Omaha Public Power District
444 South 16th Street Mall
Omaha NE 68102-2247

December 13, 1996
LIC-96-0196

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

Reference: Docket No. 50-285

SUBJECT: November 1996 Monthly Operating Report (MOR)

Enclosed please find the November 1996 MOR for Fort Calhoun Station (FCS) Unit No. 1 as required by FCS Technical Specification 5.9.1.

If you should have any questions, please contact me.

Sincerely,

S. K. Gambhir
Division Manager
Production Engineering

SKG/mle

Enclosures 130018

c: Winston & Strawn
L. J. Callan, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Project Manager
W. C. Walker, NRC Senior Resident Inspector
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INPO Records Center

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OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

November 1996
Monthly Operating Report

1. OPERATIONS SUMMARY

The Fort Calhoun Station (FCS) was in a refueling outage for most of November 1996. On November 25 at 0644 the reactor was made critical to start low power physics testing. The turbine generator was placed online at 0200 on November 27. The generator was maintained at a nominal 30% power level until November 28 at 0032 when turbine overspeed testing was conducted. The generator was returned to service at 0315 on November 28 and maintained at a nominal 30% power level for secondary chemistry holds. On November 30 at 0808 a slow power ramp-up to full power commenced.

Major activities scheduled and completed during the refueling outage included: complete core off-load/reload; fuel sipping and reconstitution; polar crane feedrail replacement; Reactor Coolant Pump RC-3B motor replacement; Steam Generator tube inspection and plugging; manual DC transfer switch replacement; replacement of the final three (3) of four (4) channels of the reactor protective system nuclear instrumentation wide range power drawers; replacement of twenty-eight (28) incore detectors; control element drive mechanism seal rebuilds; motor operator valve testing (MOVATS); containment local leak rate penetration tests; low pressure turbine inspection; circulating water system valve (FCV-1904B) repair; and AC supply bus maintenance and testing.

On November 11, at 1540 hours OPPD determined that the containment air coolers would not function as required for certain Updated Safety Analysis Report, Chapter 14, design basis accidents. This determination resulted from evaluations associated with NRC Generic Letter 96-06. During a loss-of-coolant-accident (LOCA) or main steam line break event coincident with a loss of offsite power, the containment air coolers could generate an internal steam bubble and upon restart of the component cooling water (CCW) pumps, the steam bubble could collapse and generate water hammer inside the piping. A safety analysis for operability evaluation has been completed to justify operability of the CCW system. Final resolution is expected by the end of the next refueling outage.

2. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

During the month of November, no power operated relief valves (PORV) or primary system safety valve challenges or failures occurred.

3. RESULTS OF LEAK RATE TESTS

No leak rate tests were performed from November 1 through November 19 due to the plant being shut down for the 1996 refueling outage. Calculated leak rates on November 20 and 21 were higher than normal due to the changing plant conditions experienced during plant startup. Leak rates have since stabilized around 0.2 gpm with slight variations above and below.

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

Amendment No.	Description
None	

5. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF November 1996

- Replaced CS/BT-1B3C (Control Switch for 480 V Bus Tie Breaker BT-1B3C)
- Replaced CS/T1B-3A (T1B-3A 4.16 KV Feeder Breaker Control Switch)
- Replaced CS/1B3A (Control Switch for 480 V Transformer Secondary Breaker 1B3A)
- Replaced CS/1B4B (Control Switch for 480 V Transformer Secondary Breaker 1B4B)
- Replaced 27-T1/1B3A and 27-T2/1B3A (Undervoltage Relays)
- Replaced 43/1A2-1A4 (Bus 1A2 to Bus 1A4 Manual Transfer Switch)
- Cleaned, coated and pulled a tube for failure analysis on AC-1B (CCW Heat Exchanger)
- Adjusted setpoint on AC-341 (CCW Surge Tank AC-2 Nitrogen Relief Valve) for Safety Analysis for Operability (SAO) 96-02
- Adjusted setpoint on AC-364 (CCW Surge Tank AC-2 Recirculation Relief Valve to Waste Disposal System) for SAO 96-02
- Repacked CH-308 (Deborating Ion Exchanger CH-9B Demineralized Water Bed Lift Valve)

