdown: -
3. Scheduled restart following refueling: October 13, 1978
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment? Yes.  
If yes, what will these be? Amendment to incorporate technical specifications for Cycle 5.  
Submitted June 26, 1978
5. If no, has reload design and core configuration been reviewed by Safety Review Committee regarding unreviewed safety questions? \_\_\_\_\_.  
If no, when is review scheduled? \_\_\_\_\_
5. Scheduled date(s) for submitting proposed licensing action and supporting information: See Item 4
6. Important licensing considerations (new or different design or supplier, unreviewed design or performance analysis methods, significant changes in design or new operating procedures). None
7. Number of fuel assemblies (a) in the core: 177.  
(b) in the spent fuel pool: 109.
8. Present licensed fuel pool capacity: 306 in Oconee 1 & 2 pool.  
Size of requested or planned increase: no increase planned.
9. Projected date of last refueling which can be accommodated by present licensed capacity: 3/3/80 assuming no transfers to McGuire.

DUKE POWER COMPANY

Date: September 15, 1978

Name of Contact: J. A. Reavis

OPERATING DATA REPORT

DOCKET NO. 50-270  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

OPERATING STATUS

1. Unit Name: Oconee Unit 2
2. Reporting Period: August, 1978
3. Licensed Thermal Power (MWt): 2568
4. Nameplate Rating (Gross MWe): 934
5. Design Electrical Rating (Net MWe): 887
6. Maximum Dependable Capacity (Gross MWe): 899
7. Maximum Dependable Capacity (Net MWe): 860
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  
None

Notes

Year-to-date & cumulative capacity factors are calculated using a weighted average for maximum dependable capacity.

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: \_\_\_\_\_

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>5,831.0</u>	<u>34,872.0</u>
12. Number Of Hours Reactor Was Critical	<u>488.8</u>	<u>4,671.0</u>	<u>24,358.5</u>
13. Reactor Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
14. Hours Generator On-Line	<u>472.6</u>	<u>4,615.9</u>	<u>23,698.9</u>
15. Unit Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,092,429</u>	<u>11,454,374</u>	<u>56,153,249</u>
17. Gross Electrical Energy Generated (MWH)	<u>367,030</u>	<u>3,911,310</u>	<u>19,114,036</u>
18. Net Electrical Energy Generated (MWH)	<u>344,800</u>	<u>3,727,909</u>	<u>18,137,092</u>
19. Unit Service Factor	<u>63.5</u>	<u>79.2</u>	<u>68.0</u>
20. Unit Availability Factor	<u>63.5</u>	<u>79.2</u>	<u>68.0</u>
21. Unit Capacity Factor (Using MDC Net)	<u>53.9</u>	<u>74.3</u>	<u>60.0</u>
22. Unit Capacity Factor (Using DER Net)	<u>52.3</u>	<u>72.1</u>	<u>58.6</u>
23. Unit Forced Outage Rate	<u>36.5</u>	<u>20.8</u>	<u>23.1</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): <u>Refueling November 5, 1978</u>			

25. If Shut Down At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_

26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	<u>      </u>	<u>      </u>
INITIAL ELECTRICITY	<u>      </u>	<u>      </u>
COMMERCIAL OPERATION	<u>      </u>	<u>      </u>



**UNIT SHUTDOWNS AND POWER REDUCTIONS**

DOCKET NO. 50-270

UNIT NAME Oconee Unit 2

DATE 9-15-78

COMPLETED BY J. A. Reavis

TELEPHONE (704) 373-8552

REPORT MONTH August, 1978

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
28	78-08-11	F	--	A	--		CB	PUMPXX	Power reduced to check seal leakage instrumentation on "B" RCP.
29	78-08-11	F	34.70	G	3		IA	INSTRU	Reactor tripped on flux/flow imbalance when operator took 2B2 RCP off. NI channels C & D readings were above trip point.
30	78-08-12	F	--	B	--		CB	PUMPXX	Hold for seal leakage evaluation on 2B1 and 2B2 RCP's.
31	78-08-12	F	227.20	A	1		CB	PUMPXX	Replace seals on 2B1 and 2B2 RCP's.
32	78-08-22	F	--	D	--		MA	ZZZZZZ	Holds at 40%, 45%, and 50% power due to radioactive waste storage space.
33	78-08-24	F	--	D	--		RC	FUELXX	Xenon hold at 90% power.

