

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



June 26, 1976
Fort St. Vrain
Unit No. 1
P-76150

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. 50-267/76/19, Preliminary, submitted per the requirements of the Technical Specifications.

Also, please find enclosed one copy of the Licensee Event Report for Abnormal Occurrence Report No. 50-267/76/19.

Very truly yours,

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

FES/alk

cc: Mr. Roger S. Boyd

6594

COPY SENT REGION IV

REPORT DATE: June 26, 1976

ABNORMAL OCCURRENCE 76/19

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OCCURRENCE DATE: June 17, 1976

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

REPORT NO. 50-267/76/19

Preliminary

IDENTIFICATION OF
OCCURRENCE:

On June 17, 1976, one steam water dump valve in each loop was open. This has been identified as an abnormal occurrence per the Fort St. Vrain Technical Specifications, Section 2.1, paragraph f.

CONDITIONS PRIOR
TO OCCURRENCE:

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

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>1,000</u>	psig
	Temperature	<u>174</u>	°F
	Flow	<u>100,000</u>	#/hr.
Primary Coolant	Pressure	<u>340</u>	psig
	Temperature	<u>194</u>	°F Core Inlet
		<u>194</u>	°F Core Outlet
	Flow	<u>*</u>	#/hr.

CONDITIONS PRIOR
TO OCCURRENCE (continued):

*Circulators	1A	<u>1,500 RPM on Feedwater</u>
	1B	<u>1,500 RPM on Feedwater</u>
	1C	<u>1,500 RPM on Feedwater</u>
	1D	<u>1,500 RPM on Feedwater</u>

DESCRIPTION OF
OCCURRENCE:

The reactor operator was making a routine check of the plant control boards and noticed that a steam-water dump valve in each loop was open and the alarm light was lit.

APPARENT CAUSE
OF OCCURRENCE:

<u>Design</u>	<u>Unusual Service Cond. Including Environment</u>
<u>Manufacture</u>	<u>Component Failure</u>
<u>Installation/Const.</u>	<u>X Other (specify)</u>
<u>Operator</u>	<u>Unknown at this time.</u>
<u>Procedure</u>	<u></u>

