

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

MONTHLY OPERATIONS REPORT

NO. 114

July, 1983

FORM 288 22 0218

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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 July, 1983.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

Reactor power was limited for most of July by reactor dewpoint or high oxidants (carbon monoxide, carbon dioxide and water). On July 4, 1983, moisture began to decrease steadily, and reactor power was increased to continue the "dry out" process. Power was increased to near 30% on July 16, 1983, and the turbine generator was synchronized. Reactor power was limited by oxidant levels for the remainder of July. The levels were slowly decreasing and operation at levels up to 70% are anticipated in early August.

The major operational problems which caused shutdowns or temporary outages during July were:

On July 8, 1983, the reactor was shutdown and the condenser removed from service to repair the turbine #2 reheat stop valve. The plug was stuck in the seat. While shutdown, the Loop 2 main steam safeties were repaired and the bearing water recycle valves were repaired.

Two helium circulator trips occurred during this period. The first trip was due to a malfunctioning pressure differential transmitter. The second trip occurred when power was restored to a helium circulator PPS logic module after required testing of the module, due to a faulty chip.

On two occasions on July 19, 1983, reheat bypass valve hydraulic oil leaks forced generator outages to permit repair. The repairs were completed, and the turbine was returned to service on July 20, 1983.

On July 27, 1983, the flow control valve on the electric driven feed pump stopped pump flow. The pump had to be temporarily removed from service. The valve could not be removed from the line at power, so feedwater flow from the feed pump was rerouted through the non-controlling discharge valve.

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 August 12, 1983
COMPLETED BY Chuck Fuller
TELEPHONE (303) 785-2224

OPERATING STATUS

1. Unit Name: Fort St. Vrain
2. Reporting Period: 830701 thru 830731
3. Licensed Thermal Power (MWe): 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): 231
10. Reasons for Restrictions, If Any: Restriction to 70% pending resolution of contractual matters.

NOTES

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	<u>744</u>	<u>5,087</u>	<u>35,808</u>
12. Number of Hours Reactor Was Critical	<u>645.3</u>	<u>2,564.0</u>	<u>22,310.7</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>361.4</u>	<u>1,266.4</u>	<u>14,440.9</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated (MWH)	<u>143,835.4</u>	<u>656,538.8</u>	<u>7,445,964.2</u>
17. Gross Electrical Energy Generated (MWH)	<u>34,331</u>	<u>175,145</u>	<u>2,502,049</u>
18. Net Electrical Energy Generated (MWH)	<u>27,118</u>	<u>138,578</u>	<u>2,261,688</u>
19. Unit Service Factor	<u>48.6</u>	<u>24.9</u>	<u>40.3</u>
20. Unit Availability Factor	<u>48.6</u>	<u>24.9</u>	<u>40.3</u>
21. Unit Capacity Factor (Using MDC Net)	<u>11.0</u>	<u>8.3</u>	<u>19.1</u>
22. Unit Capacity Factor (Using DER Net)	<u>11.0</u>	<u>8.3</u>	<u>19.1</u>
23. Unit Forced Outage Rate	<u>51.4</u>	<u>75.1</u>	<u>44.4</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	<u>None</u>		

25. If Shut Down at End of Report Period, Estimated Date of Startup: N/A

26. Units In Test Status (Prior to Commercial Operation):	Forecast	Achieved
INITIAL CRITICALITY	<u>N/A</u>	<u>N/A</u>
INITIAL ELECTRICITY	<u>N/A</u>	<u>N/A</u>
COMMERCIAL OPERATION	<u>N/A</u>	<u>N/A</u>

AVERAGE DAILY UNIT POWER LEVEL

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

Docket No. 50-267
Unit Fort St. Vrain
Date August 12, 1983
Completed By Chuck Fuller
Telephone (303) 785-2224

Month July, 1983

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>1.3</u>

DAY AVERAGE DAILY POWER LEVEL
(MWe-Net)

17	<u>47.8</u>
18	<u>55.4</u>
19	<u>25.7</u>
20	<u>67.8</u>
21	<u>78.6</u>
22	<u>77.0</u>
23	<u>78.5</u>
24	<u>93.4</u>
25	<u>91.3</u>
26	<u>91.1</u>
27	<u>136.1</u>
28	<u>98.9</u>
29	<u>121.9</u>
30	<u>98.0</u>
31	<u>107.0</u>

*Generator on line but no net generation.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-267

UNIT NAME Fort St. Vrain

DATE August 12, 1983

COMPLETED BY Chuck Fuller

TELEPHONE (303) 785-2224

REPORT MONTH July, 1983

NO.	DATE	TYPE	DURATION	REASON	METHOD OF SHUTTING DOWN REACTOR	LER #	SYSTEM CODE	COMPONENT CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
83-010	830701	F	377.1	H	4	N/A	CGB	ZZZZZZ	Shutdown continued for primary coolant cleanup. Reactor critical.
83-011	830719	F	3.8	B	4	N/A	HBD	VALVEX	Manually tripped turbine to perform maintenance on reheat bypass valve. Reactor remained critical.
83-012	830719	F	1.7	B	4	N/A	HBD	VALVEX	Manually tripped turbine to perform maintenance on reheat bypass valve. Reactor remained critical.

REFUELING INFORMATION

1. Name of Facility.	Fort St. Vrain Unit No. 1
2. Scheduled date for next refueling shutdown.	April 1, 1984
3. Scheduled date for restart following refueling.	June 1, 1984
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?	Yes
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 10CFR Section 50.59)?	-----
If no such review has taken place, when is it scheduled?	-----
5. Scheduled date(s) for submitting proposed licensing action and supporting information.	Not scheduled at this time; to be determined.
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. 11 spent HTGR fuel elements.
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.

REFUELING INFORMATION (CONTINUED)

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, General Atomic Company, and DOE.*
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- * 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 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 WCR 19 1/2, Platteville, Colorado 80651

August 12, 1983
Fort St. Vrain
Unit #1
P-83278

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 July, 1983.

Very truly yours,

Don W. Waremberg
Manager, Nuclear Production

DWW/djm

Enclosure

cc: Mr. John T. Collins

IE 24
1/1