<sup>1</sup>  
F: Forced  
S: Scheduled

<sup>2</sup>  
Reason:  
A-Equipment Failure (Explain)  
B-Maintenance of Test  
C-Refueling  
D-Regulatory Restriction  
E-Operator Training & License Examination  
F-Administrative  
G-Operational Error (Explain)  
H-Other (Explain)

<sup>3</sup>  
Method:  
1-Manual  
2-Manual Scram.  
3-Automatic Scram.  
4-Other (Explain)

<sup>4</sup>  
Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
Exhibit I - Same Source

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-270  
 UNIT NAME Oconee Unit 2  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

REPORT MONTH August, 1978

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
34	78-08-24	F	9.49	G	3		CB	VESSEL	While placing spray valve (2-RC-1) in auto the reactor tripped due to low press. in the RC system.
35	78-08-24	F	--	D	--		RC	FUELXX	Xenon hold.
36	78-08-25	F	--	D	--		MA	ZZZZZZ	Holding for radioactive waste storage space.
37	78-08-26	F	--	D	--		RC	FUELXX	Xenon hold at 90% power.

<sup>1</sup>  
 F: Forced  
 S: Scheduled

<sup>2</sup>  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance of Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

<sup>3</sup>  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

<sup>4</sup>  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG-0161)

<sup>5</sup>  
 Exhibit I - Same Source

**AVERAGE DAILY UNIT POWER LEVEL**

DOCKET NO. 50-270

UNIT Oconee Unit 2

DATE 9-15-78

COMPLETED BY J. A. Reavis

TELEPHONE (704) 373-8552

MONTH August, 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	825	17	-
2	823	18	-
3	819	19	-
4	812	20	-
5	813	21	-
6	824	22	144
7	823	23	386
8	822	24	448
9	813	25	317
10	823	26	698
11	166	27	811
12	25	28	823
13	-	29	822
14	-	30	819
15	-	31	812
16	-		

**INSTRUCTIONS**

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.

DOCKET NO: 50-270

UNIT: Oconee Unit 2

DATE: 9-15-78

NARRATIVE SUMMARY

MONTH: August, 1978

Oconee 2 operated at near rated power until August 8 when a 5% reduction in power was made for maintenance on the discharge control valve for 2D2 heater drain pump (2HD-234). Near rated power was reached again on August 9.

On August 11 power was reduced to 75% to check seal leakage instrumentation on the 2B2 RCP. The reactor tripped on flux/flow imbalance when the 2B2 RCP was removed from service because of high readings on NI channels C & D. The unit returned to service on August 12 and came to 30% power for the evaluation of 2B1 and 2B2 RCP seal leakage flow. This flow indicated too high for operation and the unit was removed from service for seal replacement.

The unit was on line again on August 22 with a slow power increase due to the availability of radioactive waste storage space.

While in a xenon hold at 90% power on August 24 the reactor tripped on low RCS pressure while placing spray valve (2-RC-1) in auto. The unit returned to service on August 25 and reached near rated power on August 27. This power level was continued the remainder of the month.



OPERATING DATA REPORT

DOCKET NO. 50-287  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

OPERATING STATUS

1. Unit Name: Oconee Unit 3
2. Reporting Period: August, 1978
3. Licensed Thermal Power (MWt): 2568
4. Nameplate Rating (Gross MWe): 934
5. Design Electrical Rating (Net MWe): 887
6. Maximum Dependable Capacity (Gross MWe): 899
7. Maximum Dependable Capacity (Net MWe): 860
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  
None

**Notes**

Year-to-date & cumulative capacity factors are calculated using a weighted average for maximum dependable capacity.

