

P. O. Box 361, Platteville, Colo 80651



April 2, 1975

Mr. E. Morris Howard, Director  
Region IVY Office of Inspection  
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. 50-267/75/6A,  
Final, submitted per the requirements of the Technical Specifications.

Very truly yours,

Frederic E. Swart  
Supt. Nuclear Production  
Fort St. Vrain Nuclear  
Generating Station

FES:11

cc: Mr. Angelo Giambusso

*50-267-incident*

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REPORT DATE: March 21, 1975

ABNORMAL OCCURRENCE

OCCURRENCE DATE: February 2, 1975

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

REPORT NO. 50-267/74/6A

Final

IDENTIFICATION OF  
OCCURRENCE: \_\_\_\_\_

A gas waste vacuum tank rupture disc ruptured releasing a small quantity of gas. This is identified as an Abnormal Occurrence per Technical Specification definition 2.1.c.

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 _____	-	MWth
	Elect. _____	0	MWe
Secondary Coolant	Pressure _____	1000	psig
	Temperature _____	210	°F (Feedwater on pre-boiler recirculation)
	Flow _____	180,000	#/hr.
Primary Coolant	Pressure _____	230	psia
	Temperature _____	254	°F Core Inlet
		254	°F Core Outlet
	Flow _____	90,000	#/hr.

DESCRIPTION OF  
OCCURRENCE:

While attempting to drain "B" helium purification train water separator via HV-2382, with the separator level indication of 48", the operator drained the separator to 4" and closed HV-2382. Approximately one minute later he received a gas waste vacuum tank high pressure alarm and noticed the gas waste pressure and gas waste flow high. The reactor operator suspected HV-2382 of not closing and dispatched an equipment operator to check regeneration system pressures. The equipment operator closed PV-2352, the manual isolation for HV-2382 and isolated the blown rupture disc M-63802.

APPARENT CAUSE  
OF OCCURRENCE:

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

The air operated drain valve failed to close properly which allowed primary coolant helium to enter the regeneration system and be vented to the gas waste vacuum tank at a rate which exceeded the capacity of the two gas waste compressors.

ANALYSIS OF  
OCCURRENCE:

The release from the rupture disc was about 3 minutes in duration at approx. 100 ACFM. No increase in activity was detectable on the stack radiation monitors (RT-7324-1, 2 or 7325-1). Subsequent analysis of the gas in the gas waste surge tank for release No. 77 showed no measurable gamma activity. The allowable release rate based on tritium was  $3.9 (10^7)$  ACFM.

CORRECTIVE  
ACTION:

With the reactor depressurized to atmospheric pressure the valve (HV-2382) was isolated and disassembled for inspection. HV-2382 was found to have a small piece of metal in the seat of the valve which prevented the valve from closing properly. The foreign object was removed, the valve seat repaired and the valve was reassembled and tested. No further corrective action is planned.

FAILURE DATA/  
SIMILAR REPORTED OCCURRENCES:

Abnormal Occurrences 50-267/74/21, 50-267/74/22, and 50-267/75/5 involved rupture of this rupture disc but the causes are unrelated. No. 74/21 was due to a release of gas from the gas waste compressor relief valves. No. 74/22 was due to a pressure setting error in the operating procedure. No. 75/5 was due to an improper valve lineup during a purge.

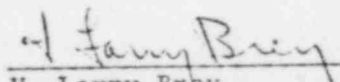
PROGRAMMATIC IMPACT:

None


CODE IMPACT:

