NRC FORM 366 (12-81) 10 CFR 50

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

APPROVED BY OMB 3150-0011

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

0 1	A L B R F 3 (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

CON'T 0 1	REPORT SOURCE L (6)	0 5 0 0 0 2 9 6 (7)	0 3 3 0 8 3 (8)	0 4 2 6 8 3 (9)
		DOCKET NUMBER	EVENT DATE	REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During normal operation on unit 3, while performing SI 4.2.B-69 (Reactor

0 3 High Pressure) pressure switch, PS-3-204C, had an as-found setpoint of 1123 psig.

0 4 T. S. Table 3.2.B trip level setting is 1120 psig. Above this setpoint the

0 5 switch trips recirculation pump "A". There was no effect on the health or

0 6 safety of the public. A redundant switch was available and operable.

0 7

0 8

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

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 2 3	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER (26)
E (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	S 3 8 2

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Pressure switch, PS-3-204C, calibration had drifted. The static-O-ring model

1 1 9N-AA45-X9-TT pressure switch was recalibrated, functionally tested, and

1 2 returned to service. See attached action plan for corrective action,

1 3 category 3.

1 4

1 5	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
	E (28)	0 8 5 (29)	N/A	(31)	Surveillance testing

1 6	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
	Z (33)	Z (34)	N/A	N/A

PERSONNEL EXPOSURES

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

PERSONNEL INJURIES

1 8	NUMBER	DESCRIPTION (41)
	0 0 0 (40)	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

1 9	TYPE	DESCRIPTION
	Z (42)	N/A

PUBLICITY

2 0	ISSUED	DESCRIPTION (45)	NRC USE ONLY
	N (44)	N/A	

NAME OF PREPARER Bobby J. Irby PHONE: (205) 729-0841

Tennessee Valley Authority
Browns Ferry Nuclear Plant

Form BF 17
BF 15.2
2/12/82

LER SUPPLEMENTAL INFORMATION

BFRO-50-296 / 83023 Technical Specification Involved Table 3.2.B

Reported Under Technical Specification 6.7.2.b.(1) * Date Due NRC 4/29/83

Event Narrative:

Units 1 and 3 were operating normally at 85-percent power and 99-percent power, respectively. Unit 2 was in an outage. Only unit 3 was affected by this event. During the performance of Surveillance Instruction (SI) 4.2.B-69 (Reactor High Pressure), pressure switch, PS-3-204C, had an as-found setpoint of 1123 psig. Technical Specification (TS) Table 3.2.B required trip setting is equal to or less than 1120 psig. Pressure above the setpoint trips recirculation pump "A".

Pressure switch PS-3-204C calibration had drifted. The static-O-ring model 9N-AA45-X9-TT pressure switch was recalibrated, functionally tested, and a redundant switch was available and operable. See attached action plan for corrective action, category 3.

* Previous Similar Events:

BFRO-50-259/81048
260/78023, 80030
296/82055, 82068

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision: JRP

ACTION PLAN
BROWNS FERRY NUCLEAR PLANT - REACTOR PROTECTION SYSTEM
PRIMARY CONTAINMENT ISOLATION SYSTEM
AND CORE STANDBY COOLING SYSTEMS
PRIMARY SENSOR SWITCHES

BACKGROUND

The reactor protection system (RPS), the primary containment isolation system (PCIS), and the core standby cooling systems (CSCS) use mechanical-type switches in the sensors that monitor plant process parameters. The plant technical specifications have put very close tolerances on these instruments. As a result, almost any change in switch setpoint requires submittal of a licensee event report (LER). To reduce the frequency of this type LER, the following action plan has been developed.

LONG-TERM SOLUTION

Advances in technology make it possible to replace the mechanical-type switches with a more accurate and more stable electronic transmitter/electronic switch system. This modification is a major change to these safety systems and requires fully qualified safety-grade equipment. This equipment is in limited supply and has long procurement times. TVA is presently reviewing bids for this equipment. The tie-in of the new system to the balance of the RPS, the PCIS, and the CSCS requires a refueling outage. TVA expects to install the electronic systems during the first refueling outage after receipt of equipment.

INTERIM ACTIONS

Because of the long leadtime to implement the long-term solution, several interim actions have been taken. They are based on a review of licensee event reports which can be categorized as follows:

Category 1: Individual instruments whose setpoints have drifted two consecutive times.

Category 2: Groups of instruments which exhibit a predictable cyclic setpoint drift pattern.

Category 3: Individual, randomly occurring instrument setpoint drifts which cannot be put in category 1 or 2.

For each category the following action is taken.

Category 1: The instrument is replaced with an identical instrument.

Category 2: The margin between the instrument setting and the technical specification limit is increased.

Category 3: The instrument is readjusted to the specificed setpoint.