

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

January 14, 1994
LIC-94-0023

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

Reference: Docket No. 50-285

Gentlemen:

SUBJECT: December 1993 Monthly Operating Report (MOR)

Enclosed is the December 1993 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,

W. G. Gates

W. G. Gates
Vice President

WGG/mah

Enclosures

c: LeBoeuf, Lamb, Leiby & MacRae
J. L. Milhoan, NRC Regional Administrator, Region IV
S. D. Bloom, NRC Project Manager
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OMAHA PUBLIC POWER DISTRICT
Fort Calhoun Station Unit No. 1

DECEMBER 1993
Monthly Operating Report

1. OPERATIONS SUMMARY

On December 1, the station was operating at 90.5% power following the 1993 maintenance and refueling outage. Power ascension continued with the plant reaching 100% power on December 3.

A reactor trip occurred at approximately 0227 on Monday, December 6 during weekly testing of the turbine Electro-Hydraulic Control (EHC) System pumps. The trip resulted from inadequate design of a Facility Change Engineering Change Notice (ECN) which had reconfigured the EHC fluid lines to the EHC pressure transmitters. The ECN was installed during the 1993 Refueling Outage to eliminate an equipment vibration problem. Following the plant trip, the EHC fluid lines were reconfigured and tested prior to restart of the plant. Details of this event were provided in Licensee Event Report (LER) 93-018 dated January 5, 1994. The reactor was taken critical at 0146 on December 7. The generator was synchronized to the grid at 0536 on December 7, and a power ascension commenced at a rate of less than 3% per hour to approximately 95%. Power was held at 95% for Technical Specification moderator temperature coefficient testing.

On December 9, surveillance test SE-ST-AFW-3005, an Inservice Inspection (ISI) test on the Auxiliary Feedwater System (AFW), was satisfactorily conducted. However, a one-hour notification was made to the NRC because it was realized that the surveillance test procedures rendered both AFW pumps inoperable for an 18 minute period. Further information on this event can be found in LER 93-019 dated January 10, 1994.

On December 12, power ascension from 95% to 100% occurred, with 100% operation continuing throughout the remainder of December.

The following LERs were submitted during this reporting period:

LER No. Description

93-014 Rev. 1	Failure of a Power Operated Relief Valve to Open During Testing
93-015	Manual Emergency Boration following Spurious Increase in Indicated Reactor Power
93-016	Unplanned Control Rod Withdrawal and Subsequent Manual Reinsertion
93-017	Time Delay Relays for Offsite Power Low Signal Found Out of Tolerance

2. SAFETY VALVES OR PORV CHALLENGES OR FAILURES WHICH OCCURRED

During the month of December, no PORV or primary system safety valve challenges or failures occurred.

3. RESULTS OF LEAK RATE TESTS

Reactor Coolant System leak rate was steady throughout the month except for the three days following the plant trip on December 6. With the return to steady state plant conditions, the leak rate was steady for the remainder of the month with no degrading trends noted. The nominal leak rate was approximately 0.10 gpm.

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

Amendment No. Description

158	The amendment makes changes to the operating license to extend the expiration date to August 9, 2013, or 40 years after the date of issuance of the operating license, rather than 40 years from the date of issuance of the construction permit.
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5. SIGNIFICANT SAFETY RELATED MAINTENANCE FOR THE MONTH OF DECEMBER 1993

- Rebuilt Charging Pumps CH-1A and CH-1C.
- Replaced a control relay for Pressurizer Backup Heaters Bank #1 (MCC-3A1-D01).
- Replaced the manifold and transmitter for Spent Fuel Filter AC-6.
- Replaced "C" phase throat baffle on breaker unit 1A4-14 for Low Pressure Safety Injection Pump SI-1B.
- Replaced A1 card on linear amplifier AI-31A-AW3-A1.
- Replaced A6 card for Power Range Safety Drawer Nuclear Instrumentation Channel 6 (AI-31D-DW3).
- Replaced A2 card for Power Range Safety Drawer Channel 8 (AI-31D-DW3).
- Replaced a card in Power Range Control Channel 9 (AI-31E-AW1).

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 JANUARY 05, 1994
COMPLETED BY M. A. HOWMAN
TELEPHONE 402-533-6939

OPERATING STATUS

1. Unit Name: FORT CALHOUN STATION
2. Reporting Period: DECEMBER 1993

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	8760.0	177674.0
12. Number of Hours Reactor was Critical	720.7	7081.4	137691.7
13. Reactor Reserve Shutdown Hours.....	.0	.0	1309.5
14. Hours Generator On-line.....	716.9	7000.0	136063.2
15. Unit Reserve Shutdown Hours.....	.0	.0	.0
16. Gross Thermal Energy Generated (MWH)	1034325.7	9720323.6	179285799.6
17. Gross Elec. Energy Generated (MWH)..	351442.0	3247224.0	59088024.2
18. Net Elec. Energy Generated (MWH)....	335608.5	3102176.0	56373062.9
19. Unit Service Factor.....	96.4	79.9	76.6
20. Unit Availability Factor.....	96.4	79.9	76.6
21. Unit Capacity Factor (using MDC Net)	94.4	74.1	68.8
22. Unit Capacity Factor (using DER Net)	94.4	74.1	67.1
23. Unit Forced Outage Rate.....	3.6	1.4	4.2

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	JANUARY 05, 1994
COMPLETED BY	M. A. HOWMAN
TELEPHONE	402-533-6939

MONTH DECEMBER 1993

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

1	452
2	479
3	488
4	489
5	489
6	37
7	84
8	345
9	460
10	461
11	462
12	461
13	485
14	488
15	488
16	488

DAY AVERAGE DAILY POWER LEVEL
 (MWe-Net)

17	489
18	488
19	488
20	488
21	488
22	489
23	488
24	488
25	488
26	489
27	488
28	488
29	488
30	488
31	489

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 January 6, 1994
COMPLETED BY M. A. Howman
TELEPHONE (402) 533-6939

REPORT MONTH December 1993

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
93-06	12/06/93	F	27.1	H	3	93-018	HA	TURBIN	On December 6, 1993, the main turbine and the reactor tripped during Electro-Hydraulic Control (EHC) pump shifting. The EHC tubing configuration had been changed during the recent refueling outage by Facility Change Engineering Change Notice (ECN) 93-162. The Root Cause of this event was determined to be inadequate design of the ECN. See LER 93-018 dated January 5, 1994 for corrective actions to prevent recurrence.

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 - Unit No. 1

Report for the month ending December 31, 1993

1. Scheduled date for next refueling shutdown. March 11, 1995
2. Scheduled date for restart following refueling. April 29, 1995
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 April 1995
4. Scheduled date(s) for submitting proposed licensing action and support information. November 1994
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. **
6. The number of fuel assemblies:
 - a) in the core 133 Assemblies
 - b) in the spent fuel pool 570 Assemblies
 - c) spent fuel pool storage capacity 729 Assemblies
 - d) planned spent fuel pool storage capacity 1083 Assemblies
7. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity. 1995 Outage*

* Capability of full core offload of 133 assemblies lost. Reracking to be performed in 1994.

** OPPD expects to utilize CASMO-3/SIMULATE-3 codes for reactor physics related analyses. If NRC approval of CENTS code is obtained by May 1994, it will also be employed.

Prepared by Sam Helt Date 1-14-94