(7 77)

LICENSEE EVENT REPORT

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

0 1 | T N S N P 1 (2) | 0 0 -0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | (5)

LICENSEE CODE | LICENSE NUMBER | LICENSE TYPE | CAT 58

CON'T

0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 3 2 7 (7) | 0 6 2 6 8 1 (8) | 0 7 0 8 8 1 (9)

DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | With unit 1 in Mode 4 (preparatory to entering Mode 3) on 6-26-81, a safety evaluation

0 3 | based on nonconformance report SQN EEB 8118 and the results of an equipment inspection

0 4 | at the site identified that steam generator level transmitters 1-LT-3-148, 156, 164,

0 5 | 172, 174 and 175 would fail during a LOCA. The transmitters are required during Modes

0 6 | 1, 2, and 3 by Technical Specifications 3.3.3.5 and 3.7.1.2. There was no effect on

0 7 | public health or safety. No previous occurrences.

0 8 |

0 9 | SYSTEM CODE: H H (11) | CAUSE CODE: B (12) | CAUSE SUBCODE: B (13) | COMPONENT CODE: I N S T R U (14) | COMP SUBCODE: T (15) | VALVE SUBCODE: Z (16)

(17) LER/RO REPORT NUMBER: EVENT YEAR 8 1 | — | SEQUENTIAL REPORT NO. 0 6 7 | / | OCCURRENCE CODE 0 1 | REPORT TYPE T | — | REVISION NO. 0

ACTION TAKEN: A (18) | FUTURE ACTION: Z (19) | EFFECT ON PLANT: Z (20) | SHUTDOWN METHOD: Z (21) | HOURS (22): 0 0 0 0 | ATTACHMENT SUBMITTED: Y (23) | NPRD-4 FORM SUB.: N (24) | PRIME COMP. SUPPLIER: N (25) | COMPONENT MANUFACTURER: F 1 8 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | Foxboro notified the licensee of the possible use of incorrect insulating sleeving on

1 1 | transistor and zener diode lead wires in the amplifier of some Foxboro transmitters.

1 2 | Tests had shown that teflon becomes brittle and deteriorates with a substantial

1 3 | integrated radiation dose. Based on an equipment inspection and subsequent safety

1 4 | evaluation, the affected transmitter amplifiers were replaced prior to entry into Mode 3.

1 5 | FACILITY STATUS: G (28) | % POWER: 0 0 0 (29) | OTHER STATUS (30): NA | METHOD OF DISCOVERY: D (31) | DISCOVERY DESCRIPTION (32): Vendor notification

1 6 | ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): NA | LOCATION OF RELEASE (36): NA

1 7 | PERSONNEL EXPOSURES NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): NA

1 8 | PERSONNEL INJURIES NUMBER: 0 0 0 (40) | DESCRIPTION (41): NA

1 9 | LOSS OF OR DAMAGE TO FACILITY TYPE: Z (42) | DESCRIPTION (43): NA

2 0 | PUBLICITY ISSUED: N (44) | DESCRIPTION (45): NA

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LER SUPPLEMENTAL INFORMATION

The Foxboro Company has identified two deficiencies in specific transmitters. The first deficiency involves the use of incorrect insulating sleeving (i.e., teflon) on transistor and zener diode lead wires in the amplifier. Foxboro testing has demonstrated that teflon will become brittle and deteriorate with substantial integrated dose (approximately 200 megarads). Teflon sleeving can withstand an integrated dose of ten megarads. Integrated doses of greater than ten megarads will only be obtained during an accident (LOCA) inside containment. The integrated dose during normal operation will be less than ten megarads in all areas of the plant; therefore, based on this information and Sequoyah Nuclear Plant's inspection program, the transmitter amplifiers identified in table 1 were replaced prior to entry into Mode 3. These transmitters are required for steam generator level control (Auxiliary Feedwater) and for post-accident monitoring.

