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 8 1 2 8 3] (8) [0 8 2 5 8 3] (9)

DOCKET NUMBER — EVENT DATE — REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

[0 2] During normal operation on unit 3 while calibrating pressure switches that

[0 3] remove the control valve fast closure/stop valve scram bypass on unit 3,

[0 4] pressure switches PS-1-81A & B, and PS-1-91A & B operated at 159.4, 159.4,

[0 5] 157.4 & 158.4 psig respectively. Tech. Spec. Table 3.1.A requires the

[0 6] switches to operate at ≤ 154 psig. There was no effect on public health

[0 7] or safety because other RPS trip systems were available and operable.

[0 8]

[0 9]

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

LER/RO REPORT NUMBER (17)	EVENT YEAR	SEQUENTIAL REPORT NO	OCCURRENCE CODE	REPORT TYPE	REVISION NO.
	8 3	0 5 1	0 1	T	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	SUPPLIER FORM SUB.	PRIME COMP SUPPLIER	COMPONENT MANUFACTURER (26)
E (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	L (25)	B 0 6 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

[1 0] The Barksdale model B2T A12SS pressure switches calibration had drifted.

[1 1] They were immediately recalibrated, functionally tested and returned to

[1 2] service. See attached action plan for corrective action, category 3

[1 3]

[1 4]

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
E (28)	0 9 3 (29)	N/A	B (31)	Surveillance Testing

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

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

PERSONNEL INJURIES NUMBER	DESCRIPTION (41)
0 0 0 (40)	N/A

LOSS OF OR DAMAGE TO FACILITY

TYPE	DESCRIPTION (42)
Z (42)	N/A

PUBLICITY ISSUED	DESCRIPTION (45)
N (44)	N/A

8309060169 830825
PDR ADOCK 05000296
S PDR

NRC USE ONLY

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 / 83051 Technical Specification Involved Table 3.1.A

Reported Under Technical Specification 6.7.2.a.(5) Date Due NRC 08/26/83

Event Narrative:

Units 2 and 3 were operating at 97 and 93% power respectively. Unit 1 was in a refueling outage. Unit 3 was the only unit effected by this event. While performing Surveillance Instruction 4.1.A-14 (Reactor Protection System Turbine First Stage Permissive) on unit 3, pressure switches PS-1-91A & B operated at 157.4 & 158.4 psig respectively, PS-1-81A at 159.4 psig, and PS-1-81B at 159.4 psig. Technical Specification Table 3.1.A requires these switches to operate at $\leq$ 154 psig. The trip level setting for these pressure switches removes the control valve fast closure/stop valve scram bypass. The switches were immediately recalibrated per SI 4.1.A-14 and returned to service. There was no effect on public health or safety because other RPS trip systems were available and operable. See attached action plan for corrective action, category 3.

* Previous Similar Events:

BFRO-50-259/81032, 81038, 81064, 82037, 82092
BFRO-50-260/78002, 79017, 79024, 80020, 80022, 80057, 81023, 81028, 81059, 82018, 83025
BFRO-50-296/79007, 79012, 79028, 80022, 80030, 80045, 80052, 81007, 81030, 81039, 82009, 82036, 82054, 83010

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 specified setpoint.

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

1750 Chestnut Street Tower II

August 25, 1983

Mr. James P. O'Reilly, Director
U.S. Nuclear Regulatory Commission
Suite 2900
101 Marietta Street, NW
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE REPORT BFRO-50-296/83051

The enclosed report provides details concerning pressure switches that remove the control valve fast closure/stop valve bypass. This report is submitted in accordance with Browns Ferry unit 3 Technical Specification 6.7.2.a(5).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

H. J. Green
Director of Nuclear Power

Enclosure
cc (Enclosure):
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Records Center
Institute of Nuclear Power Operations
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

NRC Inspector, Browns Ferry

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