

Public Service Company of Colorado

P. O. Box 361, Platteville, Colorado 80651

June 17, 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. 50-267/75/14,
(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

2311090191 760903
PDR ADOCK 05000267
S PDR

50-267
inquiry
mc

REPORT DATE: June 11, 1975OCCURRENCE DATE: May 30, 1975ABNORMAL OCCURRENCE

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

REPORT NO. 50-267/75/14

FINALIDENTIFICATION OF
OCCURRENCE:

Engine B (K-9204X) of A diesel-Generator overspeeded to approximately 1900 rpm while the setting of the electrical overspeed trip was being checked.

This is considered an abnormal occurrence as per Section 2.1, paragraph (g) of 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> 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

1960-1961

DESCRIPTION OF
OCCURRENCE:

The Engine was being run to overspeed by manual control of the fuel rack. The mechanical overspeed trip was disconnected because of an uncertainty of its setpoint, believed to be below that of the electrical. On reaching the setpoint of the electrical overspeed trip, the trip actuated, de-energizing the generator, allowing the engine to run to approximately 1900 rpm before speed was decreased. Maximum engine recommended speed is 1650 rpm, normal speed is 1200 rpm.

APPARENT CAUSE
OF OCCURRENCE:

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

The procedure called for the engine to be coupled to the generator during test. The actual trip then shed load off the engine allowing it to go to overspeed.

ANALYSIS OF
OCCURRENCE:

When the electrical overspeed trip actuated, declutching the generator, fuel flow, even though shut off quickly, was enough to overspeed the engine.

Maximum recommended engine speed is 1650 rpm and the unit reached approximately 1900 rpm. Dismantling to check possible damage (under Supervision of a manufacturer's service man) revealed no damage attributable to the overspeed.

Cylinder ring breakage, piston damage, and cylinder liner marking were found, attributable to water in the engine at some period in time. This will be reported as an unusual occurrence.

CORRECTIVE
ACTION:

The test procedure shall be changed so declutch action will be checked with the engine at idle, giving no chance of overspeed.

Items initiating declutching will be checked with the engine declutched and the initiating of the signal verified.

The test procedure will be thoroughly reviewed for conditions which might lead to equipment damage.

FAILURE DATA/SIMILAR REPORTED OCCURRENCES:

Other procedural deficiencies have been experienced, (AO 50-267/75/12 and 13) but no abnormal engine condition resulted.
The corrective action for these were in progress at the time of this event.

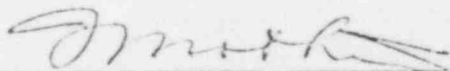
PROGRAMMATIC IMPACT:

None

CODE IMPACT:

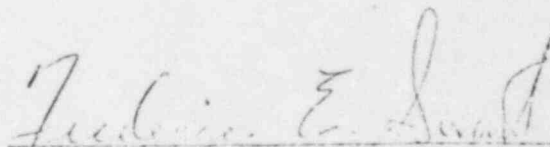
None

RECOMMENDED:



Francis M. Mathie, Superintendent
Maintenance
Fort St. Vrain Nuclear Generating
Station

APPROVED:



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