

Public Service Company of Colorado

P. O. Box 361, Platteville, Colorado 80651

April 7, 1975

APR. 15, 1975

Mr. E. Morris Howard, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive
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. 50-267/75/9,
final, submitted per the requirements of the Technical Specifications.

Very truly yours,

H. Larry Brey

H. Larry Brey
Superintendent-Operations
Fort St. Vrain Nuclear
Generating Station

HLB:il

cc: Mr. Angelo Giambusso

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REPORT DATE: April 7, 1975

ABNORMAL OCCURRENCE

OCCURRENCE DATE: March 29, 1975

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

REPORT NO. 50-267/75/9

Final

IDENTIFICATION OF
OCCURRENCE:

On Saturday, March 29, 1975, it was noted that there were indications that the mechanical seal on "B" helium circulator might be leaking. This is reportable as an Abnormal Occurrence per definition 2.1.c of the Fort St. Vrain Technical Specifications.

CONDITIONS PRIOR
TO OCCURRENCE:

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

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

Power	Rtr.	<u> 0 </u>	MWth
	Elect.	<u> 0 </u>	MWe
Secondary Coolant	Pressure	<u> ~ 300 </u>	psig)
	Temperature	<u> ~ 85 </u>	°F)
	Flow	<u> 0 </u>	#/hr.)
Primary Coolant	Pressure	<u> 86 </u>	psia
	Temperature	<u> 133 </u>	°F Core Inlet
		<u> 133 </u>	°F Core Outlet
	Flow	<u> 0 </u>	#/Hr.

DESCRIPTION OF
OCCURRENCE:

"B" circulator was cleared to construction to install blind flanges in the normal bearing water lines to and from the circulator bearing circuitry. This was required to circulate bearing water around the circulator to maintain water cleanliness.

When the normal bearing water inlet flange was loosened, water and gas began blowing from the flange and the pressure decreased very slowly. At the same time the Buffer-Mid buffer indication (local and remote) indicated $\approx 10''$ positive.

The flange was tightened up and buffer-mid buffer indications returned to "0".

The above occurred at 2100 on 3-29-75.

APPARENT CAUSE
OF OCCURRENCE:

<input type="checkbox"/> Design	<input type="checkbox"/> Unusual Service Cond. Including Environ.
<input type="checkbox"/> Manufacture	<input type="checkbox"/> Component Failure
<input type="checkbox"/> Installation/Const.	<input checked="" type="checkbox"/> Other (specify)
<input type="checkbox"/> Operator	<input type="checkbox"/>
<input type="checkbox"/> Procedure	<input type="checkbox"/>

The circulator seal is leaking, probably due to some foreign material on the sealing surfaces.

ANALYSIS OF
OCCURRENCE:

It was determined that the circulator static seals are a primary closure and as such should fall under LCO 4.2.9, which allows a maximum leakage from each circulator of 400 lb/day of helium at 10 psid. The leak rate has been determined to be ≈ 54.0 lb/day at 10 psid, the base specified by the Technical Specifications. An abnormal degradation of a primary coolant boundary has occurred but no violation of the Technical Specifications has resulted.

It should be mentioned that during normal operation of the helium circulator, this mechanical seal performs no sealing function and therefore no leakage as reported occurs.

Leakage through this seal will only occur if the helium circulator is removed from service and isolated from the bearing and buffer helium auxiliaries.

CORRECTIVE
ACTION:

No corrective action is planned at this time. If the leakage rate increases and approaches the Technical Specification limit, mechanical repairs will be undertaken.

FAILURE DATA/
SIMILAR REPORTED OCCURRENCES:

Abnormal Occurrence 50-267/74/10 was a similar leakage problem.

PROGRAMMATIC IMPACT:

None

CODE IMPACT:

None

Approved: _____

H. Larry Brey
H. Larry Brey
Superintendent-Operations
Fort St. Vrain Nuclear
Generating Station

HLB:il

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<u>Hot Shutdown</u>	<u>Routine Load Change</u>
<u>X Cold Shutdown</u>	<u>Other (specify)</u>
<u>Refueling Shutdown</u>	
<u>Routine Startup</u>	

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	Elect. <u>0</u>	MWe
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	Temperature <u>~ 85</u>	°F) Condensate pressure
	Flow <u>0</u>	#/hr.) on steam
) generators
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	Temperature <u>133</u>	°F Core Inlet
	<u>133</u>	°F Core Outlet
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OF OCCURRENCE:

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Unusual Service Cond.
Including Environ.

Manufacture

Component Failure

Installation/Const.

X Other (specify)

Operator

Procedure

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