- Repacked CH-317 (Deborating Ion Exchanger CH-9B Outlet Isolation for Regenerative Drain Isolation Valve)
- Repacked CH-359 (Charging Pump CH-1A Suction Drain Valve to Waste Disposal System)
- Replaced sightglass on FO-2-2 (DG-2 Fuel Oil Day Tank)
- Rebuilt HCV-1041B (Steam Generator RC-2A Main Steam Check Valve)
- Replaced instrument air tubing and fittings on HCV-1042A-20B (Test Solenoid Main Steam Isolation)
- Replaced solenoid on HCV-1388B (Steam Generator RC-2A Blowdown Isolation Valve)
- Rebuilt actuator on HCV-1388B-O (Steam Generator RC-2A Blowdown Isolation Valve Operator)
- Rebuilt HCV-2883A (CCW Heat Exchanger AC-1D, Raw Water Inlet Valve)
- Rebuilt actuator on HCV-484 (Shutdown Cooling Heat Exchanger AC-4A, CCW Outlet Valve)
- Replaced coupling on HCV-485 (Shutdown Cooling Heat Exchanger AC-4B, CCW Outlet Valve)
- Replaced drive motor on RC-10-08 (CEDM)
- Replaced drive package on RC-10-22 (CEDM)
- Benchtested and reset setpoints on Pressurizer Relief Valves RC-141 and RC-142
- Repacked RC-166 (Pressurizer Spray Line Vent Valve)
- Plugged 36 tubes in RC-2A (Steam Generator A)
- Plugged 21 tubes in RC-2B (Steam Generator B)
- Repacked RC-240 (Reactor Coolant Pump RC-3A Discharge Pressure to DPI-110W/124W Isolation Valve)
- Performed "CHAR" testing on pressurizer heater and mineral insulation cables
- Replaced twenty-eight (28) incore detectors
- Replaced RC-7D-22 (Incore Instrumentation)
- Replaced diaphram in SI-7D (Safety Injection Leakage Cooler Accumulator)

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 DECEMBER 10, 1996
COMPLETED BY M. L. EDWARDS
TELEPHONE 402-533-6929

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION
2. Reporting Period: NOVEMBER 1996

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.....	720.0	8040.0	203234.0
12. Number of Hours Reactor was Critical	137.2	6239.6	159947.6
13. Reactor Reserve Shutdown Hours.....	.0	.0	1309.5
14. Hours Generator On-line.....	92.2	6148.2	158128.7
15. Unit Reserve Shutdown Hours.....	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	45107.6	8752978.9	211439287.2
17. Gross Elec. Energy Generated (MWH)..	11368.0	2923281.9	69857007.1
18. Net Elec. Energy Generated (MWH)....	9746.3	2784384.8	66641753.6
19. Unit Service Factor.....	12.8	76.5	77.8
20. Unit Availability Factor.....	12.8	76.5	77.8
21. Unit Capacity Factor (using MDC Net)	2.8	72.5	70.8
22. Unit Capacity Factor (using DER Net)	2.8	72.5	69.2
23. Unit Forced Outage Rate.....	.0	5.9	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	N/A		
COMMERCIAL OPERATION			

ATTACHMENT II
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO.	50-285
UNIT	FORT CALHOUN STATION
DATE	DECEMBER 10,1996
COMPLETED BY	M. L. EDWARDS
TELEPHONE	402-533-6929

MONTH NOVEMBER 1996

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	63
12	0	28	79
13	0	29	109
14	0	30	155
15	0		
16	0		

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 December 9, 1996
COMPLETED BY M. L. Edwards
TELEPHONE (402) 533-6929

REPORT MONTH November 1996

No.	Date	Type[1]	Duration (Hours)	Reason[2]	Method of Shutting Down Reactor[3]	Licensee Event Report No.	System Code[4]	Component Code[5]	Cause & Corrective Action to Prevent Recurrence
96-06	961004	S	627.8	C	1	N/A	ZZ	ZZZZZZ	On October 4, 1996, Fort Calhoun Station commenced its 16th refueling outage. The outage ended on November 27, 1996 when the generator was synchronized to the grid.

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)

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Exhibit H - Same Source

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Attachment IV
Refueling Information
Fort Calhoun Station Unit No. 1

Report for the month ending: November 30, 1996		
1.	Scheduled date for next refueling shutdown.	March 21, 1998
2.	Scheduled date for restart following refueling.	May 2, 1998
3.	Will refueling or resumption of operations thereafter require a technical specification change or other license amendment?	No
a.	If answer is yes, what, in general, will these be?	N/A
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?	No
c.	If no such review has taken place, when is it scheduled?	Prior to May 2, 1998
4.	Scheduled date(s) for submitting proposed licensing action and support information.	No submittal required
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.	None
6.	The number of fuel assemblies: a) in the core b) in the spent fuel pool c) spent fuel pool storage capacity	 133 Assemblies 662 Assemblies 1083 Assemblies
7.	The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.	2007 Outage

Prepared by: Ken Hoss Date: 12-10-96