

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

MONTHLY OPERATIONS REPORT

NO. 64

APRIL, 1979

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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 April, 1979.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

Refueling shutdown is progressing on schedule. The six regions scheduled for refueling have been completed. Fuel test elements have been placed in Region 27, Region 24, Region 30, Region 22, and Region 25. The PGX graphite sample in the layer 12 reflector elements have also been placed in those five regions. An inspection of the Region 13 core support block is planned. A test of the installation of the region constraint devices was performed on Region 18 for the purpose of identifying any problems prior to the scheduled installation of region constraint devices later this year. Following completion of the region constraint device test, the stylus block for the scratcher assembly was inserted into Region 18. The modified control rod drive work was completed with one modified drive placed in Region 35 and one placed in Region 5.

The main turbine generator overhaul completion date of May 4, 1979, is reported by General Electric to have slipped to May 24, 1979. This new completion date could pose real problems for attaining power operation by June 1, 1979.

Installation of C-2103 (helium circulator) continues.

The main condenser eddy current testing indicated wall thinning and/or leaks in 648 tubes. Plugging of the tubes is in progress.

Cleaning of the circulating water cooling tower has been completed.

Loop 1 and Loop 2 secondary coolant piping, valve, and control system overhaul was completed in April and both loops are receiving flow from the condensate system at this time.

System 91 (hydraulic oil system) overhaul and system modification were essentially completed by April 25, 1979, and these systems are now being returned to service. The additional auxiliary boiler was placed in service on April 5, 1979, and final testing was completed during this report period.

Attached is a summary, by department, of outage activities completed.

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

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4.0 MONTHLY OPERATING DATA REPORT

Attached

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A summary of outage completion is as follows: .

DEPARTMENT	TOTAL NUMBER OF ACTIVITIES	NUMBER OF ACTIVITIES COMPLETED	% COMPLETE
Computer Services	8	4	50
Electrical	145	119	82
Engineering	117	88	75
General Atomic	46	43	93
General Electric	41	16	39
Health Physics	19	7	37
<u>MAINTENANCE</u>			
Overall	521	456	88
General items	264	206	78
Refueling	232	232	100
Circulator	25	18	72
<u>OPERATIONS</u>	234	189	81
QUALITY ASSURANCE	4	2	50
RESULTS	114	86	75
STORES	23	19	83
TECH SERVICES	42	32	76
TRAINING	3	2	67
WAREMBOURG	11	4	36
<u>TOTAL</u>	1,328	1,067	80% overall average

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POOR ORIGINAL

OPERATING DATA REPORT

DOCKET NO. 50-267
DATE 790601
COMPLETED BY J. W. Gahm
TELEPHONE (303) 785-2253

OPERATING STATUS

- 1. Unit Name: Fort St. Vrain, Unit No. 1
2. Reporting Period: 790501 to 790531
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

NOTES

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: Nuclear Regulatory Commission restriction (70%) pending resolution of certain Final Safety Analysis Report and Technical Specification bases discrepancies. This unit is in the power ascension phase of startup testing.

Table with 4 columns: Item, This Month, Year to Date, Cumulative. Rows 11-23 include metrics like Hours in Reporting Period, Reactor Reserve Shutdown Hours, and Energy Generated.

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): Shutdown for Refueling on 2-1-79

25. If Shut Down at End of Report Period, Estimated Date of Startup: 6-15-79

Table with 3 columns: Units In Test Status, Forecast, Achieved. Rows include INITIAL CRITICALITY, INITIAL ELECTRICITY, and COMMERCIAL OPERATION.

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UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-267
 UNIT NAME Fort St. Vrain, Unit No. 1
 DATE 790601
 COMPLETED BY J. W. Gahn
 TELEPHONE (303) 785-2253

REPORT MONTH May, 1979

NO.	DATE	TYPE	DURATION	REASON	METHOD OF SHUTTING DOWN REACTOR	LER #	SYSTEM CODE	COMPONENT CODE	CAUSE AND CORRECTIVE ACTION TO PREVENT RECURRENCE
79-04	790201	F	744	A	4	79-03/03-L-0	III	PUMPXX	Excessive gland leakage on "B" boiler feed pump concurrent with inoperable "C" boiler feed pump necessitated controlled reactor shutdown on February 1, 1979, per LCO 4.3.2. Scheduled reactor shutdown for refueling was changed from March 1, 1979, to February 1, 1979. Thus shutdown number 79-04 has extended through February, March, April, and May, 1979.

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SUMMARY: Plant shutdown for scheduled refueling and turbine generator overhaul entire month.

AVERAGE DAILY UNIT POWER LEVEL

Docket No. 50-267

Unit Fort St. Vrain, Unit No. 1

Date 790601

Completed By J. W. Gahm

Telephone (303) 785-2253

Month May, 1979

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0

*Generator on line but no net generation.

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REFUELING INFORMATION

1. Name of Facility.	Fort St. Vrain, Unit No. 1
2. Scheduled date for next refueling shutdown.	February 1, 1979
3. Scheduled date for restart following refueling.	June 1, 1979
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?	To facilitate insertion of eight fuel test elements.
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)?	*NOTE: If Technical Specification change approval if not received from Nuclear Regulatory Commission in time for refueling, then the answer to #4 is NO, and the reload fuel and graphite design have been reviewed.
If no such review has taken place, when is it scheduled?	
5. Scheduled date(s) for submitting proposed licensing action and supporting information.	January 9, 1978
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.	Eight test fuel elements to allow: 1) Different fuel particle design. 2) To qualify near isotropic graphite.
7. The number of fuel assemblies (a) in the core and (b) in the spent fuel storage pool.	a) 1482 HTGR fuel elements. b) 245 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.	1986 under the Three Party Agreement (Contract AT (04--3)-633) between DOE, Public Service Company of Colorado (PSCo), and General Atomic Company.*
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*The 1986 date is based on the understanding that spent fuel discharged during the term of the Three Party Agreement will be shipped to the Idaho National Engineering Laboratory for storage by DOE at the Idaho Chemical Processing Plant (ICPP). The storage capacity has evidently been sized to accommodate fuel which is expected to be discharged during the eight year period covered by the Three Party Agreement.

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