

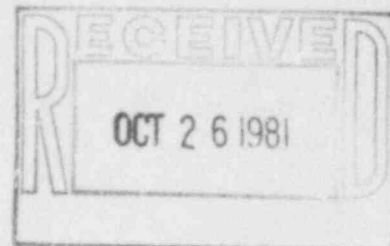


Public Service Company of Colorado

16805 Road 19 1/2, Platteville, Colorado 80651-9298



October 22, 1981
Fort St. Vrain
Unit No. 1
P-81253



Mr. Karl V. Seyfrit, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012

Reference: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Mr. Seyfrit:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/81-060, Final, submitted per the requirements of Technical Specification AC 7.5.2(b)2.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/81-060.

Very truly yours,

Don Warembourg
Don Warembourg
Manager, Nuclear Production

DW/clt

Enclosure

cc: Director, MIPC

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ACCURENCE REPORT DISTRIBUTION

Number of Copies

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Department of Energy - - - - - Mr. Glen A. Newby, Chief HTR Branch Division of Nuclear Power Development Mail Station B-107 Washington, D.C. 20545	1	(P Letter)
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Mr. Karl V. Seyfrit, Director - - - - - Region IV Office of Inspection and Enforcement Nuclear Regulatory Commission 611 Ryan Plaza Drive Suite 100C Arlington, Texas 76012	1	(Original of P Letter and Copy of LER)
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REPORT DATE: October 22, 1981

REPORTABLE OCCURRENCE 81-060

OCCURRENCE DATE: September 22, 1981

ISSUE 0
Page 1 of 4

FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
16805 WELD COUNTY ROAD 19 1/2
PLATTEVILLE, COLORADO 80651-9298

REPORT NO. 50-267/81-060/03-L-0

Final

IDENTIFICATION OF
OCCURRENCE:

During steady state power operation, the emergency feedwater header supply to Loop 1 helium circulator water turbine drives was isolated on three separate occasions between September 22, 1981, and October 13, 1981. This is a degraded mode of LCO 4.2.2 and is reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)2.

EVENT
DESCRIPTION:

Event #1

On September 22, 1981, with the plant operating at 70% thermal power and 243 MWe, excessive leakage through PV-21243 necessitated isolation of emergency feedwater to Loop 1 helium circulator water turbine drives to effect repairs. Refer to Figure 1 for simplified diagram of this system. A pressure control system is provided to control emergency feedwater flow to each of the circulator pelton wheel supply headers (A) and (B) under flow and no-flow conditions. Under flow conditions, PV-21243 (1) controls supply header pressure. Under no-flow conditions, PV-21243-1 (3) is provided to relieve excess header pressure to the turbine water drain tank in the event PV-21243 leaks through. In this instance, leakage through PV-21243 was in excess of the capabilities of PV-21243-1, and increased Loop 1 supply header pressure. This did not, in itself, render the emergency feedwater to Loop 1 circulators inoperable. A Plant Trouble Report was initiated, and the emergency feedwater was isolated ahead of PV-21243 (5) at 0010 hours on September 22, 1981. Repairs were made to PV-21243, and pelton drive water system was restored to service at 2140 hours on September 22, 1981.

Event #2

Valve leakage increased again, and on September 29, 1981, at 1100 hours, PV-21243 was isolated again and the valve stroke was lengthened in an attempt to reduce the leakage. The valve was returned to service at 1150 hours.

Event #3

On October 12, 1981, at 1000 hours, PV-21243 was isolated again for repairs. The valve was repaired and returned to service on October 13, 1981, at 0830 hours.

The pelton drive water system was returned to operation within the 24 hours allowed by LCO 4.2.2(a) in each event. Had it been necessary during these periods, the affected helium circulators could have been operated at reduced speed utilizing a water supply from the emergency condensate or firewater systems.

CAUSE
DESCRIPTION:

Excessive leakage through PV-21243 required isolation of emergency feedwater to Loop 1 helium circulators to effect repairs. The leakage was due to wear on the gasket surface between the seat ring and the valve body.

CORRECTIVE
ACTION:

Event #1

The gasket surface in the valve body of PV-21243 was built up by applying devcon compound to eliminate leakage. The valve was re-assembled, and the system returned to service.

Event #2

The valve stroke was lengthened.

Event #3

The valve disc and seat ring were replaced. The valve was re-assembled and returned to service.

A Plant Trouble Report has been written to have this valve rebuilt during the upcoming maintenance shutdown.

