

LICENSEE EVENT REPORT

CONTROL BLOCK: \_\_\_\_\_ (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	C	O	F	S	V	1	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	2	0				5	
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
LICENSEE CODE														LICENSE NUMBER					LICENSE TYPE				CAT 58						

CON'T  
 REPORT SOURCE: L 0 5 0 0 0 2 6 7 1 0 0 9 8 0  
 DOCKET NUMBER: \_\_\_\_\_  
 EVENT DATE: \_\_\_\_\_  
 REPORT DATE: \_\_\_\_\_

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 From 0830 to 1830 hours on October 9, 1980, the plant was operated at power with  
 0 3 emergency feedwater supply to Loop I helium circulator water turbine drives isolated  
 0 4 to repair a line leak downstream of PV-21243-1. This event was reported as operation  
 0 5 in a degraded mode of LCO 4.2.2(a) and reported per Fort St. Vrain Technical  
 0 6 Specification AC 7.5.2(b)2. No effect on public health or safety. No accompanying  
 0 7 occurrence. Redundant systems available and operable. Similar Reports: 80-015,  
 0 8 80-023, 80-032.

0	9	H	H	E	B	P	I	P	E	X	X	A	Z		
7	8	9	10	11	12	13	14	15	16	17	18	19	20		
SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE	VALVE SUBCODE				
EVENT YEAR: 8 0		SEQUENTIAL REPORT NO.: 0 5 8		OCCURRENCE CODE: 0 3		REPORT TYPE: X		REVISION NO.: 1							
ACTION TAKEN: A		EFFECT ON PLANT: Z		SHUTDOWN METHOD: Z		HOURS: 0 0 0 0		ATTACHMENT SUBMITTED: Y		NPRD-4 FORM SUB: Y		PRIME COMP. SUPPLIER: N		COMPONENT MANUFACTURER: X 9 9 9	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The line leakage was due to erosion caused by high pressure/temperature water flow.  
 1 1 The Loop I emergency feedwater supply header was isolated, the defective portion of  
 1 2 piping replaced, and the system returned to service. Public Service Company Change  
 1 3 Notices changed valve bodies and downstream piping to stainless steel, and added  
 1 4 flanges to facilitate any future repair work. No further corrective action is  
 9 anticipated or required.

1	5	E	0	2	7	N/A	A	Operations Rounds/Personnel	Observation
7	8	9	10	11	12	13	14	15	16
FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
ACTIVITY CONTENT RELEASED OF RELEASE: Z		AMOUNT OF ACTIVITY: N/A		LOCATION OF RELEASE: N/A					
PERSONNEL EXPOSURES NUMBER: 0 0 0		DESCRIPTION: Z							
PERSONNEL INJURIES NUMBER: 0 0 0		DESCRIPTION: N/A							
LOSS OF OR DAMAGE TO FACILITY TYPE: Z		DESCRIPTION: N/A							
PUBLICITY ISSUED: N		DESCRIPTION: N/A							

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 PDR ADOCK 05000267  
 S PDR

REPORT DATE: October 3, 1984

REPORTABLE OCCURRENCE 80-58

ISSUE 1

OCCURRENCE DATE: October 9, 1980

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. 50-267/80-58/03-X-1

Final

IDENTIFICATION OF  
OCCURRENCE:

From 0830 hours to 1830 hours on October 9, 1980, the plant was operated at power with the emergency feedwater header supply to Loop 1 circulators isolated.

| This event constitutes operation in a degraded mode of LCO 4.2.2a)  
| and was reportable per Fort St. Vrain Technical Specification  
AC 7.5.2(b)2.

EVENT  
DESCRIPTION:

Fort St. Vrain Technical Specification LCO 4.2.2 specifies the conditions which must be met for circulator operability. Item a) of LCO 4.2.2 requires that a supply of emergency feedwater be available to drive the circulator water turbines. This LCO further allows for isolation of the emergency feedwater supply for up to 24 hours without the affected helium circulators being considered inoperable.

| A pressure control system is provided to control emergency feedwater  
| in each loop under flow or no-flow conditions. Refer to Figure 1 for  
| a simplified diagram of this system. Emergency feedwater is supplied  
| to Loop 1 and Loop 2 helium circulator water turbine drives via two  
| separate flow paths ( A ) and ( B ). The main pressure control  
| valves ( 1 ) and ( 2 ) are designed to control feedwater supply  
| pressure under flow conditions. Additional pressure control valves  
| ( 3 ) and ( 4 ) are provided to bleed off any leakage from the main  
| valves to the turbine water drain tank under the no-flow conditions  
| which normally exist.

| On October 9, 1980, graveyard shift, with the plant operating at 27%  
| thermal power and approximately 65 MWe, Operations personnel  
| performing routine rounds observed a leak at the line between  
| PV-21243-1 and the turbine water drain tank (see point C ) of  
| Figure 1). The line was isolated at 0830 hours to begin repair work.

H005  
1/1

Separate valves ( ⑤ and ⑥ ) are provided for isolation of each loop. During isolation of the Loop 1 system, a 1/2" pipe nipple was replaced. Repairs were completed by 1830 hours, and the system returned to service within the 24 hours allowed by the LCO.

Had it been necessary during this period, the Loop 1 circulators could have been operated on water turbine drive at reduced speed utilizing a supply from the emergency condensate or fire water systems.

