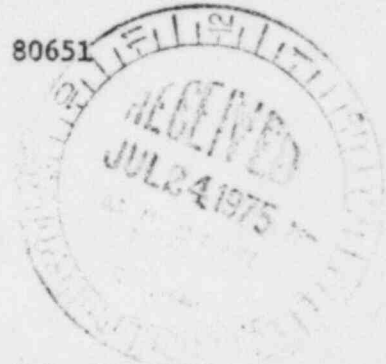


P. O. Box 361, Platteville, Colorado 80651



July 21, 1975

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. 50-267/75/16,
Final, 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. Angelo Giambusso

8311090176 750721
PDR ADOCK 05000267
S PDR

*50-267
inquiry
7831*

COPY SENT REGION *IV*

REPORT DATE: July 16, 1975

ABNORMAL OCCURRENCE

OCCURRENCE DATE: Discovered June 10, 1975

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

REPORT NO. 50-267/75/16

Final

IDENTIFICATION OF
OCCURRENCE:

When engine B (K-9204X) of standby generator set A was disassembled to check for possible damage due to overspeed, (see Abnormal Occurrence 50-267/75/14). No damage attributable to overspeed was found.

Broken rings, scored cylinders and cracked pistons were found. Examination of the other three engines revealed similar damage. The other engines had not been oversped.

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>1160</u>	psig
	Temperature	<u>215</u>	°F
	Flow	<u>145,000</u>	#/hr
Primary Coolant	Pressure	<u>351</u>	psig
	Temperature	<u>175</u>	°F Core Inlet
		<u>187</u>	°F Core Outlet
	Flow	<u>305,000</u>	#/hr.

(Conditions on May 30, 1975, date of Abnormal Occurrence 50-267/75/14).

DESCRIPTION OF
OCCURRENCE:

Damage discovered when engine B (K-9204X) opened for examination.

A cracked piston, broken piston rings and marked (lightly scored) cylinder liners were found. This damage was not attributable to overspeed. Examination of the other 3 engines (which were not oversped) revealed similar damage.

All engines were being tested regularly and carrying their rated load.

APPARENT CAUSE
OF OCCURRENCE:

Design

X

Unusual Service Cond.
Including Environ.

Manufacture

Component Failure

Installation/Const.

Other (specify)

Operator

Procedure

Cylinder liners showed water marks, indicating water presence in the engines before installation in the plant and before initial startup.

The broken rings, cracked pistons and marks on the cylinder liners were due to this water being present on initial startup.

There is no evidence that any gaskets were leaking to cause water inleakage, and there is no mechanism for introducing this amount of water to the engine through the exhaust system.

ANALYSIS OF
OCCURRENCE:

Water entered the engines during their outside storage before initial installation.

CORRECTIVE
ACTION:

All 4 engines were inspected in the presence of a manufacturers representative. Pistons, liners and rings were replaced, as required.

FAILURE DATA/SIMILAR
REPORTED OCCURRENCES:

None

PROGRAMMATIC IMPACT:

None

CODE IMPACT:

None

Recommended:

Hillyard

H. W. Hillyard
Technical Services Supervisor
Fort St. Vrain Nuclear
Generating Station

Reviewed:

Mathie

F. M. Mathie
Superintendent-Maintenance
Fort St. Vrain Nuclear
Generating Station

Approved:

Frederic E. Swart

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

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

8-14-75

July 28, 1975

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 complete copy of Abnormal Occurrence Report No. 50-267/75/16, Final. We understand the copy we forwarded on July 21, 1975, did not include Page Two of this report.

Very truly yours,

Frederic E. Swart

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

FES/alk

COPY SENT REGION IV

*Page Charge
on 8/21/75*

8537