**Public Service Company of Colorado**

16805 ROAD 19½
PLATTEVILLE, COLORADO 80651

July 2, 1980
Fort St. Vrain
Unit No. 1
P-80192

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

Reference: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Mr. Seyfrit:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/80-30, 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. 50-267/80-30.

Very truly yours,

Don Warembourg
Manager, Nuclear Production

DW/cls

Enclosure

cc: Director, MIPC

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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. 50-267/80-30/03-L-0

Preliminary

IDENTIFICATION OF OCCURRENCE:

During the regular surveillance test, the steam generator penetration interspace leakage appeared to be in excess of the limit allowed by LCO 4.2.9.

This is being reported as a degraded mode of LCO 4.2.9. per AC 7.5.2(b)2.

EVENT DESCRIPTION:

On May 28, 1980, during performance of the scheduled surveillance on PCRV closure leakage, Loop 2 steam generator penetration was found to have a leak rate of 8.23 pounds per hour or 198 pounds per day. This was well within the 400 pounds per day limit of LCO 4.2.9.

On June 4, 1980, the surveillance was again performed and indicated steam generator penetration leakage to be 17.83 pounds per hour. This was 428 pounds per day and in excess of the LCO 4.2.9 limit of 400 pounds per day. A special test, T-145, using a pressure decay method, was written, approved, and performed later that day and showed the leakage rate to be 10.74 pounds per hour or 258 pounds per day, within the limits of LCO 4.2.9. T-145 is a more accurate test and was used at this time to insure Technical Specification compliance.

During performance of T-145, it was noted that the pressure decay rate did not decrease as reactor pressure was approached. This indicated that a primary closure seal was not leaking. Futher investigation revealed a noncondensible gas was in the hot reheat sample line. A sample was taken, analyzed, and determined to be clean helium. The leakage flow path is believed to be from the penetration interspace to the cold reheat piping and out of the steam generator via the hot reheat piping (see Figure 1).

EVENT
DESCRIPTION: (Cont'd)

On June 5, 1980, T-145 was again performed and revealed a leakage rate of 10.37 pounds per hour or 249 pounds per day. A letter was sent to the Nuclear Regulatory Commission explaining the situation and requesting temporary relief from LCO 4.2.9, permitting up to 700 pounds per day instead of 400 pounds per day for the suspected internal leakage path.

The Nuclear Regulatory Commission granted the requested temporary relief, agreed to the four administrative controls proposed by Public Service Company, and added one additional administrative control. The five administrative controls agreed to are as follows:

1. SR 5.3.7, Secondary Coolant Activity, be conducted once each 72 hours in lieu of once per week.

2. A pressure decay test be conducted for the Loop 2 steam generator penetration closures on a weekly basis. This pressure decay test will be utilized to determine the leakage rate. Leakage rate increases of 25% over previously values will be cause for conducting pressure decay tests daily until it can be established that the leak rate has reached an equilibrium value within the 700 pounds per day.

3. SR 5.2.16, PCRV Closure Leakage, be conducted once every two weeks for Loop 2 steam generator penetration closure rather than monthly as a comparison to the pressure decay tests.

4. Radiation process monitors for the reheat steam system will be monitored once per shift for indication of primary coolant leakage into the secondary system.

5. Check and record the interspace differential pressure once per shift to comply with LCO 4.2.7.

The following tests were run with indicated results as follows:

To collect all the required data, T-145 was expanded and renumbered T-147.

EVENT
DESCRIPTION: (Cont'd)

| Date | Test | Results<br>Loop 2 Steam Generator Leakage<br>lbs/hour | <br><br>lbs/day |
|---|---|---|---|
| 6-6-80 | SR 5.2.16a-m | 13.38 | 321 |
| 6-11-80 | T-147 | 14.17 | 340 |
| 6-12-80 | T-147 | 13.89 | 333 |
| 6-13-80 | T-147 | 11.34 | 272 |
| 6-16-80 | T-147 | 10.80 | 259 |
| 6-17-80 | Reactor Power Reduced - Turbine Generator Off Line | | |
| 6-19-80 | SR 5.2.16a-m | 6.0 | 144 |
| 6-25-80 | SR 5.2.16a-m | 0.0 | 0 |
| | T-147 | 0.0 | 0 |
| 6-30-80 | Turbine Generator On Line - Reactor Power Increased | | |
| | T-147 | 12.96 | 311 |

The surveillance test is being conducted every other week and the T-test is being performed weekly in accordance with the administrative controls agreed upon.

