

Duke Power Company  
Electric Center  
P.O. Box 1006  
Charlotte, N.C. 28201-1006



**DUKE POWER**

May 14, 1993

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

RE: Catawba Nuclear Station  
Docket No. 50-413 and -414  
File: GS-801.01

Dear Sir:

Please find attached information concerning the performance and operating status of the Catawba Nuclear Station for the month of April, 1993.

Very truly yours,

*E.O. McCraw/ORB*

E. O. McCraw, Manager  
Operations, Performance & Automation

EOM/raw  
Attachments

xc: Stewart D. Ebnetter  
Regional Administrator/Region II  
U.S. Nuclear Regulatory Commission  
101 Marietta Street, NW, Suite 2900  
Atlanta, GA 30323

INPO Records Center  
Suite 1500  
1100 Circle 75 Parkway  
Atlanta, GA 30323

American Nuclear Insurers  
c/o Dottie Sherman, ANI Library  
Town Center, Suite 300S  
29 South Main Street  
West Hartford, CT 06107-2445

Bob Martin  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Ms. Margaret Aucoin  
Nuclear Assurance Corporation  
Suite 200  
655 Engineering Drive  
Norcross, GA 30092-2843

W. T. Orders  
Senior Resident Inspector  
Catawba Nuclear Station

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PDR ADDCK 05000413  
R PDR

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U.S. NRC - Catawba

May 14, 1993

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bc: K. S. Canady (EC08H)  
B. T. Faulkenberry (EC07C)  
R. C. Futrell (CNS)  
T. E. Mooney (EC05N)  
B. J. Horsley (EC03U)  
N. A. Rutherford (EC07I)  
E. G. LaCasse (CNS)  
R. A. Williams (EC07A) (3)  
J. C. Wimbish (EC07B)  
E. C. Fisher (MNS)  
B. W. Walsh (PB02L)  
S. D. Galloway (CNS)  
C. D. Denton (PB05E)  
J. S. Forbes (CNS)  
Candace Paton (PB02L)  
G. A. Copp (EC050) (File)

# OPERATING DATA REPORT

## OPERATING STATUS

1. Unit Name: Catawba 1
2. Reporting Period: April 1, 1993-April 30, 1993
3. Licensed Thermal Power (MWt): 3411
4. Nameplate Rating (Gross MWe): 1305\*
5. Design Electrical Rating (Net MWe): 1145
6. Maximum Dependable Capacity (Gross MWe): 1192
7. Maximum Dependable Capacity (Net MWe): 1129
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: \_\_\_\_\_

DOCKET NO. 50-413  
 DATE May 14, 1993  
 COMPLETED BY R.A. Williams  
 TELEPHONE 704-382-5346

Notes \*Nameplate Rating (Gross MWe) calculated as 1450.000 MVA x .90 power factor per Page iii, NUREG-0020.

9. Power Level To Which Restricted, If Any (Net MWe): \_\_\_\_\_
10. Reason For Restrictions, If any: \_\_\_\_\_

	This Month	Yr.-to-Date	Cumulative
11. Hours In Reporting Period	719.0	2879.0	68712.0
12. Number Of Hours Reactor Was Critical	719.0	2879.0	51665.6
13. Reactor Reserve Shutdown Hours	--0--	--0--	--0--
14. Hours Generator On-Line	719.0	2879.0	50613.8
15. Unit Reserve Shutdown Hours	--0--	--0--	--0--
16. Gross Thermal Energy Generated (MWH)	2322940	9591321	164128129
17. Gross Electrical Energy Generated (MWH)	825429	3432236	57757455
18. Net Electrical Energy Generated (MWH)	781709	3255115	54220356
19. Unit Service Factor	100.0	100.0	73.7
20. Unit Availability Factor	100.0	100.0	73.7
21. Unit Capacity Factor (Using MDC Net)	96.3	100.2	69.6
22. Unit Capacity Factor (Using DER Net)	95.0	98.8	68.9
23. Unit Forced Outage Rate	0.0	0.0	10.5
24. Shutdown Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling - October 20, 1993 - 75 days			

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

INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

## OPERATING DATA REPORT

DOCKET NO	50-413
UNIT	Catawba 1
DATE	May 14, 1993
COMPLETED BY	R.A. Williams
TELEPHONE	704-382-5346

