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CON'T

REPORT SOURCE: 01 L 6 0 5 0 0 0 2 6 7 7 0 8 2 5 8 0 8 1 0 2 7 8 3 9
60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On August 25, 1980, at 1230 hours, while operating at 50% thermal power and 150 MW electrical power, a scheduled surveillance showed several hydraulic snubbers to be inoperable. Nine of the snubbers could not be repaired in the 72 hour period allowed by LCO 4.3.10, and an orderly shutdown began. The reactor was manually scrammed at 1740 hours on August 29, 1980. No affect on public health or safety. Shutdown required by LCO 4.3.10. Reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)2.

SYSTEM CODE H B		CAUSE CODE B		CAUSE SUBCODE A		COMPONENT CODE S U P P O R T				COMP. SUBCODE D		VALVE SUBCODE Z			
EVENT YEAR 8 0		SEQUENTIAL REPORT NO. 0 4 7		OCCURRENCE CODE 0 3		REPORT TYPE X		REVISION NO. 1							
ACTION TAKEN B		FUTURE ACTION Z		EFFECT ON PLANT A		SHUTDOWN METHOD A		HOURS 0 0 2 0		ATTACHMENT SUBMITTED Y		PRIME COMP. SUPPLIER A		COMPONENT MANUFACTURER I 2 0 7	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Investigation revealed that constant support hangers (spring hangers) were not properly adjusted for the hot position and were not carrying the appropriate loads. The affected snubbers were repaired, readjusted, or replaced as required and the plant was shutdown in accordance with the requirements of LCO 4.3.10. Repairs were completed during scheduled maintenance shutdown period. Surveillance interval adjusted to 31 days \pm 25 percent. No further corrective action anticipated or required.

percent. No further corrective action required. (30)

FACILITY STATUS (28) 0 5 0 (29) N/A (31) Routine Scheduled Surveillance Test (32)

ACTIVITY CONTENT (35) N/A (36)

RELEASED OF RELEASE (33) Z (34) N/A

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37)	Z	(38)	N/A	(39)

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
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99	0	0	0
100	0	0	0

7 8 9 10 11 12
LOSS OF OR DAMAGE TO FACILITY (43)
TYPE DESCRIPTION
1 9 Z (42) N/A
8311150319 831027
PDR ADOCK 05000267
S PDR

7 8 9 10
PUBLICATION
ISSUED DESCRIPTION (45)
2 0 N (44) N/A
3 6 9 10 68 69 70
NRC USE ONLY

NAME OF PREPARER

PHONE (303) 785-2224

REPORT DATE: October 27, 1983

REPORTABLE OCCURRENCE 80-47

ISSUE 1

OCCURRENCE DATE: August 25, 1980

Page 1 of 6

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

REPORT NO. 50-267/80-47/03-X-1

Final

IDENTIFICATION OF
OCCURRENCE:

During the performance of the regularly scheduled hydraulic snubber surveillance, 16 snubbers were found to be inoperable. This event constituted operation in a degraded mode of LCO 4.3.10. Nine of these inoperable snubbers could not be repaired within the 72 hours in which continued reactor operation is allowed by the LCO, thus a plant shutdown was required. This event was reportable per Fort St. Vrain Technical Specification AC 7.5.2(b)2.

EVENT
DESCRIPTION:

On August 25, 1980, while operating at 50% thermal power and 150 MW electrical power, maintenance personnel performing a regularly scheduled hydraulic snubber surveillance identified 16 inoperable snubbers. This put the plant in a degraded mode of LCO 4.3.10, in which a 72 hour period of continued plant operation is allowed for repair of inoperable snubbers. Nine of the inoperable snubbers could not be repaired during this period and the 36 hour orderly shutdown period was entered.

A planned maintenance shutdown period was scheduled to begin August 30, 1980, and a decision was made to begin the shutdown a day early August 29, 1980, and to complete repair of the inoperable snubbers during this maintenance period.