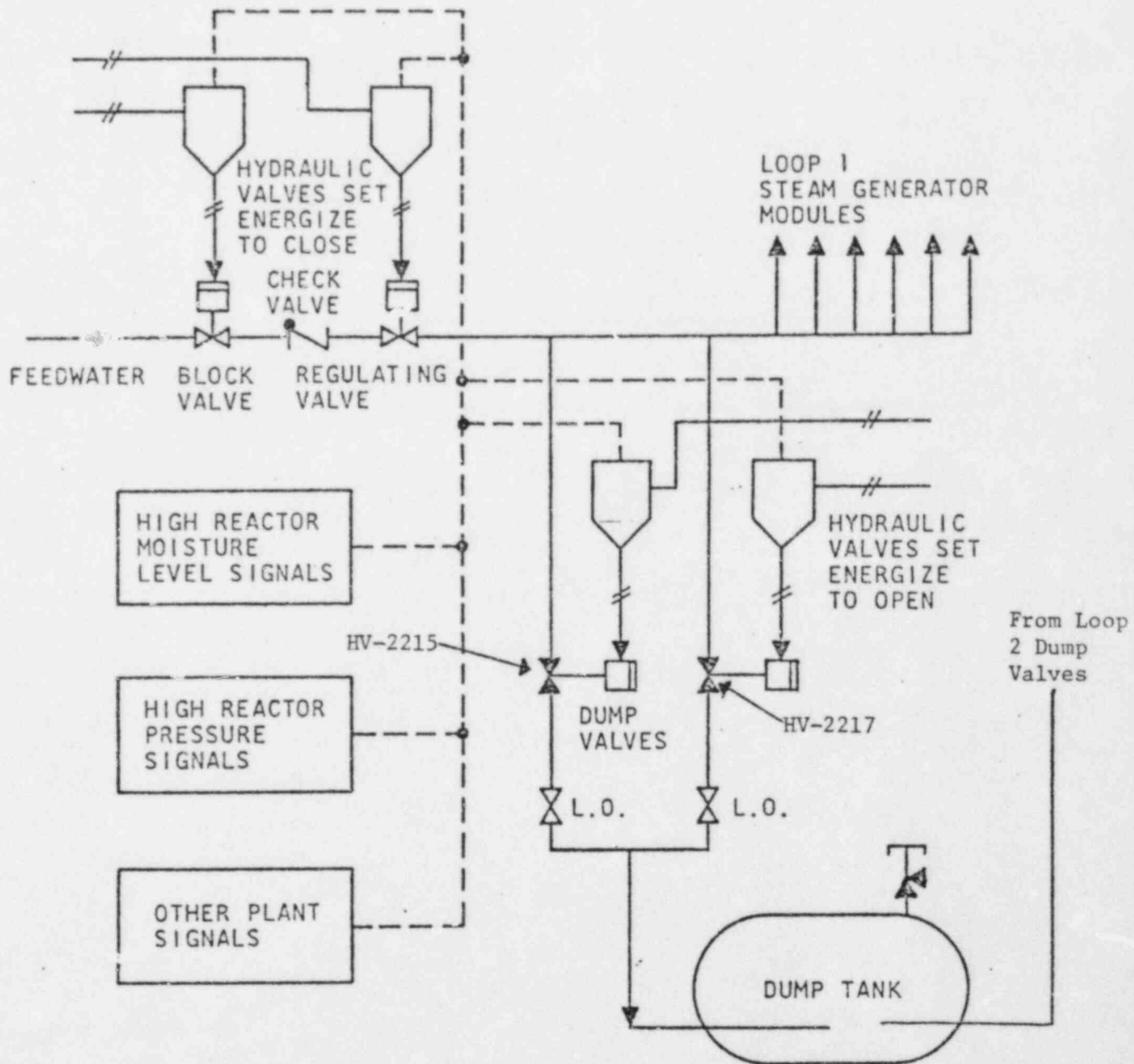
ANALYSIS OF
OCCURRENCE:

Reference attached Figure 1 which shows two parallel dump valves in a loop and the trip signals which will open a dump valve. Loop 1 and Loop 2 dump valves discharge to a common steam/water dump tank. The attached Figure 2 shows the interlocks which must be closed to open a steam/water dump valve. If a loop steam/water dump valve is open, its relay must be energized. The energized relay and position switches on the open valve interlock and should prevent automatic opening of either steam/water dump valve in the other loop.

The seal in circuit also insures that operator action is required to close an open valve by utilizing the hand switch.

