

OMAHA PUBLIC POWER DISTRICT  
Fort Calhoun Station (FCS) Unit No. 1

MAY 1995  
Monthly Operating Report

1. OPERATIONS SUMMARY

During the month of May, FCS operated at a nominal 100% power until May 11, 1995, when a manual reactor trip was initiated due to an indicated component cooling water (CCW) leak in the upper oil reservoir of the Reactor Coolant Pump (RCP) RC-3D motor. All four of the RCP motors' upper lube oil coolers were eddy current tested, and a total of 10 tubes were plugged. The plant was returned to power operation on May 15th. On May 24th, the reactor was manually tripped from approximately 97% power due to new indications of a CCW leak into the upper oil reservoir of the RC-3D motor. The plant was taken to cold shutdown and the tube bundles in all four RCP motor upper oil reservoir lube oil coolers were replaced. The plant was returned to power operation on May 29th. Power was increased to a nominal 100% on May 31st.

During performance of daily Reactor Coolant System (RCS) sampling on May 5th, the RCS sample inboard containment isolation valve, HCV-2504A, did not indicate closed as required. Technical Specification (TS) Limiting Condition for Operation (LCO) 2.6(1)a was entered, and the RCS sample outboard containment isolation valve, HCV-2504B, was deactivated and locked in the closed position to restore containment integrity. The limit switch on HCV-2504A was repaired and tested, and the valve was declared operable on May 6th.

On May 9th, HCV-2504A again failed to indicate closed as required. HCV-2504B was deactivated and locked in the closed position and TS LCO 2.6(1)a was entered. The actuator diaphragm was replaced and tested satisfactorily, a Local Leak Rate Test (LLRT) was satisfactorily performed on HCV-2504A, and the valve was subsequently declared operable on May 10th. The actuator diaphragm was also replaced on HCV-2504B.

The May 20th, RCS radioactivity exhibited an increasing trend. The Fuel Reliability Indicator (FRI) had increased from the May 11th value of 0.00024  $\mu\text{Ci/g}$  to 0.0678  $\mu\text{Ci/g}$ . As required by Standing Order O-43, "Fuel Reliability Action Plan," reactor coolant charging and letdown flows were increased to facilitate cleanup of the system. Standing Order O-43 requires this action with a FRI between 0.05 and 0.2  $\mu\text{Ci/g}$ . The FRI value had decreased to 0.024  $\mu\text{Ci/g}$  prior to the reactor shutdown on May 24th. Fuel rod failures due to spacer grid fretting is the probable cause of the high activity. These failures were not unexpected since defective fuel rods due to fretting had been identified and replaced during the 1995 refueling outage.

2. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

On May 25, 1995, the Power Operated Relief Valves (PORVs) were successfully tested during a plant cooldown.

3. RESULTS OF RCS LEAK RATE TESTS

The RCS leak rate was steady in May except during the two plant shutdowns. The leak rate data during these conditions was erratic and of limited use for trending purposes. The nominal leak rate for May is 0.100 to 0.200 gpm, with no degrading trends noted. Besides the erratic leak rates noted during plant transients, the leak rate has remained relatively unchanged this cycle.

4. CHANGES, TESTS AND EXPERIMENTS REQUIRING NUCLEAR REGULATORY COMMISSION AUTHORIZATION PURSUANT TO 10CFR50.59

<u>Amendment No.</u>	<u>Description</u>
None	

5. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF MAY 1995

- Installed new sparging nozzles in the air sparging system for Raw Water Pumps AC-10A/B/C/D.
- Replaced circuit board AI-31E-AW1-A8 when the rod drop circuit would not calibrate.
- Replaced the tube bundles in the lube oil coolers for all four RCPs, RC-3A/B/C/D.
- Adjusted the limit switch on Control Element Drive Mechanism RC-10-18.
- Cleaned CCW heat exchanger AC-1D.

6. OPERATING DATA REPORT

Attachment I

7. AVERAGE DAILY UNIT POWER LEVEL

Attachment II

8. UNIT SHUTDOWNS AND POWER REDUCTIONS

Attachment III

9. REFUELING INFORMATION, FORT CALHOUN STATION UNIT NO.1

Attachment IV

ATTACHMENT I  
OPERATING DATA REPORT

DOCKET NO. 50-285  
UNIT FORT CALHOUN STATION  
DATE JUNE 07, 1995  
COMPLETED BY D. L. LIPPY  
TELEPHONE (402) 533-6843

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION  
2. Reporting Period: MAY 1995

NOTES

3. Licensed Thermal Power (MWt): 1500  
4. Nameplate Rating (Gross MWe): 502  
5. Design Elec. Rating (Net MWe): 478  
6. Max. Dep. Capacity (Gross MWe): 502  
7. Max. Dep. Capacity (Net MWe): 478

