

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME: 01 C O F S V I 1 00 - 00 00 00 - 00 41 11 20 01 1

REPORT TYPE: 01 CONT D I T L 05 0 - 02 67 03 10 76 03 19 76

EVENT DESCRIPTION

02 WHILE ISOLATING HE CIRC ID (SN C-2102) THE STATIC SEAL ACTUATION
03 LINE COULD NOT BE PRESSURIZED. HE CIRC ID IS STILL AVAILABLE FOR
04 PRIMARY COOLANT CIRCULATION UNTIL THE CIRC IS REMOVED FOR
05 INSPECTION.
06 (AD-050-267-76/07)

SYSTEM CODE: 07 C B E M E C F U N N G O 6 3 N

CAUSE DESCRIPTION

08 THE PRESUMED CAUSE IS THAT THE STATIC SEAL BELLOWS IS FAILED. THIS
09 BELLOWS IS PART OF HE CIRC SN C-2102 (SUPPLIED BY GENERAL ATOMIC
10 CO.), WHICH WILL BE REMOVED FOR INSPECTION.

FACILITY STATUS: 11 G 000 A NA
 FORM OF ACTIVITY RELEASED: 12 Z NA NA

PERSONNEL EXPOSURES

13 000 Z NA

PERSONNEL INJURIES

14 000 NA

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

16 Z NA

PUBLICITY

17 NA

ADDITIONAL FACTORS

18 NA

8311070210 760319
PDR ADOCK 05000267
S PDR

19

NAME: Royce A. Heller

PHONE: 303 785-2253

REPORT DATE: March 19, 1976

ABNORMAL OCCURRENCE 76/07

OCCURRENCE DATE: March 10, 1976

Page 1 of 5

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

REPORT NO. 50-267/76/07

Preliminary

IDENTIFICATION OF
OCCURRENCE:

On March 10, 1976, while isolating Helium Circulator 1D (serial number C-2102), the static seal actuation line could not be pressurized. Preliminary tests indicate a possible rupture of the static seal bellows which has been identified as an abnormal occurrence per the Fort St. Vrain Technical Specification 2.1, paragraph c.

CONDITIONS PRIOR
TO OCCURRENCE:

<u>Steady State Power</u>	<u>Routine Shutdown</u>
<u>Hot Shutdown</u>	<u>Routine Load Change</u>
<u>X Cold Shutdown</u>	<u>Other (specify)</u>
<u>Refueling Shutdown</u>	<u></u>
<u>Routine Startup</u>	<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>250</u> psig
	Temperature <u>100</u> °F
	Flow <u>190,000</u> #/hr.
Primary Coolant	Pressure <u>70</u> psig
	Temperature <u>155</u> °F Core Inlet (see note)
	<u>214</u> °F Core Outlet
	Flow <u>1A, 1C, and 1D self-</u> #/hr.
	turbining, 1B at 1,000 RPM

NOTE: Indicated low inlet temperature due to lack of primary coolant flow.
Had previously heated core using reheat steam flow.

DESCRIPTION OF
OCCURRENCE:

During the 8-4 shift of March 10, 1976, the equipment operator observed a rapidly decaying pressure for Circulator 1D (serial number C-2102) brake and seal gas pressure bottle. A leak check of the appropriate fittings was made. No external leaks were detected. It was further noted that bottle pressure only decayed with the seal actuation valves, HV-21194-4 and HV-21194-2, open (refer to Figure 1).

APPARENT CAUSE
OF OCCURRENCE:

