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

(2) LICENSEE CODE: A L B R F 3 | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT: (5)

CONT'T

REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 0 0 2 9 6 (7) | EVENT DATE: 0 3 0 5 8 2 (8) | REPORT DATE: 0 3 3 1 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

During refueling, while performing SI 4.1.A.7 level switches 3-LIS-3-203A switch 2 and 3-LIS-3-203D switch 2 (Reactor High Water Level) had as-found calibrations of 591.06 and 588.23 inches respectively. Technical pecification able 3.2.B limits to ≤ 583 inches. There was no danger to the health or safety of the public because redundant switches were available and operable.

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

(17) LER RO REPORT NUMBER: EVENT YEAR 8 2 | SEQUENTIAL REPORT NO.: 0 0 5 | OCCURRENCE CODE: 0 3 | REPORT TYPE: L | REVISION NO.: 0

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Level indicating switches 3-LIS-3-203A, D switch 2 calibrations had drifted. The Barton model 288 switches were recalibrated, functionally tested and returned to service. See attached action plan for corrective action.

FACILITY STATUS: H (28) | % POWER: 0 0 0 (29) | OTHER STATUS (30): NA | METHOD OF DISCOVERY: B (31) | DISCOVERY DESCRIPTION (32): Surveillance Testing

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

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

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

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

PUBLICITY — ISSUED: N (44) | DESCRIPTION (45): NA

NRC USE ONLY

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Tennessee Valley Authority
Browns Ferry Nuclear Plant

Form BF 17
BF 15.2
2/12/82

LER SUPPLEMENTAL INFORMATION

BFRO-50- 296/ 8205 Technical Specification Involved Table 3.2.B

Reported Under Technical Specification 6.2.b.2 * Date Due NRC 4/2/82

Event Narrative:

Units 1 and 2 normal operation, unit 3 refueling outage. Unit 3 was affected by this event. While performing Surveillance Instruction (SI) 4.1.A.7 (Reactor Protection System Reactor Water Level), level indicating switches 3-LIS-3-203A switch 2 operated at 591.06 inches and 3-LIS-3-203D switch 2 operated at 588.23 inches. The limit in the Technical Specification Table 3.2.B is $\leq$ 583 inches. Water level above this trip setting actuates switch 3-LIS-3-203A tripping the HPCI turbine and switch 3-LIS-3-203D tripping the RCIC turbine. The switches were recalibrated per SI 4.1.A.7 and returned to service. There was no danger to the health or safety of the public, plant employees, or equipment at any time because redundant switches (3-LIS-3-203B,C switch #2) were available and operable. The failure of the level switches were due to setpoint drift. See attached action plan for corrective action.

* Previous Similar Events:

259/81071, 73022W, 73041W, 73033W, 78024, 74001W, 80089. 260/81055, 80004, 81068, 82006, 80029, 81004. 296/77003, 81055, 80028.

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision: JRP

LER
BFRO-50-296/8205

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.