Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247
402/636-2000

June 12, 1992
LIC-92-198R

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: May 1992 Monthly Operating Report (MOR)

Enclosed is the May 1992 MOR for Fort Calhoun Station (FCS) Unit No. 1 as required by FCS Technical Specification Section 5.9.1.

If you should have any questions, please contact me.

Sincerely,

W. G. Gates

W. G. Gates
Division Manager
Nuclear Operations

WGG/sel

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae
R. D. Martin, NRC Regional Administrator, Region IV
R. P. Mullikin, NRC Senior Resident Inspector
S. D. Bloom, NRC Acting Project Manager
R. T. Pearce, Combustion Engineering
R. J. Simon, Westinghouse
Office of Management & Program Analysis (2)
INPO Records Center
American Nuclear Insurers

IE24
1/1

OPERATING DATA REPORT

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	JUNE 03, 1992
COMPLETED BY	M. L. EDWARDS
TELEPHONE	(402) 636-2451

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION
2. Reporting Period: MAY 1992

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	3647.0	163777.0
12. Number of Hours Reactor was Critical	719.9	1470.9	126289.6
13. Reactor Reserve Shutdown Hours......	.0	.0	1309.5
14. Hours Generator On-line.............	669.2	1415.2	124792.3
15. Unit Reserve Shutdown Hours.........	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	791795.5	1750651.6	163374377.3
17. Gross Elec. Energy Generated (MWH)..	261030.0	584266.0	53760392.2
18. Net Elec. Energy Generated (MWH)....	246192.3	552968.9	51286720.3
19. Unit Service Factor.................	89.9	38.8	76.2
20. Unit Availability Factor............	89.9	38.8	76.2
21. Unit Capacity Factor (using MDC Net)	69.2	31.7	68.1
22. Unit Capacity Factor (using DER Net)	69.2	31.7	66.3
23. Unit Forced Outage Rate.............	2.9	1.4	3.9

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.):

		Forcast	Achieved
INITIAL CRITICALITY			
INITIAL ELECTRICITY	N/A		
COMMERCIAL OPERATION			

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	JUNE 03, 1992
COMPLETED BY	M. L. EDWARDS
TELEPHONE	(402) 636-2451

MONTH MAY 1992

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	211
2	0	18	329
3	32	19	432
4	113	20	434
5	112	21	449
6	119	22	477
7	265	23	481
8	292	24	482
9	256	25	485
10	405	26	486
11	465	27	487
12	474	28	486
13	475	29	485
14	311	30	484
15	49	31	480
16	206		

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.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-285
UNIT NAME Fort Calhoun St.
DATE June 5, 1992
COMPLETED BY M. L. Edwards
TELEPHONE (402) 636-2451

REPORT MONTH May 1992

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report #	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
92-01	920201	S	2210.4	C	1		XX	XXXXXX	On February 1, 1992, the 13th Fort Calhoun Station Refueling Outage commenced. The generator was put back on-line May 3, 1992.
92-02	920503	S	2.2	B	4		XX	XXXXXX	On May 3, 1992, the generator was taken off-line to conduct turbine over-speed testing while the reactor remained critical.
92-03	920514	F	19.9	B	3	92-014	HA	INSTRU	On May 14, 1992, while valving in a high level turbine trip sensor on moisture separator No. 3 to repair a steam leak, a turbine trip and reactor trip occurred. All automatic safety systems functioned as designed. See LER 92-014 for details and corrective actions.
92-04	900531	F	0.0	A	1	92-019	RB	CONROD	On May 31, 1992, Control Element Assembly (CEA) No. 35 dropped into the reactor core. Reactor power was reduced to 70% within one hour per Technical Specifications. Attempts to recover the CEA while at 70% power were unsuccessful. The generator was taken off-line early in the morning on June 1, 1992.

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 (NUREG-0161)

5
Exhibit 1 - Same Source

(9/77)

Refueling Information
Fort Calhoun - Unit No. 1

Report for the month ending May 1992

1. Scheduled dated for next refueling shutdown. — September 1993

2. Scheduled date for restart following refueling. — November 1993

3. Will refueling or resumption of operations thereafter require a technical specification change or other license amendment? — Yes

   a. If answer is yes, what, in general, will these be? — Incorporate specific requirements resulting from reload safety analysis.

   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. — N/A

   c. If no such review has taken place, when is it scheduled? — N/A

4. Scheduled date(s) for submitting proposed licensing action and support information. — June 1993

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. — New fuel supplier; New LOCA analysis

6. The number of fuel assemblies:
   - a) in the core — 133 Assemblies
   - b) in the spent fuel pool — 529 Assemblies
   - c) spent fuel pool storage capacity — 729 Assemblies
   - d) planned spent fuel pool storage capacity — Planned to be increased with higher density spent fuel racks.

7. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity. — 1995*

* Capability of full core offload of 133 assemblies lost. Reracking to be performed between the 1993 and 1995 Refueling Outages.

Prepared by Kevin Holthaus Date 6-9-92

OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

MAY 1992
Monthly Operating Report

I. OPERATIONS SUMMARY

Fort Calhoun Station (FCS) concluded its thirteenth Refueling Outage by bringing the reactor critical at 1035 on May 1, 1992. Low power physics testing followed, with the Plant Review Committee approving the preliminary test results and allowing the plant to enter Mode 1 (Power Operations) on May 2, 1992. After main turbine warm-up, the generator was put on line at 0526 on May 3, 1992. Turbine overspeed testing was successfully performed later that day and power was raised to 30% and held there for a secondary chemistry holdpoint. The secondary chemistry hold point was cleared on May 6, 1992 and power was increased to 66% for a reactor physics testing hold point.