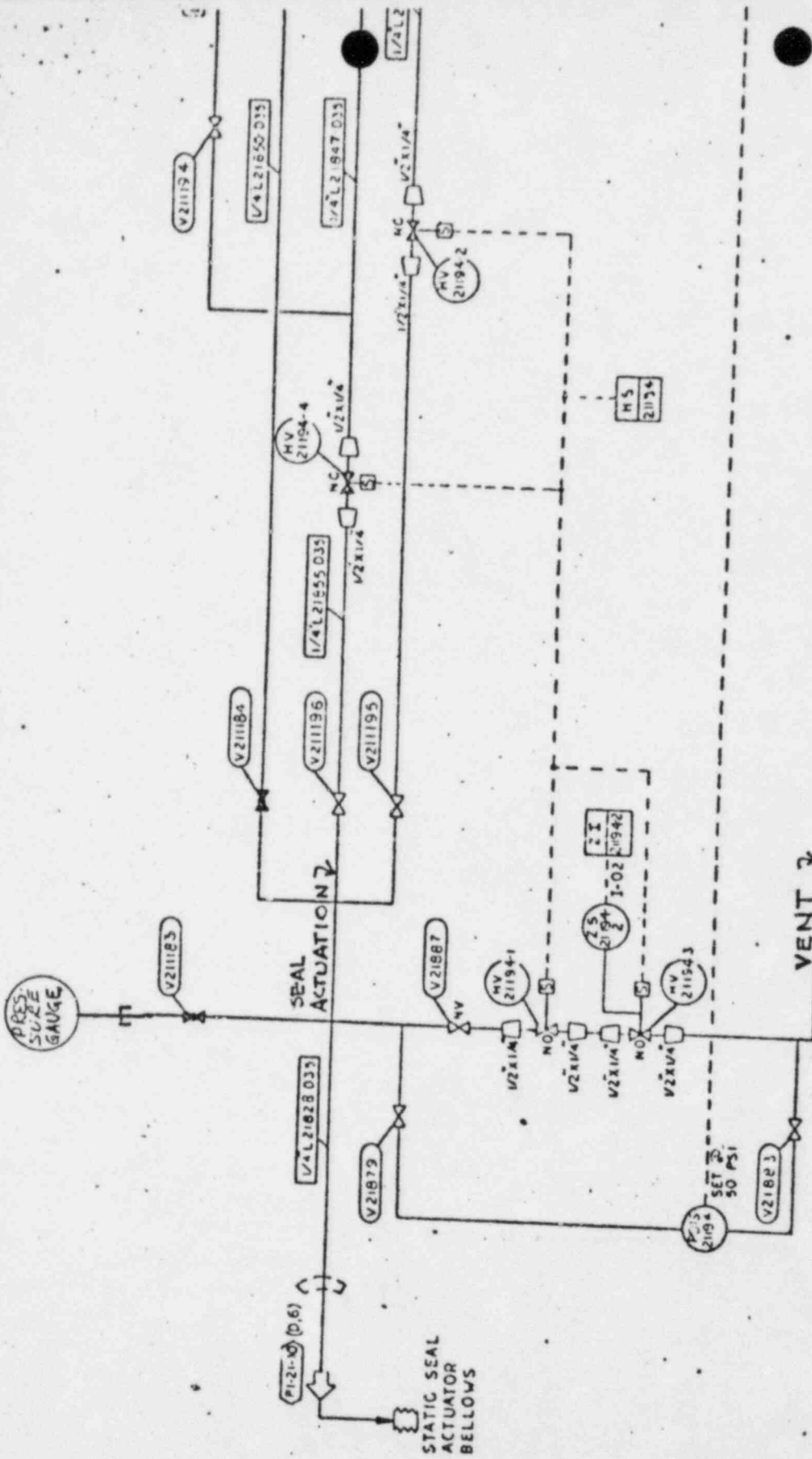
_____ Design	_____ Unusual Service Cond. Including Environment
_____ Manufacture	_____ X Component Failure
_____ Installation/Const.	_____ Other (specify)
_____ Operator	_____
_____ Procedure	_____

ANALYSIS OF
OCCURRENCE:

The following shift (4-12), a pressure gauge was connected to the system as shown on the attached Figure 1. The system valves were aligned as follows:

V-21184	Closed
V-211196	Closed
V-211195	Closed
V-21879	Closed
V-21883	Closed
V-21887	Closed
V-211201	Closed
V-211183	Open

The primary coolant pressure was then cycled between 61 psig and 83 psig by use of the Helium Transfer Compressor (C-2401). The readings observed on the gauge followed closely the known primary coolant pressure. The only explanation for this observation is that the static seal bellows is open to primary coolant pressure (reference Figure 2).



NOTES:

