

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	C	O	F	S	V	1	2	0	0	-	0	0	0	0	0	0	3	4	1	1	2	0	4	5
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
LICENSEE CODE														LICENSE NUMBER				LICENSE TYPE				CAT 58			

0	1	L	6	0	5	0	0	0	2	6	7	7	1	0	2	4	8	1	8	0	3	2	8	8	4	9
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
CON'T		REPORT SOURCE		DOCKET NUMBER								EVENT DATE				REPORT DATE										

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During plant temperature fluctuation testing on October 24, 1981, the Loop 2 steam generator interspace leakage exceeded the limits of LCO 4.2.9 and the variance agreed to by Public Service Company and the Nuclear Regulatory Commission on June 5, 1980. This event was reported as a degraded mode of LCO 4.2.9 per Fort St. Vrain Technical Specification AC 7.5.2(b)2. No accompanying occurrence. No affect on public health or safety. Similar Reportable Occurrences: RO's 80-030 and 81-067.

0	9	H	B	X	Z	H	T	E	X	C	H	F	Z	8	1	0	6	8	0	3	X	2	0	2	2	0	Y	Y	N	G	0	6	3										
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40										
LER/RO REPORT NUMBER		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The purified helium leakage was internal to the penetration interspace and occurred between the interspace and associated cold reheat steam piping. Public Service Company Change Notice 1436 installed modifications to allow operation of the interspace at a pressure slightly greater than cold reheat steam. Revisions to LCOs 4.2.7 and 4.2.9 were requested and approved. No further corrective action is anticipated or required.

1	5	X	0	7	1	RT-500K	A	Operator Observation	N/A
7	8	9	10	11	12	13	14	15	16
FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
ACTIVITY CONTENT RELEASED		AMOUNT OF ACTIVITY		LOCATION OF RELEASE		PERSONNEL EXPOSURES		PERSONNEL INJURIES	
NUMBER		TYPE		DESCRIPTION		NUMBER		DESCRIPTION	
1		2		3		4		5	
6		7		8		9		10	
11		12		13		14		15	
16		17		18		19		20	
21		22		23		24		25	
26		27		28		29		30	
31		32		33		34		35	
36		37		38		39		40	
41		42		43		44		45	
46		47		48		49		50	
51		52		53		54		55	
56		57		58		59		60	
61		62		63		64		65	
66		67		68		69		70	
71		72		73		74		75	
76		77		78		79		80	
81		82		83		84		85	
86		87		88		89		90	
91		92		93		94		95	
96		97		98		99		100	

8404090157 840328
PDR ADDCK 05000267
S PDR

NAME OF PREPARER

PHONE: (303) 785-2224

REPORT DATE: March 28, 1984

REPORTABLE OCCURRENCE 81-068

ISSUE 2

OCCURRENCE DATE: October 24, 1981

Page 1 of 3

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

REPORT NO. 50-267/81-068/03-X-2

Revised Final

IDENTIFICATION OF
OCCURRENCE:

During plant temperature fluctuation testing on October 24, 1981, the steam generator penetration interspace leakage was found to be in excess of the limit allowed by LCO 4.2.9 and the variance granted by the Nuclear Regulatory Commission on June 5, 1980. This was reported as operation in a degraded mode of LCO 4.2.9 and reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)2.

EVENT
DESCRIPTION:

On May 28, 1980, during performance of the scheduled surveillance on PCRV closure leakage, the Loop 2 steam generator penetration interspace was found to be leaking pure helium into the reheat steam header. At that time, the leakage rate was within the limits of LCO 4.2.9, but it subsequently increased, and on June 4, 1980, exceeded the 400 pound per day limit of LCO 4.2.9. Relief was requested and granted to allow a leakage rate of 700 pounds per day based on the leakage path and compliance with certain administrative controls (Reference P-80139). It has since been determined that the interspace for module B-2-3 of the Loop 2 steam generator was the source of leakage of helium.

On October 24, 1981, at 1020 hours, the 700 pound per day leakage limit was determined to be exceeded. Plant conditions were changed in various attempts to reduce the leakage to acceptable values, and at 0950 on October 25, the leakage rate was decreased to less than 700 pounds per day, within the 24 hours allowed by LCO 4.2.9. On October 26, the reactor power was reduced to less than 2%, and the PCRV was depressurized to less than 100 psia.

On October 26, 1981, Public Service Company submitted a proposal to the Commission which would allow continued reactor operation for the completion of the RT-500 fluctuation testing program (Reference P-81270).

The proposal requested that, based on the defined leakage path and the capability of demonstrating the integrity of the primary and secondary closures, the penetration for module B-2-3 would be operated with an interspace pressure just slightly above cold reheat steam pressure, but below reactor vessel pressure.

Public Service Company received approval of this proposal for four weeks of operation to allow completion of testing.

CAUSE
DESCRIPTION:

Other.

The purified helium leakage was determined to be from the penetration interspace for steam generator module B-2-3 into the cold reheat steam piping.

CORRECTIVE
ACTION:

Public Service Company Change Notice (CN) 1436 was initiated in November, 1981, and has installed instrumentation, piping, valves, and control equipment to allow operation of the steam generator penetration interspaces at a pressure slightly greater than cold reheat but less than reactor pressure. Additional capability to monitor the interspace helium was also provided. These modifications maintain steam generator interspace helium leakage to within the limits of LCO 4.2.9.

Revision to the Fort St. Vrain Technical Specification, LCO 4.2.7 and LCO 4.2.9, were proposed by Public Service Company in January, 1982, and approved by the Nuclear Regulatory Commission in March, 1982, as Amendment No. 26 to the Fort St. Vrain Facility Operating License.

Amendment No. 26 revised the Technical Specifications to:

- (1) permit the interspace between primary and secondary closures of the steam generator modules to be maintained at a pressure slightly above cold reheat steam pressure; and
- (2) set a limit on the possible release of primary coolant activity through the primary closure seals of no greater than 1.4 curies per day.

No further corrective action is anticipated or required.

Prepared By: Duane L. Frye
Duane L. Frye
Senior Technical Services Technician

Reviewed By: Frank J. Novachek
Frank J. Novachek
Technical Services Engineering Supervisor

Reviewed By: L. Milton McBride
L. M. McBride
Station Manager

Approved By: Don Warembourg
Don Warembourg
Manager, Nuclear Production