While at 66% power, a backwash valve (MOV-B-B2) on the south half of B condenser failed, which required power to be decreased to 58% to facilitate repair. On May 8, 1992 at 1610, during condenser valve repairs, the biannual 60 psia Personnel Air Lock (PAL) Type 3 Leak Test failed. The decision was made to enter Technical Specifications (TS) 2.6(1) (Containment System) and 2.0.1(1) (General Requirements) due to the loss of containment integrity. A notification of unusual event (NOUE) was declared and a one hour report to the NRC was made due to the limiting condition for operation (LCO) action statement of these specifications requiring the plant to be taken to Hot Shutdown (Mode 3) within 6 hours. A priority one maintenance work order was issued to direct tightening the packing on the PAL door access handwheel. Repairs and retesting were completed and preparations for the power reduction ceased. The NOUE was terminated at 1647 on May 8, 1992. Subsequently, during the week of June 1, 1992, it was determined that TS 2.6.(1) had not been violated. Therefore, entry into TS 2.0.1(1) was unnecessary and the one hour report and followup Licensee Event Report (LER) were retracted during a telephone conference on June 4, 1992 with the NRC Operations Center. Repairs to the condenser valve were completed on May 9, 1992 and the power was increased to 98% and held for calibration of nuclear instrumentation detectors.

At 1557 on May 14, 1992, while valving in a high level turbine trip sensor on moisture separator No. 3 to repair a steam leak, a turbine trip followed immediately by a reactor trip occurred. All automatic safety systems functioned as designed. A post-trip review was performed to ensure the plant could restart, and at 0537 on May 15, 1992, the reactor was taken critical. The generator was put on line at 1152 on May 15, 1992 and reactor power was increased.

On May 16, 1992 with the plant at 50% power, a second main feedwater pump (FW-4C) was put into service to support power ascension. With the pump in service, a significant seal leak appeared, which was later discovered to be caused by a hairline crack on a weld on the pump's outboard seal. Since feedwater pump FW-4A was already out for maintenance, the power ascension was halted at 50% while repairs to FW-4C could be made. Difficulties were encountered in isolating the pump due to a failure of the suction valve's manual valve operator. On May 17, 1992, repairs were completed and FW-4C was put into service.

On May 21, 1992, 4160 Volt safety related electrical buses IA3 and IA4 fast transferred to the 22 KV supply from the 161 KV offsite power supply. TS 2.7(2) (Electrical Systems) was entered and a four-hour notification was made to the NRC. The transfer occurred when System Protection personnel were performing a switching operation in a substation which feeds 161KV to FCS. The switching operation involved a faulty relay which simulated a low voltage condition on the 161 KV feed to FCS. When notified of the problem, the switching was returned to normal and 4160 Volt buses IA3 and IA4 were re-powered from 161 KV.

Very slight leakage from the flange of pressurizer code safety valve RC-142 was identified during the hot hydrostatic test on April 27, 1992. During May, attempts were made to Furmanite seal the flange, and were successful in temporarily stopping the leak. Leak repair work will continue in June 1992.

At 2255 on May 31, 1992, Control Element Assembly (CEA) No. 35 dropped into the reactor core. Reactor power was reduced to less than 70% within one hour per TS 2.10.4. Attempts to recover the CEA while at 70% power were unsuccessful. Troubleshooting revealed a short in a CEA clutch coil. To accommodate repairs, the reactor was taken to Hot Shutdown. A NOUE was declared and a four hour report made to the NRC due to a shutdown required by Technical Specifications. Repairs were completed and the reactor was taken critical on June 2, 1992.

The following NRC inspections took place during May 1992:

IER No.	Title
92-11	Monthly Resident Inspection
92-12	Security Inspection

The following LERs were submitted during May 1992:

LER No.	Description
92-010	Lack of Proper Breaker/Fuse Coordination on 125V DC System
92-013	Inadvertent Isolation of Radiation Monitors During Containment Purge
92-015	Loss of Shutdown Cooling Flow Control and Flow Indication
92-016	Insufficient Containment Spray Pump Net Positive Suction Head
92-017	Cracking of Cam Followers on GE Type SBM Control Switches

A. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

None

B. RESULTS OF LEAK RATE TESTS

The results of the reactor coolant system (RCS) leak rate tests for the month of May 1992 reflect a successful outage. Many sources of leaks in the RCS and its interfacing systems (chemical and volume control, safety injection, and containment spray) were repaired. The total RCS leakrate for May 1992 averaged about 0.1 gpm and the unknown leak rate averaged about 0.05 gpm. On several days, the leak rates were negative due to plant transients.

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

None

D. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF MAY 1992

Some of the significant Critical Quality Element (CQE) corrective maintenance items completed during the month of May 1992 follow:

Lift was adjusted on raw water pumps AC-10B and AC-10D.

Dirt was found in the windings of the motor on charging pump B (CH-1B-M). The motor windings were cleaned and bearings replaced.

Performed actions as necessary to correct flange leakage on pressurizer relief valve RC-142.

Recut and lapped seats and installed new discs on HCV-921 and HCV-922 (radiation monitor RE-064 isolation valves).

Corrected remote position indication problems for the following MOVs:

HCV-314 (HPSI to RC Loop 1A Isolation Valve)
HCV-315 (HPSI to RC Loop 1A Isolation Valve)
HCV-317 (HPSI to RC Loop 2A Isolation Valve)
HCV-321 (HPSI to RC Loop 2B Isolation Valve)

Replaced steam generator RC-2B inlet drain valve FW-926.

Installed new RC main loop flow differential pressure transmitter A/DPT-114X.