EVENT
DESCRIPTION: (Cont'd)

The sequence of events for this period were as follows:

Date	Time	Event
Later Part of August	N/A	Normal plant operations at approximately 50% reactor power and 150 MW electrical.
8-25-80	~0800	Began snubber surveillance.
	1230	HOS 36 declared impaired. Beginning of 72 hour continued reactor operation period as HOS 36 could not be repaired within this period (per paragraph (b) of LCO 4.3.10).
8-28-80	1230	End of 72 hour continued reactor operation period. Orderly shutdown begun. Beginning of 36 hour allowed for orderly shutdown (per paragraph (c) of LCO 4.3.10).
8-29-80	0830	Turbine load and reactor power reduction began as part of the orderly shutdown. At this time, the 24VDC power for the EHC control system was lost and electrical maintenance personnel began investigating the cause before the turbine was taken off line.
	1330	Turbine runback to about 50 MW electrical load occurred due to maintenance work. Resulting feedwater upset caused one circulator in each loop to trip. The turbine was manually taken off line at this time and preparations made to test the turbine's overspeed trip.
	1545	Overspeed trip test completed.
	1740	Shutdown completed, reactor manually scrammed.
8-30-80	0030	End of 36 hour orderly shutdown period.
	Dayshift	Beginning of scheduled maintenance shutdown.

EVENT
DESCRIPTION: (Cont'd)

The 16 inoperable snubbers were as follows:

<u>Snubber</u>	<u>Problem</u>
BFS 412	Out of tolerance on travel.
CRS 144	Out of tolerance on travel.
CRS 262	Out of tolerance on travel.
HOS 36	Out of tolerance on travel.
HOS 56	Out of tolerance on travel.
HOS 86	Out of tolerance on travel.
HRS 129	Mounting brackets installed wrong.
HRS 158	Out of tolerance on travel.
HRS 351	Reservoir obstructing travel.
MSS 27	Out of tolerance on travel.
MSS 29	Out of tolerance on travel.
MSS 191	Out of tolerance on travel.
MSS 249	Out of tolerance on travel.
MSS 257	Out of tolerance on travel.
MSS 376	Out of tolerance on travel.
MSS 421	Bent piston rod.

CAUSE
DESCRIPTION:

An analysis of the surveillance results revealed the following reasons for inoperable snubbers.

Improper Adjustment - 13 of the 16 inoperable snubbers were due to the constant support hangers (spring hangers) not being properly adjusted for the hot position; these hangers were not carrying the appropriate load in the hot position, which in turn affected the stroke position of the various hydraulic snubbers.

Snubbers Affected

BFS 412	HOS 56	MSS 29	MSS 27
CRS 144	HOS 86	MSS 191	MSS 257
CRS 262	HRS 158	MSS 249	MSS 376
HOS 36			

Improper Installation - HRS 129 mounting brackets were installed 90° from the specified position binding the pipe when movement occurred.

CAUSE
DESCRIPTION: (Cont'd)

Reservoir Out of Position - HOS 351 reservoir had been forced from its correct position, and prohibited snubber movement due to interference with an adjacent pipe.

Snubber Damaged - MSS 421 had a bent piston rod making it inoperable. The bent rod was due to a loose pipe clamp that shifted position.

CORRECTIVE
ACTION:

The immediate corrective actions were:

Repair snubbers when possible during the 72 hour continued operation period. The following were corrected.

- HRS 129 - Mounting brackets were removed and replaced in the correct position.
- HRS 351 - Reservoir was repositioned and locking nut secured.
- MSS 421 - Replaced with a certified replacement snubber.
- CRS 144 - Snubber adjusted for proper stroke length.
- HOS 86 - Snubber adjusted for proper stroke length.
- MSS 27 - Snubber adjusted for proper stroke length.
- MSS 249 - Snubber adjusted for proper stroke length.

Began an orderly shutdown at the end of the allowed 72 hour continued reactor operation period.

CORRECTIVE
ACTION: (Cont'd)

The followup corrective actions included:

Continued repair of the affected snubbers during the maintenance shutdown period. The following were corrected:

- BFS 412 - Modified for the proper stroke length.
- CRS 262 - Modified for the proper stroke length.
- MSS 191 - Mounting brackets shimmed to give snubber proper stroke length.
- HRS 158 - Mounting brackets shimmed to give snubber proper stroke length.
- MSS 29 - Snubber adjusted for proper stroke length.
- MSS 257 - Snubber adjusted for proper stroke length.
- MSS 376 - Snubber adjusted for proper stroke length.
- HOS 36 - Mounting bracket was repositioned to give snubber proper stroke length.
- | HOS 56 - Required no maintenance as the stanchion was
| shortened by two inches by Craft Action C-34 per
| Public Service Company Change Notice 1140 and
| Controlled Work Procedure 80-33.

| The surveillance interval was adjusted to 31 days per SR 5.3.8.

| No further corrective action is anticipated or required.

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