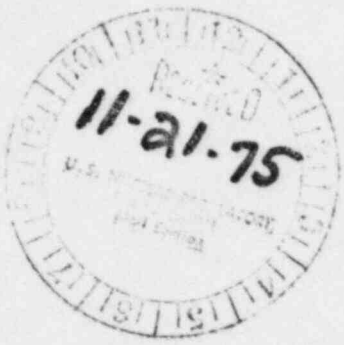
P. O. Box 361, Platteville, Colorado 80651



November 18, 1975
Fort St. Vrain
Unit No. 1
P-75008

Mr. E. Morris Howard, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
Suite 1000
Arlington, Texas 76012

Ref: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Mr. Howard:

Enclosed please find a copy of Abnormal Occurrence Report No. 50-267/75/24, Preliminary, submitted per the requirements of the Technical Specifications.

Very truly yours,

Frederic E. Swart
Superintendent, Nuclear Production
Fort St. Vrain Nuclear
Generating Station

FES/alk

cc: Mr. Roger S. Boyd

13276

REPORT DATE: November 18, 1975

OCCURRENCE DATE: November 8, 1975

FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
P. O. BOX 361
PLATTEVILLE, COLORADO 80651

REPORT NO. 50-267/75/24

Preliminary

IDENTIFICATION OF OCCURRENCE:

On November 8, 1975, the static seal on "B" helium circulator was apparently inadvertently released,which is one of the primary coolant boundaries when the helium circulator is shutdown.

This is identified as an abnormal occurrence per section 2.1.c of the Fort St. Vrain Technical Specifications.

CONDITIONS PRIOR TO OCCURRENCE:

	Steady State Power		Routine Shutdown
	Hot Shutdown		Routine Load Change
X	Cold Shutdown		Other (specify)
	Refueling Shutdown		
	Routine Startup		

The major plant parameters at the time of the event were as follows:

Power	RTR	0	MWth
	ELECT	0	MWe
Secondary Coolant	Pressure	210	psig
	Temperature	70	°F
	Flow	80,000	#/hr.
Primary Coolant	Pressure	46	psia
	Temperature	N/A	°F Core Inlet
		84	°F Core Outlet
	Flow	1 circulator at 4,000 rpm	#/hr.

DESCRIPTION OF OCCURRENCE:

During reactor shutdown, "B" helium circulator was shutdown to reroute cables for segregation reasons. At 2030 hours, while PCRV was approximately 35 psig during pressurization, the reactor operator noticed a positive increase of buffer/mid buffer ΔP, which indicates flow down the circulator shaft. The brake and seal set position indicating lights were inoperable due to a construction work authorization, so an operator was sent to the local location and the brake and seal were set manually.

APPARENT CAUSE OF OCCURRENCE:

	Design		Unusual Service Cond. Including Environ.
	Manufacture		Component Failure
	Installation/Const.	X	Other (specify)
	Operator	Undetermined at this time.	
	Procedure		

With the cable reroutes in progress, one of the redundant circuits which had a holding circuit that was relied on to set the brake and seal, was apparently interrupted. This appears to have released the static seal on "B" circulator.

ANALYSIS OF OCCURRENCE:

The following conditions existed when the buffer/mid buffer increasing differential pressure was observed:

1. One cable reroute work authorization removed the "X" circuit on circulator auxiliary isolation valves. It also included position indication on the brake and seal valves.

2. A second cable reroute work authorization removed the channel "A" input of "B" circulator buffer/mid buffer (seal malfunction) module. This module removal also nullified the channel "A" input of "B" circulator loss of bearing water.

3. A third cable reroute work authorization removed the channel "B" input of "B" circulator loss of bearing water module. Removal of this module also removed the "B" channel of "B" circulator buffer/mid buffer (seal malfunction) input.

These conditions in themselves should not have released the brake and seal because the "B" circulator trip should not have reset. The brake and seal should have remained set by the holding circuit.

ANALYSIS OF OCCURRENCE (continued):

Investigation into the cause of the release is still in progress.

CORRECTIVE ACTION:

The "B" circulator brake and seal was manually set as a follow up to the increase of the buffer/mid buffer differential pressure. This action closed the static seal, which returned the primary coolant boundary to normal.

Investigation into the cause and any possible further corrective action is in progress.

FAILURE DATA/SIMILAR REPORTED OCCURRENCES:

Abnormal Occurrence 50-267/74/24A - similar, but not the same.
Abnormal Occurrence 50-267/74/10 - related, but not similar.
Abnormal Occurrence 50-267/74/13A - related, but not similar.
Abnormal Occurrence 50-267/75/9 - related, but not similar.

PROGRAMMATIC IMPACT:

None

CODE IMPACT:

None

Submitted by: _____
Harvey W. Hillyard, Jr.
Technical Services Supervisor

Reviewed by: _____
H. Larry Brey
Superintendent, Operations

Approved by: _____
Frederic E. Swart
Superintendent, Nuclear Production