



Public Service Company of Colorado

16805 Weld County Road 19 1/2, Platteville, Colorado 80651

October 25, 1979
Fort St. Vrain
Unit No. 1
P-79248

Mr. Karl V. Seyfrit, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012

REF: Facility Operating License
No. DPR-34

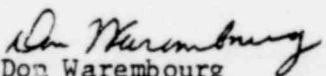
Docket No. 50-267

Dear Mr. Seyfrit:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/79-41/03-L-0, Preliminary, submitted per the requirements of Technical Specification AC 7.5.2(b)2.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/79-41/03-L-0.

Very truly yours,


Don Warembourg
Manager, Nuclear Production

DW/alk

cc: Director, MIPC

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REPORT DATE: October 25, 1979

REPORTABLE OCCURRENCE 79-41

OCCURRENCE DATE: October 5, 1979

ISSUE 0

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FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
16805 WELD COUNTY ROAD 19 1/2
PLATTEVILLE, COLORADO 80651

REPORT NO. 50-267/79-41/03-L-0

Preliminary

IDENTIFICATION OF
OCCURRENCE:

On four occasions between October 5, 1979, and October 8, 1979, malfunctions of helium circulator speed modifiers caused loss of Plant Protective System function of high speed trips. Each of the four malfunctions resulted in operation under a degraded mode permitted by LCO 4.4.1 and are reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)2.

EVENT
DESCRIPTION:

Event 1 - Speed Modifier, SM-21165

On October 5, 1979, at 1710 hours, while operating at 30% thermal power and 76 MW electrical power, operations personnel observed that one of three channels for the 1A circulator speed protection tripped on low speed while the circulator was operating at approximately 4,500 rpm.

Event 2 - Speed Modifier, SM-21165

On October 6, 1979, at 1140 hours, while operating at 29% thermal power and 82 MW electrical power, operations personnel observed that one of three channels for the 1A circulator speed protection tripped on low speed while the circulator was operating at approximately 4,500 rpm.

Event 3 - Speed Modifier, SM-21165

On October 6, 1979, at 2015 hours, while operating at 38% thermal power and 114 MW electrical power, operations personnel observed that one of three channels for the 1A circulator speed protection tripped on low speed while the circulator was operating at approximately 4,700 rpm.

Event 4 - Speed Modifier, SM-21161

On October 8, 1979, at 2030 hours, while operating at 50% thermal power and 150 MW electrical power, operations personnel observed that one of three channels for the 1A circulator speed protection tripped on low speed while the circulator was operating at approximately 5,900 rpm.

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EVENT

DESCRIPTION (continued):

Each of the four events resulted in loss of the speed signal and trip capability in one of the three associated high speed trip channels for the 1A circulator. Two redundant channels were available and operable.

CAUSE

DESCRIPTION:

Instrument calibration drift due to bridge unbalance.

The balancing problem is caused by a change in resistance between the two leads of the speed element and ground at the circulator connection end. The difference in resistance occurs over a period of time in the cable connectors as a result of the temperature and humidity of the ambient air.

CORRECTIVE

ACTION:

Adjusting the 1A circulator speed modifier restored overspeed protection to the affected channel.

As an interim measure, the adjustment of the speed modifiers is being checked on a weekly basis.

New connections have been ordered and will be environmentally qualified for installation. The results will be reported in a future supplemental report.

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Approved by: Don Warembourg
Don Warembourg
Manager, Nuclear Production

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