Public Service Company of Colorado

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

January 6, 1983
Fort St. Vrain
Unit No. 1
P-83004

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. 50-267/82-048, Preliminary, submitted per the requirements of Technical Specification AC 7.5.2(b)4.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/82-048.

Very truly yours,

Don Warembourg

Don Warembourg
Manager, Nuclear Production

DW/cls

Enclosure

cc: Director, MIPC

Return Orig. & 1 to RIV

H005

REPORTABLE OCCURRENCE DISTRIBUTION

	Number of Copies
Department of Energy San Francisco Operations Office Attn: California Patent Group 1333 Broadway Oakland, California 94612	1 (P Letter)
Department of Energy Mr. Glen A. Newby, Chief HTR Branch Division of Nuclear Power Development Mail Station B-107 Washington, D.C. 20545	1 (P Letter)
Department of Energy Attn: Project Manager P. O. Box 81608 San Diego, California 92138	1 (P Letter)
Mr. John T. Collins, Regional Administrator Region IV Nuclear Regulatory Commission 611 Ryan Plaza Drive Suite 1000 Arlington, Texas 76011	1 (Original of P Letter)
Mr. George Kuzmycz Nuclear Regulatory Commission 7920 Norfolk Avenue Bethesda, Maryland 20034	1 (P Letter)
Director Office of Management Information and Program Control Nuclear Regulatory Commission Washington, D.C. 20555	1 (P Letter)
INPO Records Center Suite 1500 1100 Circle 75 Parkway Atlanta, GA 30339	1 (P Letter)
Mr. Richard Phelps, FSV, GA, Site Representative General Atomic Company 16864 Weld County Road 19 1/2 Platteville, Colorado 80651	1 (P Letter)
NRC Resident Site Inspector	1 (P Letter)

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

REPORT NO. 50-267/82-048/03-L-0

Preliminary

IDENTIFICATION OF OCCURRENCE:

On December 7, 1982, with the reactor operating at less than 2% power, it was determined that the helium purification cooler (E-2302) on the "B" purification train had a primary coolant (helium) to purification cooling water leak. This occurrence is being reported per Section 7.5.2(b)4 of the Fort St. Vrain Technical Specifications.

EVENT DESCRIPTION:

During the month of November, 1982, the reactor plant was maintained in either a non-critical or low power condition due to maintenance and primary coolant chemistry considerations. During this period, the presence of "gas" was noted within the purification cooling water system.

Normally, entrained gas is collected within the purification cooling water system expansion tanks and is then manually vented to the radioactive gas waste system. Because this venting process was becoming more frequent, investigations were undertaken to determine possible points of ingress. At the end of November, these investigations led to the process of isolating each major component served by the cooling water system.

On December 7, 1982, it was determined that a primary coolant (helium) to purification cooling water leak was present in the heat exchanger tubes within the "B" purification train cooler. Due to the location and design of the cooler, the exact location of the leak within the cooler is not known.

CAUSE DESCRIPTION:

The cause of the leak appears to be random in nature.

CORRECTIVE ACTION:

The Final Safety Analysis Report accident analyses for the purification cooling water system were reviewed to determine the

impact on continued cooler operation. All equipment of the purification cooling water system is designed for the PCRV reference pressure of 845 psig, and any gas that is vented from the system can be processed by the gas waste system in a normal manner. Based on these considerations, it was determined that continued cooler operation does not constitute an unreviewed safety question.

For the short term, a safety-related modification has been made to the purification cooling water system to provide a more effective method of venting entrained gases. This modification essentially consists of providing a larger expansion volume for the entrained gases.

Due to the location of the cooler within a PCRV well, and its unique design, replacement of the entire assembly is the only effective permanent repair. A replacement cooler has been ordered, and will be installed during a scheduled plant outage of sufficient length. At this time, it is expected that the replacement cooler will be received in May, 1983, and installed during the next refueling outage.

Future actions will be included in a supplemental report.

Prepared By: Owen J. Clayton
Owen J. Clayton
Senior Technical Services Technician

Reviewed By: Charles Fuller
Charles Fuller
Technical Services Engineering Supervisor

Reviewed By:
Edwin D. Hill
Station Manager

Approved By: Don Warembourg
Don Warembourg
Manager, Nuclear Production