



**Public Service Company of Colorado**

16805 ROAD 19½  
PLATTEVILLE, COLORADO 80651

December 17, 1980  
Fort St. Vrain  
Unit No. 1  
P-80432

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. 50-267/80-72, Preliminary, submitted per the requirements of Technical Specification AC 7.5.2(b)1 and AC 7.5.2(b)2.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/80-72.

Very truly yours,

*Don Warembourg*  
Don Warembourg  
Manager, Nuclear Production

DW/sb

Enclosure

cc: Director, MIPC

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REPORT DATE: December 17, 1980

REPORTABLE OCCURRENCE 80-72

OCCURRENCE DATE: November 17, 1980

ISSUE 0

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

REPORT NO. 50-267/80-072/03-L-0

Preliminary

IDENTIFICATION OF  
OCCURRENCE:

During the November performance of the monthly check of the helium circulator seal malfunction pressure differential switches, it was discovered that three of the twelve switch units tripped outside the limits specified in LCO 4.4.1, Table 4.4-3.

These are reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)1 and AC 7.5.2(b)2.

EVENT  
DESCRIPTION:

While operating at 66% thermal power and 207 MWe, instrument personnel performed the circulator seal malfunction (buffer-mid-buffer) switch operability check. The switches are normally calibrated on an annual basis; however, due to the problems cited in the previous reports as listed on the LER, a check of buffer-mid-buffer trip settings on a monthly basis has been undertaken as an interim measure to test operability.

There are twelve buffer-mid-buffer switch units, three per circulator. Each switch unit contains two electrical switches. The range of the sensing element is from (-) 100 inches of water to zero to (+) 100 inches of water. One of the electrical switches in each unit must operate at greater than or equal to (-) 10 inches water (negative buffer-mid-buffer), and the other electrical switch must operate at less than or equal to (+) 80 inches of water (positive buffer-mid-buffer) per Table 4.4-3.

The trip settings for the twelve switches are listed in Table 1.

The switch settings, which were found to be less conservative than those established by the Technical Specification did not prevent the fulfillment of the functional requirements of the system.

CAUSE  
DESCRIPTION:

Dirt buildup and accumulation in the electrical switches prevented them from making proper contact.

CORRECTIVE  
ACTION:

The trip settings of the electrical switches were re-adjusted to the proper trip points.

Due to the continuing problems being experienced with the electrical switches, the interim check of the trip settings is being conducted on a monthly basis.

The investigation of the problem associated with the helium circulator seal malfunction trip switches has been completed, and Public Service Company Nuclear Project Department is proceeding on a path to replace the existing equipment.

TABLE 1

		As Found Inches H <sub>2</sub> O		As Left Inches H <sub>2</sub> O	
		Increasing Trip Point	Decreasing Trip Point	Increasing Trip Point	Decreasing Trip Point
LA Circulator	PDIS-21149	+76	- 7	+76	-7
	PDIS-21151	+74	- 5	+74	-5
	PDIS-21153	+75	- 6	+75	-6
LB Circulator	PDIS-21155	+73	-30 (1)	+73	-6
	PDIS-21157	+75	-20 (1)	+75	-6
	PDIS-21159	+77	- 5	+77	-5
LC Circulator	PDIS-21150	+74	- 7	+74	-7
	PDIS-21152	+73	- 4	+73	-4
	PDIS-21154	+77	- 6	+77	-6
LD Circulator	PDIS-21156	+75	-25 (1)	+75	-6
	PDIS-21158	+77	- 6	+77	-6
	PDIS-21160	+77	- 7	+77	-7

(1) Denotes switches which were out of tolerance.

Prepared By: Asa Reed  
Asa B. Reed  
Technical Services Technician

Reviewed By: J. W. Gahm  
J. W. Gahm  
Technical Services Supervisor

Reviewed By: Frank M. Mathie  
Frank M. Mathie  
Operations Manager

Approved By: Don Warembourg  
Don Warembourg  
Manager, Nuclear Production