The second deficiency involves capacitor degradation. Degradation of this capacitor is a function of time and service conditions with heat being the primary contributor. In discussions with the Foxboro representative, he has related to us that a temperature of around 100°F will cause an instrument drift of between 1/2-1 percent within the first year. The capacitor will also be able to withstand high temperature peaks for a short duration; therefore, based on this information and Sequoyah's inspection program, the transmitter amplifiers identified in table 2 were replaced.

The amplifiers to the other Foxboro instruments as identified in table 3 are expected to be replaced at the next outage where sufficient time is available. We believe that there is no need to replace these transmitters at this time for the following reasons.

1. Cold leg accumulator pressure transmitters
   (1-PT-63-86/61/62/106/108/126/128)

   A. The average temperature of lower containment during normal operation is maintained between 100°F and 120°F; therefore, the expected instrument drift is less than the indicator channel accuracy.

   B. The instruments serve no safety function during an accident. They are only used to verify accumulator pressure.

2. RHR cold leg injection flow rate
   (1-FT-63-91C/92C)

   A. The transmitters do not contain teflon wire; therefore, they will not deteriorate on the radiation field.

B. The normal temperature in the Auxiliary Building (El. 690) is approximately 100°F and on the high energy line break is approximately 117°F. This will cause an instrument drift of around 1/2 -1 percent in the first year, which is within indicator channel accuracy.

C. The instruments serve no safety function. They are only used to verify RHR flow during an accident.

3. Main steam line pressure
(1-PT-1-2B/20B/27B/9A/9B/20A)

A. The transmitters are located in the main steam vault rooms; therefore, they will not see greater than ten megarads integrated dose.

B. The normal temperature in the vault rooms is around 120°F with peak temperature approximately 300°F (accident) for a short duration. This will cause an instrument drift of around 1/2-1 percent in the first year, which is within the instrument accuracy.

C. The instruments are input to SSPS; however, the instrument drift is small.

4. Dead weight tester
(PI-68-338)

A. Serves no safety function.

Foxboro, in its letter to TVA, has identified several transmitters with no TVA tag numbers. These spare transmitters will be inspected. Those found having deficiencies will be replaced. Foxboro has also identified transmitters on Unit 2 which will be required to be checked and replaced where necessary. The inspection program for the Unit 2 transmitters has been initiated.

This defect has previously been reported by telephone based on preliminary information.

TABLE 1

TVA Tag #	Serial No.	Teflon Wire	Mode Required to be Operable
1-LT-3-148	2805612	Yes	1, 2, 3
1-LT-3-156	2805614	Yes	1, 2, 3
1-LT-3-164	2805616	Yes	1, 2, 3
1-LT-3-272	2805620	Yes	1, 2, 3
1-LT-3-174	2805624	Yes	1, 2, 3
1-LT-3-175	3119351	Yes	1, 2, 3

TABLE 2

TVA Tag #	Serial No.	Capacitor	Mode Required to be Operable
1-LT-3-171	2805618	CDE/TX-65-3313	1, 2, 3
1-LT-3-173	2805622	CDE/TX-65-3313	1, 2, 3
1-PT-63-83*	2645557	Unqualified amplifier	1, 2, 3
1-PT-68-68*	3045140	Unqualified amplifier	1, 4, 3, 4

*During the inspection, these transmitters had the wrong amplifier. An investigation into the cause for this discrepancy has been initiated.

TABLE 3

TVA TAG #	SERIAL NO.
1-PT-1-9A	4006312
1-PT-1-9B	3119350
1-PT-1-20A	3119342
1-PT-1-2B	2645561
1-PT-1-20B	2645563
1-PT-1-27B	2645562
1-PT-63-86	2645558
1-FT-63-91C	3991009
1-FT-63-92C	3991007
1-PT-63-61	2645560
1-PT-63-62	2645559
1-PT-63-106	2645556
1-PT-63-108	2645555
1-PT-63-126	2645554
1-PT-63-128	2645553
1-PT-68-338	2504276