PUBLIC SERVICE COMPANY OF COLORADO

FORT ST. VRAIN NUCLEAR GENERATING STATION

MONTHLY OPERATIONS REPORT

NO. 111

April, 1983

FORM 288 22 0218

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 April, 1983.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

Mechanical repairs have been the primary consideration at Fort St. Vrain during the month of April, with the reactor shut down as a result of a scram which occurred on March 17, 1983.

1B boiler feedpump has been overhauled and is being reassembled. Operational testing will commence in mid-May.

Problems with the installation of 1D helium circulator reheat flange have been encountered because of the reluctance of a metallic seal to stay in place while hoisting this multi-ton unit into place with a hydraulic ram. A method of "sighting in" the position of this seal prior to hoisting the unit the last few inches has been devised. It is anticipated that the reheat flange will be successfully installed the week of May 9.

HV-2224 main steam stop check valve repair has required rebuilding and stress relieving of the valve and internals.

Repairs have been completed to PV-22129 and PV-22153, Loop 1 depressurizing valves.

1B main condensate pump is being overhauled at this time.

The problem concerning the accumulation of excessive amount of liquid waste has been resolved by two corrective actions. First, Sulphur 35 was identified as the restrictive isotope in the Reactor Building sump contents. This allowed release of the liquid at a higher rate. Second, liquid waste from the purification trains and regeneration train knock-out pots is being detrained to carboys for future disposal. This allows the release of lesser contaminated liquid from the liquid waste receivers with a very short holdup time being required.

The test of an "ultra-filtration" unit for removal of colloidal iron from condensate has proven successful. Further testing during startup conditions will be conducted.

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 May 10, 1983
COMPLETED BY C. H. Fuller
TELEPHONE (303) 785-2224

OPERATING STATUS

NOTES

1. Unit Name: Fort St. Vrain
2. Reporting Period: 830401 through 830430
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: Restriction to 70% pending resolution of contractual matters.

		This Month	Year to Date	Cumulative
11.	Hours in Reporting Period	719	2,879	33,600
12.	Number of Hours Reactor Was Critical	0.0	1,153.9	20,900.6
13.	Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14.	Hours Generator On-Line	0.0	905.0	14,079.5
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	0.0	464,132.2	7,253,557.6
17.	Gross Electrical Energy Generated (MWH)	0	140,814	2,467,718
18.	Net Electrical Energy Generated (MWH)	-2,814	120,303	2,243,413
19.	Unit Service Factor	0.0	31.4	41.9
20.	Unit Availability Factor	0.0	31.4	41.9
21.	Unit Capacity Factor (Using MDC Net)	0.0	12.7	20.2
22.	Unit Capacity Factor (Using DER Net)	0.0	12.7	20.2
23.	Unit Forced Outage Rate	100.0	68.6	40.8

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Maintenance and plant recovery - 830501 through 830531 (744.0 hours).
25. If Shut Down at End of Report Period, Estimated Date of Startup: 830601

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 May 10, 1983

Completed By C. H. Fuller

Telephone (303) 785-2224

Month April, 1983

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0.0	17	0.0
2	0.0	18	0.0
3	0.0	19	0.0
4	0.0	20	0.0
5	0.0	21	0.0
6	0.0	22	0.0
7	0.0	23	0.0
8	0.0	24	0.0
9	0.0	25	0.0
10	0.0	26	0.0
11	0.0	27	0.0
12	0.0	28	0.0
13	0.0	29	0.0
14	0.0	30	0.0
15	0.0	31	N/A
16	0.0		

*Generator on line but no net generation.

UNIT SHUTDOWNS AND POWER REDUCTONS

DOCKET NO. 50-267
UNIT NAME Fort St. Vrain
DATE May 10, 1983
COMPLETED BY C. H. Fuller
TELEPHONE (303) 785-2224

REPORT MONTH April, 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	830401	F	719.0	B	3	N/A	CBI	BLOWER	Shutdown continued from reactor scram on 830317 for maintenance to "D" helium circulator, "B" boiler feed pump and primary coolant chemistry clean-up.

REFUELING INFORMATION

1.	Name of Facility.	Fort St. Vrain Unit No. 1
2.	Scheduled date for next refueling shutdown.	February 1, 1984
3.	Scheduled date for restart following refueling.	April 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.*

* 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.