

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

MONTHLY OPERATIONS REPORT

NO. 127

August, 1984

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 August, 1984.

1.0 NARRATIVE SUMMARY OF OPERATING EXPERIENCE AND MAJOR SAFETY RELATED MAINTENANCE

The control rod investigation continues. In order to expedite primary coolant moisture removal, the control rod drives from several regions have been placed in the equipment storage wells and have been replaced by temporary spare rods. This allowed pressurizing the PCRV to approximately 90 psia so that the helium purification train could be placed in service on August 8, 1984.

The commitment made to the Nuclear Regulatory Commission to refurbish both the gear train and shim motors on the six control rod drives that did not scram on June 23, 1984 has been completed.

The seventh control rod drive had a bad shim motor. The motor stator was replaced, and the rod was reassembled, but the scram time was near the limit. It was decided to refurbish the gear train assembly. The gear train assembly has been refurbished, but the control rod drive lifting cable is partially frayed. The rod drive cannot be utilized unless the control rod cable is replaced.

The control rod drive in Region 7, which had a slack cable indication, was prepared for removal from the core. The removal process was nearly completed when it was discovered that one of the control rod drive absorber strings was not fully retracted. The string was bent and could not be returned to the core so the control rod drive could not be released from the auxiliary transfer cask. Preparations are in progress to prepare the Refueling Floor for removal of the control rod in an abnormal configuration. Upon completion of this task, control rod drive refurbishing and repairing efforts will continue per commitment to the Nuclear Regulatory Commission.

Loop 1 was placed in service August 7, 1984, to maximize primary coolant flow for this moisture removal operation.

Due to the abnormal control rod configuration, in-core control rod drive testing has been slowed because the core reactivity status must be confirmed making neutron diffusion computer code runs for each evolution.

A significant number of Maintenance personnel from the Denver area have been assigned to Fort St. Vrain temporarily to perform maintenance activities which were not being performed due to the control rod drive work.

A Nuclear Regulatory Commission inspection team was on site the week of July 30 to monitor control rod drive work activities.

The annual Radiological Emergency Response Plan (RERP) drill was performed on August 15, 1984. Problems were experienced with the notification fan-out procedure, but operational response to the situation went well.

Spent fuel shipping continues. Several loads have been sent off site this month.

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 September 12, 1984

COMPLETED BY Frank Novachek

TELEPHONE (303) 785-2224

OPERATING STATUS

1. Unit Name: Fort St. Vrain
2. Reporting Period: 840801 through 840831
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

NOTES

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	<u>744</u>	<u>5,855</u>	<u>45,336</u>
12. Number of Hours Reactor Was Critical	<u>0.0</u>	<u>1,324.1</u>	<u>27,151.4</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>0.0</u>	<u>660.1</u>	<u>18,463.3</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>0.0</u>	<u>340,407.9</u>	<u>9,861,725.3</u>
17. Gross Electrical Energy Generated (MWH)	<u>0</u>	<u>95,144</u>	<u>3,248,594</u>
18. Net Electrical Energy Generated (MWH)	<u>-3,571</u>	<u>66,790</u>	<u>2,938,317</u>
19. Unit Service Factor	<u>0.0</u>	<u>11.3</u>	<u>40.7</u>
20. Unit Availability Factor	<u>0.0</u>	<u>11.3</u>	<u>40.7</u>
21. Unit Capacity Factor (Using MDC Net)	<u>0.0</u>	<u>3.5</u>	<u>19.6</u>
22. Unit Capacity Factor (Using DER Net)	<u>0.0</u>	<u>3.5</u>	<u>19.6</u>
23. Unit Forced Outage Rate	<u>100.0</u>	<u>72.3</u>	<u>41.9</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): 9-1-84 through 11-1-84, 1464 hours. Control Rod Drive Investigation.

25. If Shut Down at End of Report Period, Estimated Date of Startup: 11-1-84

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 September 12, 1984

Completed By Frank Novachek

Telephone (303) 785-2224

Month August, 1984

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>0.0</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17	<u>0.0</u>
18	<u>0.0</u>
19	<u>0.0</u>
20	<u>0.0</u>
21	<u>0.0</u>
22	<u>0.0</u>
23	<u>0.0</u>
24	<u>0.0</u>
25	<u>0.0</u>
26	<u>0.0</u>
27	<u>0.0</u>
28	<u>0.0</u>
29	<u>0.0</u>
30	<u>0.0</u>
31	<u>0.0</u>

\*Generator on line but no net generation.

50-267

UNIT NAME

Fort St. Vrain

DATE

September 12, 1984

COMPLETED BY

Frank Novachek

TELEPHONE

(303) 785-2224

REPORT MONTH August, 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	840801	F	744.0	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) 197 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.





# Public Service Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651

September 13, 1984  
Fort St. Vrain  
Unit #1  
P-84352

Office of Inspection and Enforcement  
ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

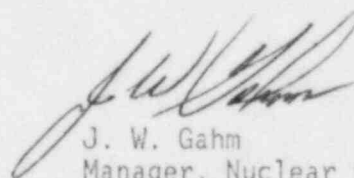
REFERENCE: Facility Operating  
License No. DPR-34

Docket No. 50-267

Dear Sir:

Enclosed please find our Monthly Operations Report for the month of August, 1984.

Sincerely,



J. W. Gahm  
Manager, Nuclear Production

Enclosure

cc: Mr. John T. Collins

JWG/djm

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Reg. IV

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