MONTH April, 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	10.0
2	10.0
3	10.0
4	10.0
5	10.0
6	10.0
7	10.0
8	10.0
9	10.0
10	10.0
11	10.0
12	10.0
13	10.0
14	10.0
15	10.0
16	10.0
17	10.0
18	10.0
19	10.0
20	10.0
21	10.0
22	10.0
23	10.0
24	10.0
25	10.0
26	10.0
27	10.0
28	10.0
29	10.0
30	10.0
31	10.0
32	10.0
33	10.0
34	10.0
35	10.0
36	10.0
37	10.0
38	10.0
39	10.0
40	10.0
41	10.0
42	10.0
43	10.0
44	10.0
45	10.0
46	10.0
47	10.0
48	10.0
49	10.0
50	10.0
51	10.0
52	10.0
53	10.0
54	10.0
55	10.0
56	10.0
57	10.0
58	10.0
59	10.0
60	10.0
61	10.0
62	10.0
63	10.0
64	10.0
65	10.0
66	10.0
67	10.0
68	10.0
69	10.0
70	10.0
71	10.0
72	10.0
73	10.0
74	10.0
75	10.0
76	10.0
77	10.0
78	10.0
79	10.0
80	10.0
81	10.0
82	10.0
83	10.0
84	10.0
85	10.0
86	10.0
87	10.0
88	10.0
89	10.0
90	10.0
91	10.0
92	10.0
93	10.0
94	10.0
95	10.0
96	10.0
97	10.0
98	10.0
99	10.0
100	10.0

<u>DAY</u>	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	10.0
2	10.0
3	10.0
4	10.0
5	10.0
6	10.0
7	10.0
8	10.0
9	10.0
10	10.0
11	10.0
12	10.0
13	10.0
14	10.0
15	10.0
16	10.0
17	10.0
18	10.0
19	10.0
20	10.0
21	10.0
22	10.0
23	10.0
24	10.0
25	10.0
26	10.0
27	10.0
28	10.0
29	10.0
30	10.0
31	10.0
32	10.0
33	10.0
34	10.0
35	10.0
36	10.0
37	10.0
38	10.0
39	10.0
40	10.0
41	10.0
42	10.0
43	10.0
44	10.0
45	10.0
46	10.0
47	10.0
48	10.0
49	10.0
50	10.0
51	10.0
52	10.0
53	10.0
54	10.0
55	10.0
56	10.0
57	10.0
58	10.0
59	10.0
60	10.0
61	10.0
62	10.0
63	10.0
64	10.0
65	10.0
66	10.0
67	10.0
68	10.0
69	10.0
70	10.0
71	10.0
72	10.0
73	10.0
74	10.0
75	10.0
76	10.0
77	10.0
78	10.0
79	10.0
80	10.0
81	10.0
82	10.0
83	10.0
84	10.0
85	10.0
86	10.0
87	10.0
88	10.0
89	10.0
90	10.0
91	10.0
92	10.0
93	10.0
94	10.0
95	10.0
96	10.0
97	10.0
98	10.0
99	10.0
100	10.0

18 1133

E1 1126

25 1124

26 1122

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1993

DOCKET NO. 50-413  
 UNIT NAME CATAWBA 1  
 DATE 05/14/93  
 COMPLETED BY N. C. SIMMONS  
 TELEPHONE (704)-382-5263

N O .	DATE	(1) T Y P E	DURATION HOURS	(2) R E A S O N	(3) M E T H O D O F S H U T D O W N R/X	LICENSE EVENT REPORT NO.	(4) S Y S - T E M C O D E	(5) C O M P O N E N T C O D E	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
2-P	93- 4-27	S	--	A	--		HC	HTEXCH	REPAIR CONDENSER TUBE LEAK

(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-Operator 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 (NUREG-0161)

(5)  
Exhibit I - Same Source

MONTHLY REFUELING INFORMATION REQUEST

1. Facility name: Catawba, Unit 1
2. Scheduled next refueling shutdown: October 1993
3. Scheduled restart following refueling: January 1994

THE PROJECT MANAGER HAS BEEN ADVISED BY SEPARATE COMMUNICATION OF ANY T.S. CHANGE OR LICENSE AMENDMENT. THEREFORE, QUESTIONS 4 THROUGH 6 WILL NO LONGER BE MAINTAINED IN THIS REPORT.