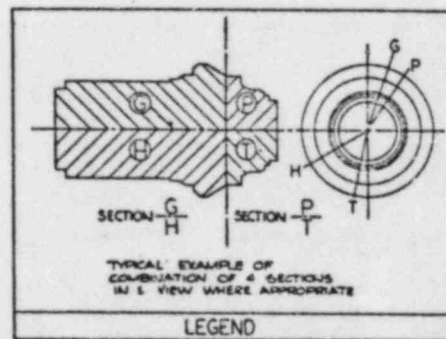
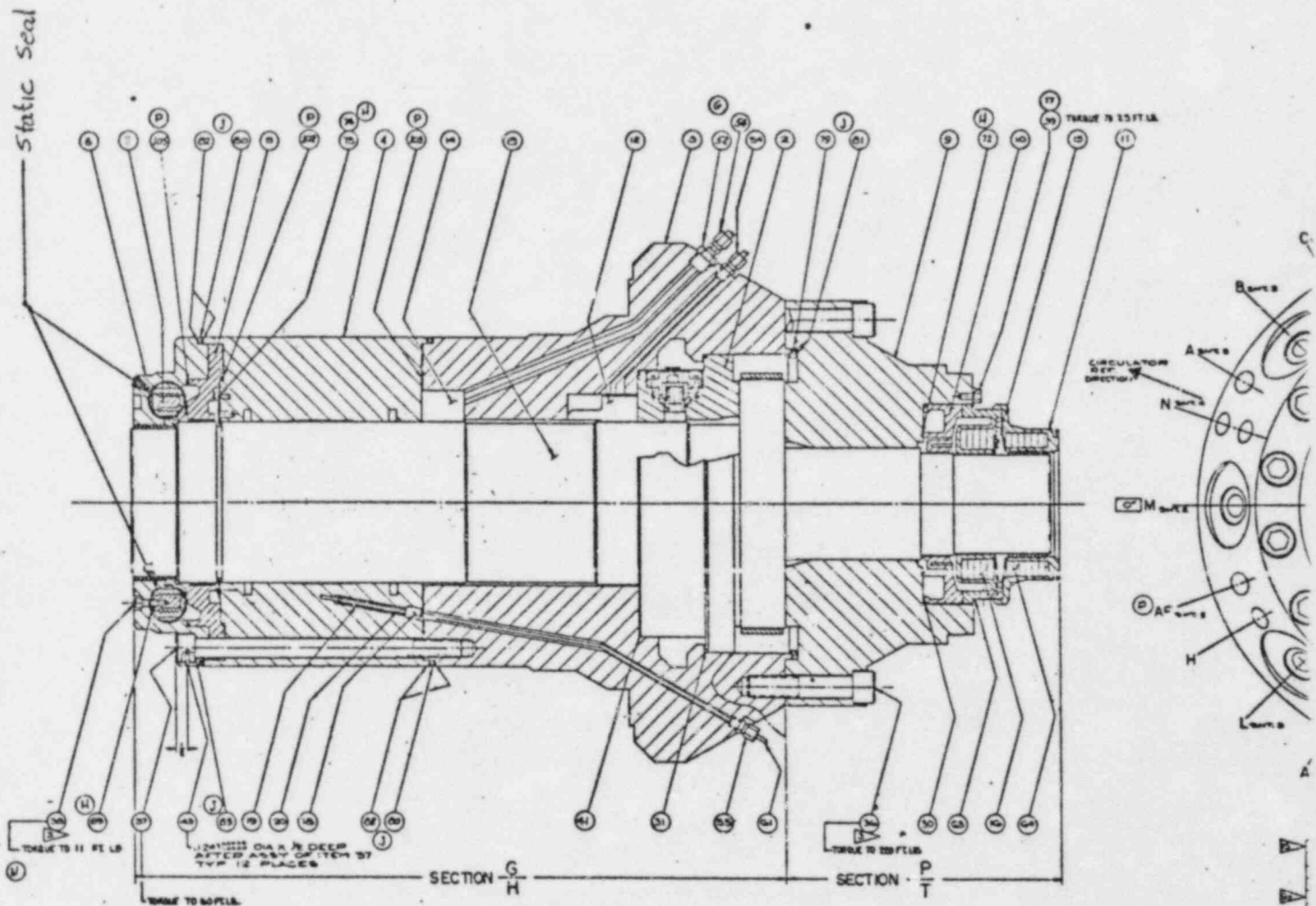
- 2 AN INTERLOCK ON BOTH THE HANDSWITCH & PPS PREVENTS BRAKE FROM BEING SET UNTIL CIRCULATOR IS TRIPPED & SLOWED TO 500RPM & PREVENTS SEAL FROM BEING SET FOR 30 SECONDS AFTER BRAKE IS SET
- 3 INTERLOCK PREVENTS BRAKE BEING RELEASED UNTIL STATIC SEAL IS VENTED.
- 5 THIS CC SHOWS - CLASS CHANGE.

CLASS CHANGE
V211201
3/4\"/>

6

5

4



A/O 76/07 - FIGURE 2

[illegible]

CORRECTIVE
ACTION:

Circulator 1D (serial number C-2102) will be removed and the static seal inspected. Further corrective action will be determined following that inspection. The spare circulator (serial number C-2101) will be placed in penetration D following the removal of Circulator 1D (serial number C-2102).

FAILURE DATA/SIMILAR REPORTED OCCURRENCES:

Abnormal Occurrence Report No. 50-267/74/13.

PROGRAMMATIC IMPACT:

Resumption of SUT B series tests will be delayed three to four weeks.

CODE IMPACT:

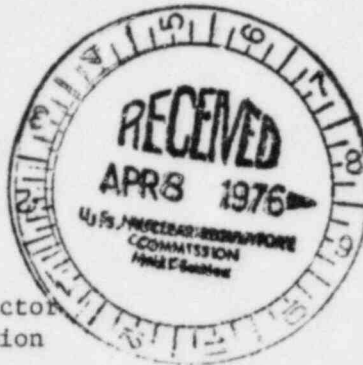
Undetermined.

Submitted by: H. W. Hillyard, Jr.
H. W. Hillyard, Jr.
Technical Services Supervisor

Reviewed by: H. Larry Brey
H. Larry Brey
Superintendent, Operations

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

Public Service Company of Colorado
P. O. Box 361, Platteville, Colorado 80651



March 19, 1976
Fort St. Vrain
Unit No. 1
P-76080

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. 50-267/76/07, Preliminary, submitted per the requirements of the Technical Specification.

Also, please find enclosed one copy of the Licensee Event Report for Abnormal Occurrence Report No. 50-267/76/07.

Very truly yours,

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

FES/alk

cc: Mr. Roger S. Boyd

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