Emergency Feedwater
Header

To Backup
Feeding Water

(B)

(A)

(5) V-211615

(1) PV-21243

To Loop 1 Helium Circulator
Water Turbine Drives

(3) PV-21243-1

To Turbine Water
Drain Tank

(6) V-211616

(2) PV-21244

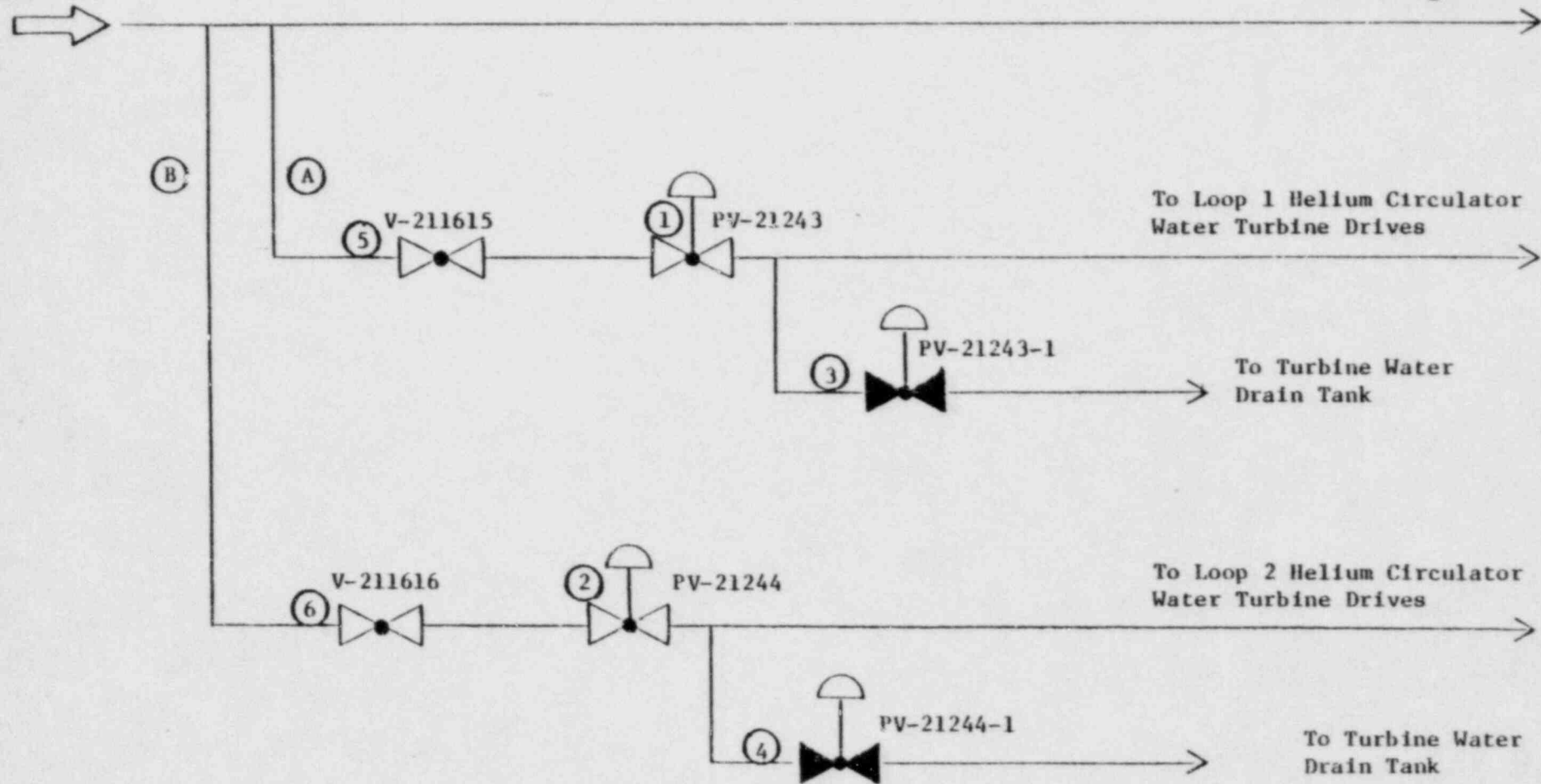
To Loop 2 Helium Circulator
Water Turbine Drives

(4) PV-21244-1

To Turbine Water
Drain Tank

Emergency Feedwater Pressure Control

FIGURE 1



Prepared By: Asa Reed
Asa Reed
Technical Services Technician

Reviewed By: Charles Fuller
Charles Fuller
Technical Services Engineering Supervisor

Reviewed By: Edwin D. Hill
Edwin D. Hill
Station Manager

Approved By: Don Warembourg
Don Warembourg
Manager, Nuclear Production