4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

If yes, what will these be?

If no, has reload design and core configuration been reviewed by Safety Review Committee regarding unreviewed safety questions?

5. Scheduled date(s) for submitting proposed licensing action and supporting information.
6. Important licensing considerations (new or different design or supplier, unreviewed design or performance analysis methods, significant changes in design or new operating procedures).
7. Number of Fuel assemblies (a) in the core: 193  
(b) in the spent fuel pool: 408
8. Present licensed fuel pool capacity: 1418  
Size of requested or planned increase: =
9. Projected date of last refueling which can be accommodated by present licensed capacity: September 2009

DUKE POWER COMPANY

DATE: May 14, 1993

Name of Contact: N. C. Simmons

Phone: 704-382-5263

DOCKET: 50-413

UNIT: Catawba 1

Date: 05/14/93

#### NARRATIVE SUMMARY

MONTH: April 1993

Catawba Unit 1 began the month of April operating at 100% full power. The unit operated at or near 100% full power until 4/27 at 0310 when it started a power decrease. The unit was held at 29% power from 0830 to 4/28 at 0520 to repair a condenser tube leakage. The unit was returned to 100% on 4/29 at 0220. The unit operated at or near 100% for the remainder of the month.

Prepared by N. C. Simmons  
Telephone: 704-382-5263

# OPERATING DATA REPORT

DOCKET NO 50-414

DATE May 14, 1993

COMPLETED BY R.A. Williams

TELEPHONE 704-382-5346

## OPERATING STATUS

1. Unit Name: Catawba 2
2. Reporting Period: April 1, 1993-April 30, 1993
3. Licensed Thermal Power (MWt): 3411
4. Nameplate Rating (Gross MWe): 1305\*
5. Design Electrical Rating (Net MWe): 1145
6. Maximum Dependable Capacity (Gross MWe): 1192
7. Maximum Dependable Capacity (Net MWe): 1129
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons: \_\_\_\_\_

Notes \*Nameplate Rating (Gross MWe) calculated as 1450.000 MVA x .90 power factor per Page iii, NUREG-0020.

9. Power Level To Which Restricted, If Any (Net MWe): \_\_\_\_\_

10. Reason For Restrictions, If any: \_\_\_\_\_

This Month Yr.-to-Date Cumulative

11. Hours In Reporting Period	719.0	2879.0	58728.0
12. Number Of Hours Reactor Was Critical	719.0	1444.2	44090.6
13. Reactor Reserve Shutdown Hours	--0--	--0--	--0--
14. Hours Generator On-Line	701.5	1996.9	43242.5
15. Unit Reserve Shutdown Hours	--0--	--0--	--0--
16. Gross Thermal Energy Generated (MWH)	2225226	4565055	137256201
17. Gross Electrical Energy Generated (MWH)	791343	1627413	48588388
18. Net Electrical Energy Generated (MWH)	749854	1527731	45655057
19. Unit Service Factor	97.6	48.5	73.6
20. Unit Availability Factor	97.6	48.5	73.6
21. Unit Capacity Factor (Using MDC Net)	92.4	47.0	68.7
22. Unit Capacity Factor (Using DER Net)	91.1	46.3	67.9
23. Unit Forced Outage Rate	0.0	0.0	10.7

24. Shutdown 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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# OPERATING DATA REPORT

DOCKET NO 50-414  
 UNIT Catawba 2  
 DATE May 14, 1993  
 COMPLETED BY R.A. Williams  
 TELEPHONE 704-382-5346

MONTH April, 1993

<u>DAY</u>	<u>AVERAGE DAILY POWER LEVEL</u> <u>(MWe-Net)</u>	<u>DAY</u>	<u>AVERAGE DAILY POWER LEVEL</u> <u>(MWe-Net)</u>
1	<u>0</u>	17	<u>1161</u>
2	<u>188</u>	18	<u>1168</u>
3	<u>337</u>	19	<u>1166</u>
4	<u>781</u>	20	<u>1154</u>
5	<u>1077</u>	21	<u>1162</u>
6	<u>1108</u>	22	<u>1168</u>
7	<u>1157</u>	23	<u>1167</u>
8	<u>1162</u>	24	<u>1164</u>
9	<u>1158</u>	25	<u>1159</u>
10	<u>1159</u>	26	<u>1159</u>
11	<u>1158</u>	27	<u>1164</u>
12	<u>1158</u>	28	<u>1162</u>
13	<u>1160</u>	29	<u>1165</u>
14	<u>1156</u>	30	<u>1141</u>
15	<u>1146</u>		
16	<u>1118</u>		

