



Public Service Company of Colorado

16805 Road 19 1/2, Platteville, Colorado 80651-9298

November 24, 1982
Fort St. Vrain
Unit No. 1
P-82531

Mr. John T. Collins, Regional Administrator
Region IV
Nuclear Regulatory Commission
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Reference: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Mr. Collins:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/82-043, Final, 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. 50-267/82-043.

Very truly yours,

Don Warembourg
Manager, Nuclear Production

DW/cl's

Enclosure

cc: Director, MIPC

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NRC Resident Site Inspector - - - - - 1 (P Letter)

REPORT DATE: November 24, 1982

REPORTABLE OCCURRENCE 82-043

ISSUE 0

OCCURRENCE DATE: October 28, 1982

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FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
16805 WELD COUNTY ROAD 19 1/2
PLATTEVILLE, COLORADO 80651-9298

REPORT NO. 50-267/82-043/03-L-0

Final

IDENTIFICATION OF
OCCURRENCE:

On October 27, 1982, and October 28, 1982, with the reactor shutdown, the average of the prestressed concrete reactor vessel cooling water system (System 46) inlet and outlet temperatures in both loops fell below 100 degrees fahrenheit. This constitutes a degraded mode of LCO 4.2.15(e) and is being reported per Fort St. Vrain Technical Specification AC 7.5.2(L)2.

EVENT
DESCRIPTION:

On October 25, 1982, with auxiliary boiler #2 already out of service, auxiliary boiler #1 was also taken out of service for maintenance. Since a portion of the steam supply from these boilers is used to control water temperatures in the PCRV cooling water system (System 46) during shutdown conditions when reactor heat is insufficient to do so, the loss of the boilers caused the average of the System 46 inlet and outlet water temperatures to trend toward the 100 degrees fahrenheit minimum allowed by LCO 4.2.15(e). This downward trend continued until Loop 2 of System 46 was manually shutdown at 2210 hours on October 26, 1982. The reduced heat removal rate that resulted from this action was sufficient to stabilize the Loop 1 average temperature at a value slightly above the 100 degrees fahrenheit limit.

Cooling water flow through Loop 2 of System 46 was re-established on October 27, 1982, at 1330 hours with the idea that auxiliary boiler #1 was being returned to service. Due to the fact that the boiler was not returned to service until 1455 hours the same day, the average of the inlet and outlet water temperatures in Loop 2 of System 46 remained less than the 100 degrees fahrenheit minimum from the time that flow had been re-established. The presence of water in the line from the boiler to the System 46 surge tank further inhibited the supply of steam to the System 46 surge tanks. As a result, the average temperature in Loop 1 of System 46 also fell below the 100 degrees fahrenheit limit at 1700 hours.

Additional problems were experienced in the early morning hours of October 28, 1982, with malfunctioning auxiliary boiler feedpumps, and

consequently, heating of the System 46 surge tanks was not observed until approximately 0800 hours.

Loop 1 of System 46 returned to full compliance with LCO 4.2.15(e) at 0900 hours, and Loop 2 at 1300 hours on October 28, 1982.

The reactor remained in a cold shutdown condition throughout the event.

CAUSE
DESCRIPTION:

Equipment malfunction.
Operator error.

The residual decay heat production rate from the reactor was, by itself, insufficient to maintain the loop averages of the PCRVR cooling water system inlet and outlet temperatures above the 100 degrees fahrenheit minimum specified in LCO 4.2.15(e) when both of the loops were in service. To maintain the loop averages above 100 degrees fahrenheit with more than one loop in service, auxiliary heat was required but was not immediately available due to equipment malfunctions. As a result of these malfunctions and the failure of the operating personnel to remove a System 46 loop from service, when it was apparent insufficient heat was available, the loop averages fell below the 100 degrees fahrenheit minimum.

CORRECTIVE
ACTION:

Auxiliary boiler #2 was put in service to increase the heat input to the PCRVR cooling water system.


Correct operation of the PCRVR cooling water system during all conditions will be reviewed with all Licensed Operators by the Training Department.

No further corrective action is anticipated or required.

Prepared By:


Paul A. Tramp
Technical Services Technician

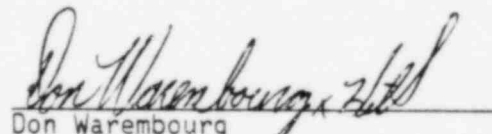
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Manager, Nuclear Production