CAUSE  
DESCRIPTION:

- | Component Failure.
- | The line leakage was determined to be a result of erosion caused by high pressure/temperature water.

CORRECTIVE ACTION:

- | The emergency feedwater header to the Loop I helium circulator water turbine drives was isolated, the defective portion of piping replaced, and the system returned to service within the time allowed by LCO 4.2.2.
- | Public Service Company Change Notice No. 1421 installed bolted flanges downstream of the pressure control valves to facilitate any future valve or piping repair work.
- | Public Service Company Change Notice No. 1687 changed the valve body of PV-21243-1 and PV-21244-1, and a portion of the downstream piping from carbon steel to stainless steel, as stainless steel is much more erosion resistant.
- | No further corrective action is anticipated or required.

Emergency Feedwater Header

To Backup Bearing 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

(C) Location of Line Leakage

(6) V-211616

(2) PV-21244

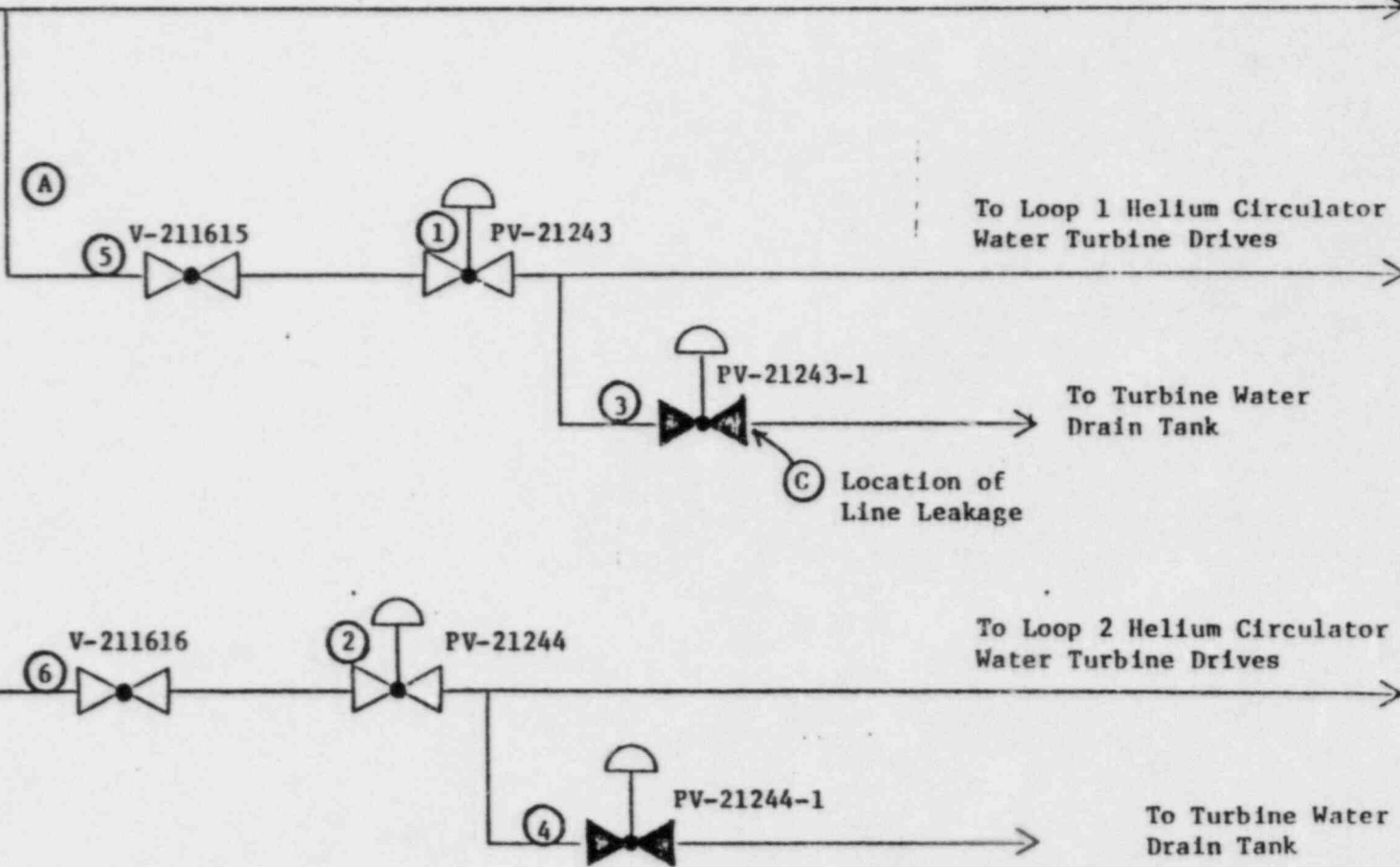
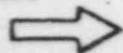
To Loop 2 Helium Circulator Water Turbine Drives

(4) PV-21244-1

To Turbine Water Drain Tank

Emergency Feedwater Pressure Control

FIGURE 1



Prepared By: Duane L. Frye  
Duane L. Frye  
Senior Technical Services Technician

Reviewed By: Jim Eggebrøten  
Jim Eggebrøten  
Technical Services Engineering Supervisor

Reviewed By: C. H. Fuller  
C. H. Fuller  
Station Manager

Approved By: J. W. Gahm  
J. W. Gahm  
Manager, Nuclear Production