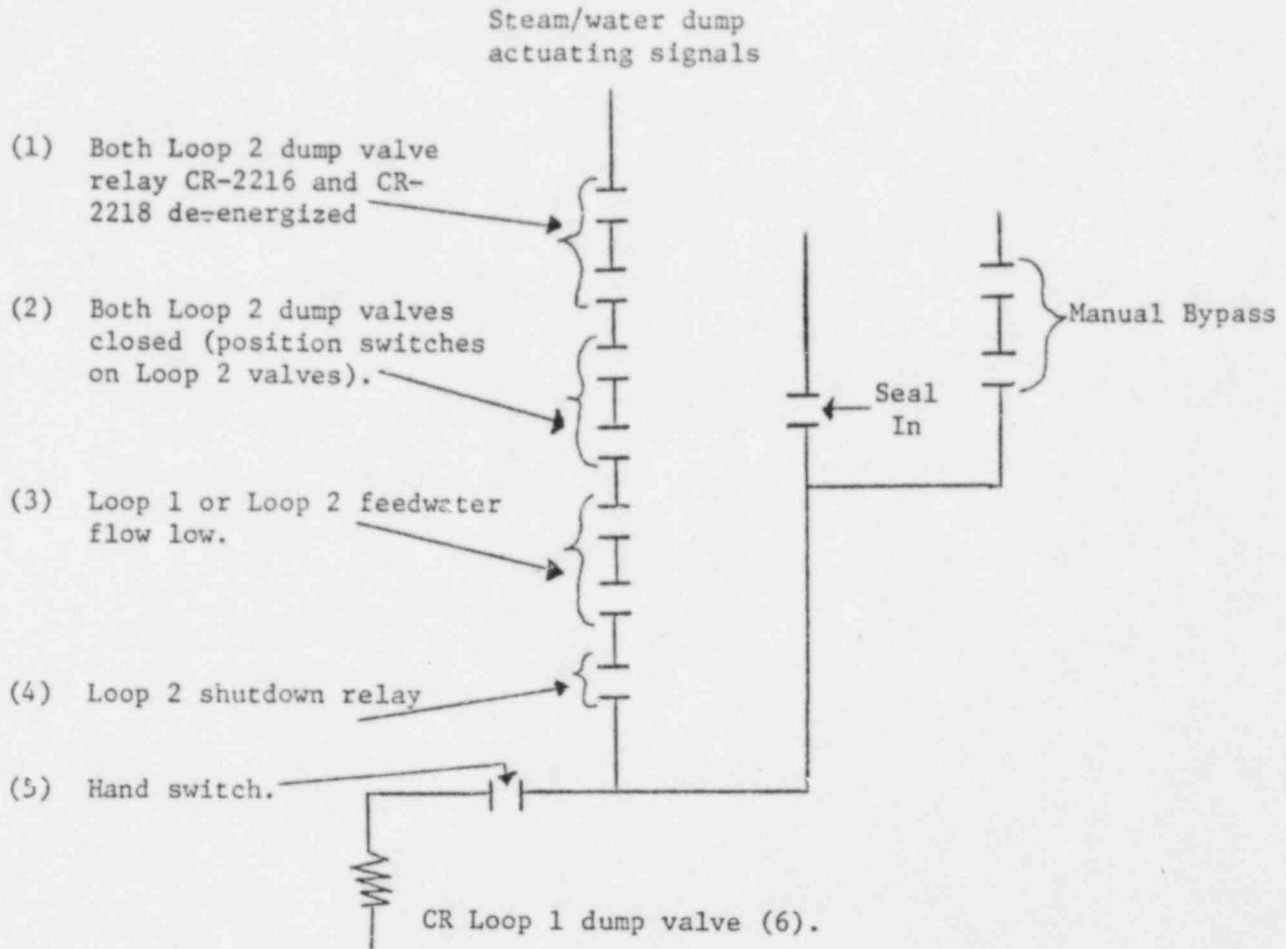
The manual bypass can open a valve in each loop but this also requires operator action.

The steam/water dump valves were tested on June 16, 1976, per approved surveillance test SR 5.3.1-Q.



Steam/water dump system (Loop 1)

FIGURE 1



- (1) Relay contacts are open if the Loop 2 dump relay is energized; closed if de-energized.
- (2) Valve position switches are on each Loop 2 dump valve. Contacts open if valve is open, closed if valve is closed.
- (3) Contacts open if Loop 1 or Loop 2 feedwater flow is low.
- (4) Open if Loop 2 is shutdown.
- (5) Hand switch utilized to close a dump valve as required normally closes.
- (6) Relay controlling one Loop 1 dump valve relay must energize to open a Loop 1 dump valve.

FIGURE 2

CORRECTIVE
ACTION:

Approved test, T-46, has been written to test the steam water dump valve circuitry. The results of the test will be included in a future report.

FAILURE DATA/SIMILAR REPORTED OCCURRENCES:

None

PROGRAMMATIC IMPACT:

None

CODE IMPACT:

None

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

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

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