8. If changes occur in Capacity Ratings (3 through 7) since last report, give reasons:  
N/A

9. Power Level to which restricted, if any (Net MWe): N/A

10. Reasons for restrictions, if any:  
N/A

	THIS MONTH	YR-TO-DATE	CUMULATIVE
11. Hours in Reporting Period.....	744.0	3623.0	190057.0
12. Number of Hours Reactor was Critical	538.8	2192.1	148610.0
13. Reactor Reserve Shutdown Hours.....	.0	.0	1309.5
14. Hours Generator On-line.....	519.6	2121.6	146895.9
15. Unit Reserve Shutdown Hours.....	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	718797.7	2974134.8	195122835.3
17. Gross Elec. Energy Generated (MWH)..	240202.0	1002934.0	64407816.2
18. Net Elec. Energy Generated (MWH)....	228248.0	955272.4	61447064.7
19. Unit Service Factor.....	69.8	58.6	77.3
20. Unit Availability Factor.....	69.8	58.6	77.3
21. Unit Capacity Factor (using MDC Net)	64.2	55.2	70.0
22. Unit Capacity Factor (using DER Net)	64.2	55.2	68.3
23. Unit Forced Outage Rate.....	30.2	9.6	4.1

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 comm. oper.):      Forecast      Achieved

INITIAL CRITICALITY  
INITIAL ELECTRICITY  
COMMERCIAL OPERATION

N/A

ATTACHMENT II  
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	JUNE 07, 1995
COMPLETED BY	D. L. LIPPY
TELEPHONE	(402) 533-6843

MONTH MAY 1995

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1	486
2	486
3	486
4	486
5	486
6	486
7	485
8	485
9	485
10	485
11	217
12	0
13	0
14	0
15	75
16	464

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	483
18	483
19	483
20	483
21	482
22	481
23	480
24	0
25	0
26	0
27	0
28	0
29	38
30	98
31	386

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.



ATTACHMENT III  
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-285  
UNIT NAME Fort Calhoun St.  
DATE June 8, 1995  
COMPLETED BY D. L. Lippy  
TELEPHONE (402) 533-6843

REPORT MONTH May 1995

No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason <sup>2</sup>	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report (LER) No.	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
95-02	950511	F	95.8	A	2	95-003	CB	HTEXCH	On May 11, 1995 a manual reactor trip was initiated due to a component cooling water (CCW) leak in the upper oil reservoir of reactor coolant pump (RCP) RC-3D motor. All four of the RCP motors' upper lube oil coolers were eddy current tested and a total of 10 tubes were plugged. The plant was returned to power operation on May 15, 1995.
95-03	950524	F	128.6	A	2	95-003	CB	HTEXCH	On May 24, 1995 the reactor was manually tripped due to new indications of a CCW leak into the upper oil reservoir for the RCP RC-3D motor. The plant was taken to cold shutdown and the tube bundles in all four RCP motor upper oil reservoir lube oil coolers were replaced. The plant was returned to power operation on May 29, 1995.

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  
H-Other (Explain)

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

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

5  
Exhibit H - Same Source

Attachment IV  
Refueling Information  
Fort Calhoun Station - Unit No. 1

Report for the month ending May 31, 1995

- |   |                               |
|---|-------------------------------|
| 1. Scheduled date for next refueling shutdown.  | <u>September 21, 1996</u>     |
| 2. Scheduled date for restart following refueling.  | <u>November 2, 1996</u>       |
| 3. Will refueling or resumption of operations thereafter require a technical specification change or other license amendment?   | <u>No</u>                     |
| a. If answer is yes, what, in general, will these be?   | <u>N/A</u>                    |
| b. If answer is no, has the reload fuel design and core configuration been reviewed by your Plant Safety Review Committee to determine whether any unreviewed safety questions are associated with the core reload.               | <u>No</u>                     |
| c. If no such review has taken place, when is it scheduled?   | <u>Prior to November 1996</u> |
| 4. Scheduled date(s) for submitting proposed licensing action and support information.  | <u>No submittal planned</u>   |
| 5. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures. | <u>N/A</u>                    |
| 6. The number of fuel assemblies:   |                               |
| a) in the core  | <u>133 Assemblies</u>         |
| b) in the spent fuel pool   | <u>618 Assemblies</u>         |
| c) spent fuel pool storage capacity   | <u>1083 Assemblies</u>        |
| 7. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.   | <u>2007 Outage</u>            |

Prepared by M. J. [Signature] for KCH

Date 6/8/95

LIC-95-0125  
Enclosure B

Fort Calhoun Station (FCS) Unit No. 1  
Monthly Operating Report

Revisions to "*Unit Shutdowns and Power Reductions*" Forms  
for February, March and April 1995

- References:
1. LIC-95-0068 dated March 15, 1995
  2. LIC-95-0087 dated April 13, 1995
  3. LIC-95-0105 dated May 15, 1995