9. Power Level To Which Restricted, If Any (Net MWe): None
10. Reasons For Restrictions, If Any: \_\_\_\_\_

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	<u>744.0</u>	<u>5,831.0</u>	<u>32,519.0</u>
12. Number Of Hours Reactor Was Critical	<u>742.0</u>	<u>4,832.1</u>	<u>24,996.7</u>
13. Reactor Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
14. Hours Generator On-Line	<u>738.4</u>	<u>4,717.3</u>	<u>24,291.0</u>
15. Unit Reserve Shutdown Hours	<u>-</u>	<u>-</u>	<u>-</u>
16. Gross Thermal Energy Generated (MWH)	<u>1,848,612</u>	<u>11,464,054</u>	<u>57,697,374</u>
17. Gross Electrical Energy Generated (MWH)	<u>644,400</u>	<u>3,999,360</u>	<u>19,951,204</u>
18. Net Electrical Energy Generated (MWH)	<u>615,284</u>	<u>3,812,792</u>	<u>18,985,399</u>
19. Unit Service Factor	<u>99.2</u>	<u>80.9</u>	<u>74.7</u>
20. Unit Availability Factor	<u>99.2</u>	<u>80.9</u>	<u>74.7</u>
21. Unit Capacity Factor (Using MDC Net)	<u>96.2</u>	<u>76.0</u>	<u>67.4</u>
22. Unit Capacity Factor (Using DER Net)	<u>93.2</u>	<u>73.7</u>	<u>65.8</u>
23. Unit Forced Outage Rate	<u>0.8</u>	<u>3.5</u>	<u>12.4</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
None

25. If Shut Down At End Of Report Period, Estimated Date of Startup: \_\_\_\_\_
26. Units In Test Status (Prior to Commercial Operation):

	Forecast	Achieved
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-287  
 UNIT NAME Oconee Unit 3  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

REPORT MONTH August, 1978

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
27	78-08-08	F	2.65	A	3		HA	CKTBRK	MCC 3XA tripped causing loss of power to EHC system pumps.
28	78-08-08	F	--	D	--		RC	FUELXX	Xenon hold.
29	78-08-25	F	2.98	A	3		CH	INSTRU	Swing in feedwater system caused flux/flow imbalance tripping reactor.
30	78-08-25	F	--	D	--		RC	FUELXX	Xenon hold.

1  
 F: Forced  
 S: Scheduled

2  
 Reason:  
 A-Equipment Failure (Explain)  
 B-Maintenance or Test  
 C-Refueling  
 D-Regulatory Restriction  
 E-Operator Training & License Examination  
 F-Administrative  
 G-Operational Error (Explain)  
 H-Other (Explain)

3  
 Method:  
 1-Manual  
 2-Manual Scram.  
 3-Automatic Scram.  
 4-Other (Explain)

4  
 Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NURIG-0161)

5  
 Exhibit I - Same Source

**AVERAGE DAILY UNIT POWER LEVEL**

DOCKET NO. 50-287  
 UNIT Oconee Unit 3  
 DATE 9-15-78  
 COMPLETED BY J. A. Reavis  
 TELEPHONE (704) 373-8552

MONTH August, 1978

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	847	17	849
2	855	18	853
3	852	19	852
4	851	20	852
5	851	21	852
6	850	22	850
7	852	23	841
8	613	24	846
9	805	25	512
10	847	26	799
11	845	27	836
12	854	28	840
13	855	29	846
14	845	30	846
15	848	31	846
16	846		

**INSTRUCTIONS**

On this format, list the average daily unit power level in MWe-Net for each day in the reporting month. Compute to the nearest whole megawatt.



DOCKET NO: 50-287

UNIT: Oconee Unit 3

DATE: 9-15-78

NARRATIVE SUMMARY

MONTH: August, 1978

The unit ran at near rated power until a trip on August 8 caused by a power loss to the EHC system pumps when the 3XA (switchgear) MCC tripped. Power was restored and the unit returned to service the same day and near rated power was reached on August 9. On August 25 the unit tripped because of flux/flow imbalance experienced during a swing in the feedwater flow. Again the unit was returned to service the same day and after reaching near rated power on August 26, remained at this level the duration of the month.



CONEE NUCLEAR STATION  
MONTHLY OPERATING REPORT  
July, 1978

1. Personnel Exposure

For the month of July no individual(s) exceeded 10 percent of their allowable annual radiation dose limit.

2. Radioactive Waste Releases

The total station liquid release for July has been compared with the Technical Specifications annual value of 15 curies; the total release for July was less than 10 percent of this limit.

The total station gaseous release for July has been compared to the derived Technical Specifications annual value of 51,000 curies; the total release for July was less than 10 percent of this limit.