CAUSE
DESCRIPTION:

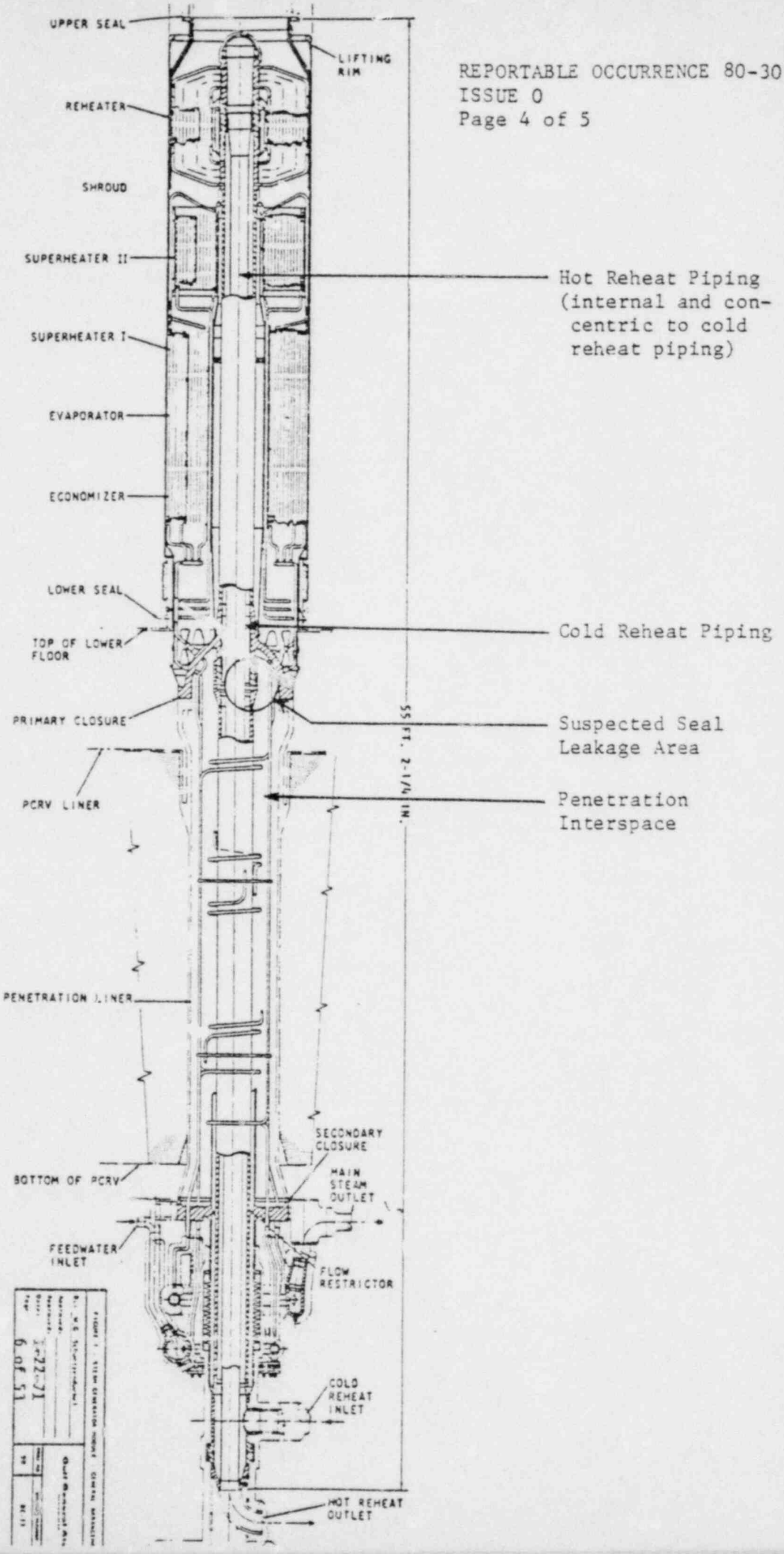
Unknown at this time.

CORRECTIVE
ACTION:

The administrative controls agreed to by the Nuclear Regulatory Commission and Public Service Company are being followed.

During the next refueling shutdown, the problem will be investigated and repairs made as required. Results will be submitted in a future supplemental report

FIGURE 1


UPPER SEAL
LIFTING RIM
REHEATER
SHROUD
SUPERHEATER II
SUPERHEATER I
EVAPORATOR
ECONOMIZER
LOWER SEAL
TOP OF LOWER FLOOR
PRIMARY CLOSURE
PCRV LINER
PENETRATION LINER
SECONDARY CLOSURE
BOTTOM OF PCRV
MAIN STEAM OUTLET
FEEDWATER INLET
FLOW RESTRICTOR
COLD REHEAT INLET
HOT REHEAT OUTLET
55 FT. 2-1/4 IN.
Hot Reheat Piping (internal and concentric to cold reheat piping)
Cold Reheat Piping
Suspected Seal Leakage Area
Penetration Interspace

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