## UNIT SHUTDOWNS AND POWER REDUCTIONS

REPORT MONTH April 1993DOCKET NO. 50-414UNIT NAME CATAWBA 2DATE 05/14/93COMPLETED BY N. C. SIMMONSTELEPHONE (704)-382-5263

N O .	DATE	(1) T Y P E	DURATION HOURS	(2) R E A S O N	(3) M E T- H O D O F S H U T D O W N R/X	LICENSE EVENT REPORT NO.	(4) S Y S- T E M C O D E	(5) C O M P O N E N T C O D E	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
1	93- 4- 1	S	15.57	C	--		RC	FUELXX	END-OF-CYCLE 5 REFUELING OUTAGE
1-P	93- 4- 1	S	--	B	--		HA	TURBIN	HOLD TO PERFORM TURBINE OVERSPEED TRIP TEST
2	93- 4- 1	S	1.98	B	--		HA	TURBIN	TURBINE OVERSPEED TRIP TEST
2-P	93- 4- 2	S	--	B	--		CA	XXXXXX	FLUX MAPPING
3-P	93- 4- 2	S	--	B	--		CA	XXXXXX	FLUX MAPPING
4-P	93- 4- 3	S	--	H	--		HB	PUMPXX	HOLD TO PLACE SECOND FEEDWATER PUMP IN SERVICE
5-P	93- 4- 4	S	--	B	--		CA	XXXXXX	FLUX MAPPING
6-P	93- 4- 4	F	--	A	--		CF	ACCUMU	COLD LEG ACCUMULATOR INOPERABLE

(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-Operator 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 (NUREG-0161)

(5)  
Exhibit I - Same Source

MONTHLY REFUELING INFORMATION REQUEST

1. Facility name: Catawba, Unit 2
2. Scheduled next refueling shutdown: May 1994
3. Scheduled restart following refueling: July 1994

THE PROJECT MANAGER HAS BEEN ADVISED BY SEPARATE COMMUNICATION OF ANY T.S. CHANGE OR LICENSE AMENDMENT. THEREFORE, QUESTIONS 4 THROUGH 6 WILL NO LONGER BE MAINTAINED IN THIS REPORT.

4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?

If yes, what will these be?

If no, has reload design and core configuration been reviewed by Safety Review Committee regarding unreviewed safety questions?

5. Scheduled date(s) for submitting proposed licensing action and supporting information.
6. Important licensing considerations (new or different design or supplier, unreviewed design or performance analysis methods, significant changes in design or new operating procedures).
7. Number of Fuel assemblies (a) in the core: 193  
(b) in the spent fuel pool: 356
8. Present licensed fuel pool capacity: 1418  
Size of requested or planned increase: -
9. Projected date of last refueling which can be accommodated by present licensed capacity: September 2011

DUKE POWER COMPANY

DATE: May 14, 1993

Name of Contact: N. C. Simmons

Phone: 704-382-5263

DOCKET: 50-414

UNIT: Catawba 2

Date: 04/14/93

#### NARRATIVE SUMMARY

MONTH: April 1993

Catawba Unit 2 began the month of April in end-of-cycle 5 refueling outage. The unit was placed on-line on 4/1 at 1534, for a total duration of 61.67 days. The unit was held at 18% power from 1730 to 2301 in preparation for the main turbine overspeed trip test. The turbine was tripped off-line at 2301 and was placed back on-line on 4/2 at 0100. During power escalation, the unit held at 20% power from 0405 to 0530 for flux mapping and at 30% power from 1205 to 4/3 at 1238 for flux mapping. The unit held at 56% power from 4/3 at 2200 to 4/4 at 0315 to place a second feedwater pump in service. The unit was held at 75% power from 1300 to 2055 for flux mapping. The unit held at 80% power from 2308 to 4/5 at 0220 when the "C" cold leg accumulator was inoperable due to boron concentration being too high. The unit reached 100% power on 4/5 at 1320. The unit operated at or near 100% full power for the remainder of the month.