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a-m.	LICENSEE EVENT REPORT
-	CONTROL BLOCK:
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	AEPORT L 6 0 5 0 0 0 3 2 7 0 1 2 2 5 8 0 8 0 1 2 2 8 1 0 SOURCE 50 61 DICKET NUMBER 68 UP EVENT DATE 74 75 REPORT DATE 80
0 2	At 86% RTP, S/G-3 train A steamline pressure and flow channels failed high at 0441 CST.
03	Action statements of LCO 3.3.3.7(a), 3.3.1.1(7), and 3.3.2.1(16) were in effect until
0 4	operability was restored at 0621 CST. At 0649 CST S/G-1, 2, & 4 train B feedwater flow
0 5	channels failed low and plant entered action statement 7 of LCO 3.3.1.1. When S/G-1
0 6	train A feedwater flow channel subsequently failed low at 0852 CST, the plant prepared
0 7	for shutdown per LCO 3.0.3 but remained at power when operability was restored at 0934
018	CST. No effect on public health or safety. Previous occurrences - none.
	SYSTEM CAUSE CAUSE COMPONENT CODE SUBCODE SUBCODE SUBCODE SUBCODE SUBCODE SUBCODE SUBCODE SUBCODE SUBCODE
7 8	Image: Second state in the se
10	The instrument channels became inoperable due to freezing of unprotected sense lines.
1 1	The lines were thawed by applying temporary heat and insulation. Design changes have
1 2	been initiated to have the required heat tracing and insulation installed to prevent
1 3	re-occurrence.
1.4	
15	STATUS Nethod OF DISCOVERY DESCRIPTION (32) B (38) O 8 6 (39) NA
16	CTIVITY CONTENT ELEASED OF RELEASE AMOUNT OF ACTIVITY 35 Z 33 Z 34 NA NA
	PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (3)
<u>, , , , , , , , , , , , , , , , , , , </u>	9 PERSONNEL INJURIES (1) 80
1 g	
ŢŢŢ	LOSS OF OR DAMAGE TO FACILITY (1) TYPE DESCRIPTION NA
20	PURLICITY ISSUED DESCRIPTION (45) NRC USE ONLY
810202	Name of Preparer J. M. McGriff/A. M. Wilkey Phone 615-842-8261

Tennessee Valley Authority Sequoyah Nuclear Plant

LER SUPPLEMENTAL INFORMATION

SQR0-50-327/80202

Technical Specification Involved: 3.0.3, 3.3.1.1, 3.3.2.1, 3.3.3.7 Reported Under Technical Specification: 6.9.1.13.b Date of Occurrence: 12/25/80 Time of Occurrence: 0441 CST

Identification and Description of Occurrence:

At 0441 CST the train A steamline pressure channel (P-1-20A) and the associated steamline flow channel (F-1-21A) for steam generator #3 failed high. The plant entered action statement "a" of LCO 3.3.3.7 and the affected trip bistables were placed in the manually-tripped condition as specified by action statement 7 of LCO 3.3.1.1 and action statement 16 of LCO 3.3.2.1 until operability was restored at 0621 CST. At 0649 CST train B feedwater flow channels for steam generator #1 (F-3-35B), steam generator #2 (F-3-48B) and steam generator #4 (F-3-103B) failed low. The affected trip bistables were placed in the manually-tripped condition in accordance with action statement 7 of LCO 3.3.1.1. Subsequently at 0852 CST the train A feedwater flow channel for steam generator #1 (F-3-35A) also failed low. Although the flow channels failed in the conservative direction, the plant prepared for shutdown in accordance with LCO 3.0.3 but remained in Mode 1 when operability of the flow channels was restored at 0934 CST.

Conditions Prior to Occurrence:

Unit in Mode 1 at 86% RTP

Apparent Cause of Occurrence:

The steamline pressure and flow channels failed high because the associated steamline pressure transmitter's sense lines in the east valve room were frozen. The transmitter is located near the air intake louvers in the east valve room which were open allowing the sense lines to freeze.

The feedwater flow channels failed low when the associated sense lines became frozen inside a building wall penetration. Heat tracing for the lines did not extend into the penetration and therefore that portion of the sense lines was unprotected.

Analysis of Occurrence:

The failure of the steamline pressure channel resulted in one accident monitoring steamline pressure channel for steam generator #3 being inoperable for less than two hours. Since the steamline flow and pressure channels failed high, the associated reactor protection and ESF trip functions were performed.

Since the feedw ter flow channels failed low, the required protective functions were performed and operation of the plant was never less conservative than the limiting condition for operation specified by LCO 3.3.1.1.

LER SUPPLEMENTAL INFORMATION (Continued)

Corrective Action:

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The sense lines were thawed by applying additional heat and insulation. A design change request has been initiated to have the necessary heat tracing and insulation installed to prevent re-occurrence.