NRC FORM 366 (7.77) - . . LICENSEE EVENT REPORT (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION) (1) CONTROL BLOCK: **D**3 (4 10 10 31(2) 0 1 BR LICENSE TYPE LICENSE NUMBER LICENSEE CODE CON'T (8) 0 3 0 9 8 3 9 10101012 9 6 7 0 2 REPORT L (6) 015 0 1 SOURCE DOCKET NUMBER EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10) While performing SI 4.2.B-5. during steady state operation on unit 0 2 2.51 ps i2 #2 was found to operate at pressure switch 3-PS-64-58C sw. 03 < 2.5 psig. 3.2.B trip level setting for this switch is Above the trin 0 4 setting indicates HPCI, and in conjunction with reactor low pressure, initiates 0 5 CSS, LPCI, and accident signal. There was no danger to the health or safety 0 6 the public because redundant pressure switches were available. 0 7 0 8 COMP VALVE CAUSE SYSTEM CAUSE SUBCODE COMPONENT CODE SUBCODE CODE CODE 16 B (12 (13 0 9 REVISION OCCURRENCE REPORT SEQUENTIAL NO. CODE REPORT NO. TYPE EVENT YEAR LER/RO REPORT (17) 0 NUMBER 3 28 COMPONENT SUPPLIER ATTACHMENT NPRD-4 SHUTDOWN EFFECT ON PLANT ACTION FUTURE HOURS (22) MANUFACTURER FORM SUB SUBMITTED 25 ¥ (23) 24 N (21) (18) (19 42 43 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27 Static-O-Ring switch (model 3-PC-64-58C sw. #2 calibration had drifted. The 10 was calibrated, functionally tested, and returned to service. See the attached 1 1 action plan, category 3 for corrective action. 1 2 1 3 1 4 80 9 METHOD OF DISCOVERY DISCOVERY DESCRIPTION (32) FACILITY (30) OTHER STATUS % POWER (31) B Surveillance Testing E (28) 0 0 (29) 11 5 80 44 45 9 10 ACTIVITY CONTENT LOCATION OF RELEASE (36) (35) AMOUNT OF ACTIVITY RELEASED OF RELEASE Z 33 Z 34 NA 6 80 45 PERSONNEL EXPOSURES DESCRIPTION (39) NUMBER TYPE 0 0 0 NA (37 38 80 9 13 PERSONNEL INJURIES DESCRIPTION (41) NUMBER 0 0 (40) NA 0 80 11 LOSS OF OR DAMAGE TO FACILITY (43) DESCRIPTION TYPE Z (42) NA 80 NRC USE ONLY 8303160438 830309 PDR ADCCK 05000296 PUBLICITY DESCRIPTION (45 ISSUED Z (44) PDR 68 69 80 10 PHONE \_\_ (205) 729-0841 NAME OF PREPARER \_\_\_ George W. Bass

Tennessee Valley Authority Browns Ferry Nuclear Plant

Form BF 17 BF 15.2 2/12/82

# LER SUPPLEMENTAL INFORMATION

BFRO-50-<u>296</u> / <u>83012</u> Technical Specification Involved <u>3.2.B</u> Reported Under Technical Specification <u>6.7.2.b (1)</u> \* Date Due NRC <u>3/19/83</u>

## Event Narrative:

Units 1 and 3 were operating at 1060 and 1100 MWE, respectively, and unit 2 was in a refueling outage. Only unit 3 was affected by this event. While performing Surveillance Instruction (SI) 4.2.B-5 (Instrumentation that Initiates or Controls the CSCS Drywell High Pressure), 3-PS-64-58C switch #2 was found to be out of technical specification limits ( $\leq 2.5$  psig). Above this trip setting 3-PS-64-58C switch #2 initiates trips in the CSS, HPCI, and LPCI, and through a multiplier relay in the CSS, initiates an accident signal. The switch was calibrated, functionally tested, and returned to service per SI 4.2.B-5. There was no danger to the health or safety of the public, since redundant switches were available and operable. See the attached action plan, category 3, for corrective action.

\* Previous Similar Events:

BFR0-50-259/8148 296/7706, 8042, 8110, 8212, 8213, 8239

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

\*Revision: LRP

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

### BACKGROUND

1. -

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 ex ects 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.