

PUBLIC SERVICE COMPANY OF COLORADO
FORT ST. VRAIN NUCLEAR GENERATING STATION

MONTHLY OPERATIONS REPORT

NO. 121

February, 1984

IE24

8403190344 840229
PDR ADOCK 05000267
R PDR

This report contains the highlights of the Fort St. Vrain, Unit No. 1, activities operated under the provisions of the Nuclear Regulatory Commission Operating License DPR-34. This report is for the month of February, 1984.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

February began with the reactor shutdown for refueling, turbine generator overhaul, major electrical modifications, and various routine corrective and preventive maintenance items.

Refueling activities began on February 3, 1984. Fuel handling was completed on February 29, 1984. Control rod drive work will be completed in early March.

The main turbine work is presently close to the original schedule. The low pressure rotor was sent to General Electric for installation of rotor blades and will be installed after the number 3 and number 4 bearings are received and installed.

"A" circulator is being removed as a result of an inspection of its internal piping. The inlet screen on the piping was not in place and was found to be in the piping. Considerable damage was also found on the inlet steam nozzles to the "A" circulator steam turbine. The damage appears to be caused by ingestion of some foreign object. This is believed to be the cause of speed valve discrepancies noted during plant operation. The thermal shield had broken up and caused internal piping removal problems. The spare circulator will be shipped from GA Technologies and should be on site during the first part of March.

Other preventive and corrective maintenance activities, including work on feedwater heaters number 5 and 6, all three boiler feed pumps, and marmon flange work on the steam generators, is slightly behind schedule. With the unexpected requirement of having to replace "A" helium circulator, the overall outage has been extended by two (2) weeks.

2.0 SINGLE RELEASES OF RADIOACTIVITY OR RADIATION EXPOSURE IN EXCESS OF 10% OF THE ALLOWABLE ANNUAL VALUE

None.

3.0 INDICATION OF FAILED FUEL RESULTING FROM IRRADIATED FUEL EXAMINATIONS

None.

4.0 MONTHLY OPERATING DATA REPORT

Attached.

OPERATING DATA REPORT

DOCKET NO. 50-267

DATE March 12, 1984

COMPLETED BY Chuck Fuller

TELEPHONE (303) 785-2224

OPERATING STATUS

NOTES

1. Unit Name: Fort St. Vrain
2. Reporting Period: 840201 through 840229
3. Licensed Thermal Power (Mwt): 842
4. Nameplate Rating (Gross MWe): 342
5. Design Electrical Rating (Net MWe): 330
6. Maximum Dependable Capacity (Gross MWe): 342
7. Maximum Dependable Capacity (Net MWe): 330

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:
None

9. Power Level To Which Restricted, If Any (Net MWe): 280
10. Reasons for Restrictions, If Any: NRC authorization for long term operation above 85% reactor power is pending completion of B-O Startup Testing.

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	696.0	1,440.0	40,921.0
12. Number of Hours Reactor Was Critical	0.0	468.0	26,295.3
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	0.0	446.6	18,249.8
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	240,818.8	9,762,136.4
17. Gross Electrical Energy Generated (MWE)	0	77,412	3,230,862
18. Net Electrical Energy Generated (MWH)	-1,952	69,350	2,940,880
19. Unit Service Factor	0.0	31.0	44.6
20. Unit Availability Factor	0.0	31.0	44.6
21. Unit Capacity Factor (Using MDC Net)	0.0	14.6	21.8
22. Unit Capacity Factor (Using DER Net)	0.0	14.6	21.8
23. Unit Forced Outage Rate	0.0	1.5	38.9

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Refueling 3-1-84/0000 through 5-2-84/2130, 1077.5 hours

25. If Shut Down at End of Report Period, Estimated Date of Startup: 5-2-84

26. Units In Test Status (Prior to Commercial Operation):

INITIAL CRITICALITY

INITIAL ELECTRICITY

COMMERCIAL OPERATION

Forecast

Achieved

N/A

N/A

N/A

N/A

N/A

N/A

AVERAGE DAILY UNIT POWER LEVEL

TSP-3
Attachment-3A
Issue 2
Page 1 of 1

Docket No. 50-267

Unit Fort St. Vrain

Date March 12, 1984

Completed By Chuck Fuller

Telephone (303)785-2224

Month February, 1984

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

1	<u>0.0</u>
2	<u>0.0</u>
3	<u>0.0</u>
4	<u>0.0</u>
5	<u>0.0</u>
6	<u>0.0</u>
7	<u>0.0</u>
8	<u>0.0</u>
9	<u>0.0</u>
10	<u>0.0</u>
11	<u>0.0</u>
12	<u>0.0</u>
13	<u>0.0</u>
14	<u>0.0</u>
15	<u>0.0</u>
16	<u>0.0</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>0.0</u>
18	<u>0.0</u>
19	<u>0.0</u>
20	<u>0.0</u>
21	<u>0.0</u>
22	<u>0.0</u>
23	<u>0.0</u>
24	<u>0.0</u>
25	<u>0.0</u>
26	<u>0.0</u>
27	<u>0.0</u>
28	<u>0.0</u>
29	<u>0.0</u>
30	<u>N/A</u>
31	<u>N/A</u>

*Generator on line but no net generation.

50-267

UNIT NAME Fort St. Vrain

DATE March 12, 1984

COMPLETED BY Chuck Fuller

TELEPHONE (303) 785-2224

REPORT MONTH February, 1984

NO.	DATE	TYPE	DURATION	REASON	METHOD OF SHUTTING DOWN REACTOR	SER #	SYSTEM CODE	COMPONENT CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
84-002	840201	S	696.0	C	2	N/A	ZZZ	ZZZZZZ	Refueling, turbine overhaul, routine corrective and preventive maintenance.

REFUELING INFORMATION

1. Name of Facility	Fort St. Vrain Unit No. 1	
2. Scheduled date for next refueling shutdown.	3rd Refueling: currently underway	4th Refueling: Feb. 1, 1986
3. Scheduled date for restart following refueling.	May 2, 1984, 2130 hours	May 1, 1986
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?	Yes	None Expected
If answer is yes, what, in general, will these be?	Use of type H-451 graphite.	-----
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 (Reference 10 CFR Section 50.59)?	-----	No
If no such review has taken place, when is it scheduled?	-----	1985
5. Scheduled date(s) for submitting proposed licensing action and supporting information.	Submitted to NRC December 2, 1983.	-----
6. 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.	-----	-----
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.	1482 HTGR fuel elements 251 spent HTGR fuel elements	

REFUELING INFORMATION (CONTINUED)

8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned, in number of fuel assemblies.	Capacity is limited in size to about one-third of core (approximately 500 HTGR elements). No change is planned.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity.	1992 under Agreements AT(04-3)-633 and DE-SC07-79ID01370 between Public Service Company of Colorado, and General Atomic Company, and DOE.*

- * The 1992 estimated date is based on the understanding that spent fuel discharged during the term of the Agreements will be stored by DOE at the Idaho Chemical Processing Plant. The storage capacity has evidently been sized to accomodate eight fuel segments. It is estimated that the eighth fuel segment will be discharged in 1992.



Public Service Company of Colorado

16805 Road 19 1/2, Platteville, Colorado 80651-9298

March 13, 1984
Fort St. Vrain
Unit No. 1
P-84080

Office of Inspection and Enforcement
ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Sir:

Enclosed please find our Monthly Operations Report for the month of February, 1984.

Very truly yours,

Don Warembourg
Don Warembourg
Manager, Nuclear Production

DW/djm

Enclosure

cc: Mr. John T. Collins

*IE24
1/1
Original
TO Region 4*