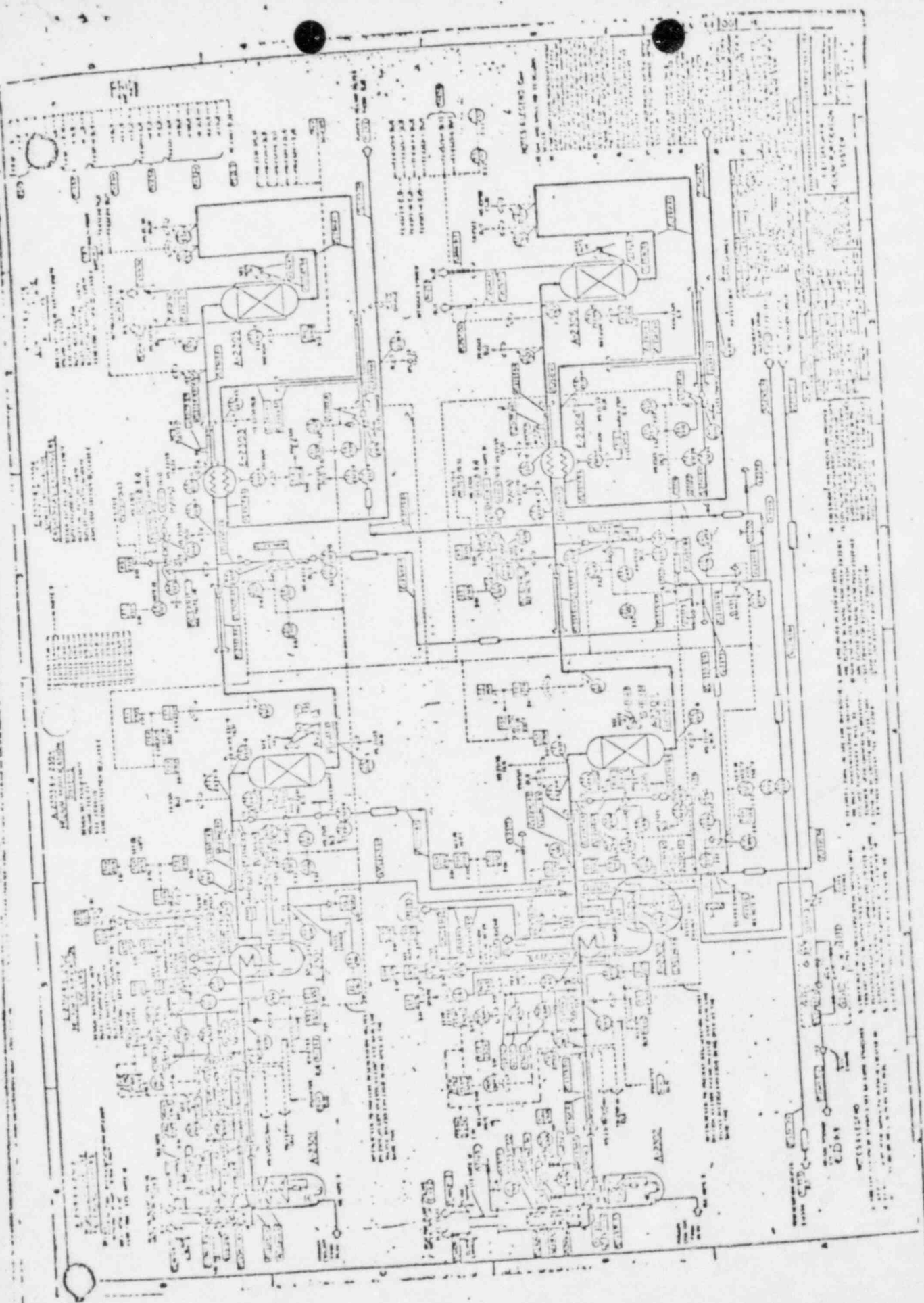
None

RECOMMENDED:

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

APPROVED:

  
\_\_\_\_\_  
Frederic E. Swart  
Superintendent-Nuclear Production  
Public Service Company  
of Colorado



1. ALL INSTRUMENTS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING STANDARDS:

- (a) API 650, TANKS FOR STORAGE OF FLUIDS AT OR NEAR ATMOSPHERIC PRESSURE
- (b) API 653, TANKS FOR STORAGE OF FLUIDS AT OR NEAR ATMOSPHERIC PRESSURE - REPAIR, MAINTENANCE AND ALTERATION
- (c) ASME B31.3, PROCESS PIPING
- (d) ASME B31.1, POWER PIPING
- (e) ASME B31.2, TRANSMISSION PIPING
- (f) ASME B31.4, PIPELINES FOR LIQUIDS, GASES AND SLURRIES
- (g) ASME B31.5, AIR, GASES AND VAPORS
- (h) ASME B31.6, GAS TRANSMISSION AND DISTRIBUTION PIPING
- (i) ASME B31.7, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (j) ASME B31.8, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (k) ASME B31.9, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (l) ASME B31.10, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (m) ASME B31.11, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (n) ASME B31.12, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (o) ASME B31.13, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (p) ASME B31.14, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (q) ASME B31.15, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (r) ASME B31.16, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (s) ASME B31.17, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (t) ASME B31.18, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (u) ASME B31.19, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (v) ASME B31.20, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (w) ASME B31.21, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (x) ASME B31.22, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES
- (y) ASME B31.23, GAS PIPING FOR PETROLEUM AND LIQUIDS
- (z) ASME B31.24, TRANSMISSION AND DISTRIBUTION PIPING FOR LIQUIDS, GASES AND SLURRIES

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P. O. BOX 361  
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APR 4, 1975

REPORT NO. 50-267<sup>25</sup>17476A

Final

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50-267  
inquiry

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PROGRAMMATIC IMPACT:

None

CODE IMPACT:

None

RECOMMENDED:

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

APPROVED:

Frederic E. Swart  
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