PUBLIC SERVICE COMPANY OF COLORADO

FORT ST. VRAIN NUCLEAR GENERATING STATION

MONTHLY OPERATIONS REPORT

NO. 104

August, 1982

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 August, 1982.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

1.1 Summary

Reactor power continued throughout the month at about 70% and 215 MWe, with the exception of three brief reductions to 30% caused by malfunctioning control equipment, and one turbine generator trip caused by a grounded instrument line.

Work is in progress to replace #5 feedwater heater.

1.2 Operations

The reactor continues operation at 70% power with electrical generation at 215 MW. One reduction in power to 55%, 175 MWe, was made on request by the System Load Dispatcher for five hours.

Repairs to several snubbers were made with no reduction of power operation.

Brushes were replaced on the turbine generator amplidyne unit.

A faulty reheat temperature sensing element caused a brief reduction of power on August 13.

On August 17, a faulty relay in the main steam pressure controller caused a turbine runback and a rod runback of the reactor. The plant was brought back to 70% power manually, and the relay was repaired.

On August 27, 1D helium circulator tripped due to a faulty speed signal to the circulator speed controller. Power was reduced to 30%, the malfunction was corrected, and 70% power operation resumed. The same evening, the turbine generator was tripped while repairing a master trip indicating light receptacle. The turbine generator was placed on line, and 70% power attained at approximately 0700 hours the following morning.

A Change Notice was completed on August 30, for all helium circulator speed control systems, which selects the higher speed signal from either of two channels. This will lessen

the chance of a circulator trip from faulty speed indication as had occurred on August 27, 1982.

A drain line from the cold reheat flash tank to the deaerator ruptured and was isolated for repair.

Lightening struck the 60 meter weather tower. Recorders at the tower were restored upon replacing a damaged power supply.

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 September 8, 1982
COMPLETED BY L. M. McBride
TELEPHONE (303) 785-2224

OPERATING STATUS

NOTES

1. Unit Name: Fort St. Vrain
2. Reporting Period: 820801 through 820831
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): 231
10. Reasons for Restrictions, If Any: NRC restriction of 70% pending resolution of temperature fluctuations.

		This Month	Year to Date	Cumulative
11.	Hours in Reporting Period	744	5,831	27,792
12.	Number of Hours Reactor Was Critical	744	3,467.5	18,045.9
13.	Reactor Reserve Shutdown Hours	0	0	0
14.	Hours Generator On-Line	739.4	2,564.3	12,472.6
15.	Unit Reserve Shutdown Hours	0	0	0
16.	Gross Thermal Energy Generated (MWH)	427,890.0	1,434,706.6	6,368,651.4
17.	Gross Electrical Energy Generated (MWH)	155,067	486,527	2,177,883
18.	Net Electrical Energy Generated (MWH)	145,965	441,483	1,995,742
19.	Unit Service Factor	99.4	44.0	44.9
20.	Unit Availability Factor	99.4	44.0	44.9
21.	Unit Capacity Factor (Using MDC Net)	59.5	22.9	21.8
22.	Unit Capacity Factor (Using DER Net)	59.5	22.9	21.8
23.	Unit Forced Outage Rate	0.6	12.8	30.5

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Maintenance outage - 821101 through 821215 - 1,080 hours
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	N/A	N/A
INITIAL ELECTRICITY	N/A	N/A
COMMERCIAL OPERATION	N/A	N/A

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-267

Unit Fort St. Vrain

Date September 8, 1982

Completed By L. M. McBride

Telephone (303) 785-2224

Month August, 1982

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	189.9	17	198.3
2	200.5	18	199.2
3	200.0	19	201.7
4	200.1	20	203.5
5	200.2	21	203.5
6	200.7	22	204.2
7	200.6	23	204.0
8	200.5	24	203.4
9	200.5	25	202.4
10	200.1	26	200.6
11	200.2	27	122.9
12	200.0	28	159.3
13	200.1	29	200.5
14	199.9	30	198.9
15	200.3	31	186.3
16	199.7		

*Generator on line but no net generation.

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-267
UNIT NAME Fort St. Vrain
DATE September 8, 1982
COMPLETED BY L. M. McBride
TELEPHONE (303) 785-2224

REPORT MONTH August, 1982

NO.	DATE	TYPE	DURATION	REASON	METHOD OF SHUTTING DOWN REACTOR	LER #	SYSTEM CODE	COMPONENT CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
82-013	820827	F	4.6	H	4	N/A	HBD	TURBIN	Turbine generator trip during electrical maintenance. Reactor remained critical.

REFUELING INFORMATION

1. Name of Facility.	Fort St. Vrain Unit No. 1
2. Scheduled date for next refueling shutdown.	October 1, 1983
3. Scheduled date for restart following refueling.	December 1, 1983
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 131 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.*

* 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.