PUBLIC SERVICE COMPANY OF COLORADO

FORT ST. VRAIN NUCLEAR GENERATING STATION

MONTHLY OPERATIONS REPORT

NO. 130

November, 1984

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 November, 1984.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

Our new Power Plant Maintenance Information System (PPMIS) was put into service on November 5, 1984, and after a month of operation, most of the initial problems have been resolved. After everyone becomes more familiar with this system, it should become a very important operating asset.

Construction has installed a new flow totalizer in our main tower blowdown line. This should give us a better indication of water chemistry requirements, and make it easier to maintain proper circulating water chemistry.

Contractors working on the sewage lagoon dug up a 13KV feed cable from Bus 7 to various users, including the Visitor's Center and the Fort St. Vrain River structure. The Security Department maintained catalytic heaters in various areas to keep pipes from freezing. The cable has been repaired and returned to service.

"1A" Purified Helium Compressor Motor Generator Set failed on Thursday, November 1, 1984. Maintenance and the Electricians were successful in repairing the compressor and returning it to service.

Clearances were removed from "B" Helium Circulator, and after flushing of the bearing water piping and warm-up of the steam piping, the circulator was brought up to speed. The Inside Auxiliary Boiler was placed in service parallel with the outside boiler to attain the maximum circulator speed and helium flow. This, as expected, showed a rise in primary coolant moisture. However, after only a few days, the primary coolant moisture level reversed, to a downward trend.

The bearing water pump for Loop II, P-2102-S, had a bad seal. This pump is necessary to operate Loop II circulators, because one other Loop II bearing water pump is inoperable. Since Loop I Helium Circulator, "1B", is operable, Loop II was shutdown and the bearing water pump repaired.

During the performance of a test of the reserve shutdown system for Control Rod Drive #21, the boron balls would not fully discharge from the hopper. This required a non-emergency event report to the Nuclear Regulatory Commission, which was reported on Monday, November 5, 1984. This malfunction is under investigation. We are continuing to perform back-EMF tests on the installed operable control rod drives.

"1A" Instrument Air Compressor periodically caused breakers to trip. The problem was investigated, and found to have a bad motor which has been replaced. Instrument Air Compressor "1C" unloading switch was functioning improperly. A new switch was installed, and still would not function at the desired pressures. A new switch is on order for the compressor. When both instrument air compressors are completed, "1B" will be removed for a scheduled five year preventive maintenance overhaul.

The Auxiliary Cooling Method (ACM) Generator Set is under going an oil cooler change out plus other work. While shutdown, the batteries are also being changed. "1B" Diesel Generator Set was removed from service to perform a scheduled preventive maintenance overhaul. "1A" Diesel Generator Set was taken out of service for a quarterly scheduled preventive maintenance overhaul. Both overhauls were completed, and both generator sets returned to service.

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 EXAMINATION

None.

4.0 MONTHLY OPERATING DATA REPORT

Attached.

OPERATING DATA REPORT

DOCKET NO. 50-267
DATE December 14, 1984
COMPLETED BY Frank Novachek
TELEPHONE (303) 785-2224

OPERATING STATUS

NOTES

1. Unit Name: Fort St. Vrain
2. Reporting Period: 841101 through 841130
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: Per commitment to the NRC, long term operation above 85% power is pending completion of the B-0 Startup Testing.

	This Month	Year to Date	Cumulative
11. Hours in Reporting Period	720	8,040	47,521
12. Number of Hours Reactor Was Critical	0.0	1,324.1	27,151.4
13. Reactor Reserve Shutdown Hours	0.0	0.0	0.0
14. Hours Generator On-Line	0.0	660.1	18,463.3
15. Unit Reserve Shutdown Hours	0.0	0.0	0.0
16. Gross Thermal Energy Generated (MWH)	0.0	340,407.9	9,861,725.3
17. Gross Electrical Energy Generated (MWH)	0	95,144	3,248,594
18. Net Electrical Energy Generated (MWH)	-2,803	58,889	2,930,419
19. Unit Service Factor	0.0	8.2	38.9
20. Unit Availability Factor	0.0	8.2	38.9
21. Unit Capacity Factor (Using MDC Net)	0.0	2.2	18.7
22. Unit Capacity Factor (Using DER Net)	0.0	2.2	18.7
23. Unit Forced Outage Rate	100.0	85.6	45.7

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
    12/01/84 through 03/31/85, 2904 hours, Control Drive Investigation.
25. If Shut Down at End of Report Period, Estimated Date of Startup: 04/01/85
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 December 14, 1984

Completed By Frank Novachek

Telephone (303) 785-2224

Month November, 1984

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.

50-267

UNIT NAME Fort St. Vrain

DATE December 14, 1984

COMPLETED BY Frank Novachek

TELEPHONE (303) 785-2224

REPORT MONTH November, 1984

NO.	DATE	TYPE	DURATION	REASON	METHOD OF SHUTTING DOWN REACTOR	LER #	SYSTEM CODE	COMPONENT CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
84-006	841101	F	720.0	A	3	50-267/84-008	AA	JC	Control Rod Drive Investigation

REFUELING INFORMATION

1. Name of Facility	Fort St. Vrain Unit No. 1
2. Scheduled date for next refueling shutdown.	4th Refueling: February 1, 1986
3. Scheduled date for restart following refueling.	May 1, 1986
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment?	No
If answer is yes, what, in general, will these be?	----------
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.	----------
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.	a) 1482 HTGR fuel elements b) 143 spent 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.