LHC FORM 366 U. S. NUCLEAR REGULATORY COMMISSION 7.77) LICENSEE EVENT REPORT CONTROL BLOCK: 10 (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION) - 0 0 0 0 0 - 0 0 3 4 (2) 011 A BRF L 1 0 0 |(4)|13 CON'T REPORT 0 1 L (6) 0 5 0 0 0 2 5 9 7 0 9 0 8 8 2 DOCKET NUMBER 63 69 EVENT DATE SOURCE EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10 0 2 During startup testing on unit 1, while calibrating the Reactor Protection System high-water level switches on the scram discharge tank (SI 4.1.A-8), level 31 switch LS-85-45E operated at 27 gailons. T.S. Table 3.2.C requires the switch to 10 4 operate at ≤ 25 gallons. Above this level will cause a rod withdrawal block. 12 3 There was no effect on public health and safety. The unit was in the startup 0 142 mode and no rods were withdrawn with the switch inoperable. SYSTEM CODE 80 CAUSE CAUSE CO'.'P VAIVE CODE SUBCODE COMPONENT CODE SUBCODE SUBCODE R B (11 E (12 E (13) NS T R U (14 S (15) Z (16) 12 13 19 SEQUENTIAL OCCURRENCE REVISION REPORT EVENT YEAR LER PO REPORT NO. CODE TYPE NO. (17 REPORT 8 2 17 10 0 013 101 L NUMBER 20 31 32 ACTION TAKEN FUTURE ACTION METHOD FFFFCT NPRD-4 ATTACHMENT SUBMITTED PRIME COMP COMPONENT MANUFACTURER ON PLANT HOURS (22) FORM SUB. SUPPLIER Z (21) 0 Y (23 0 Y (24) 0 01 L (35 RI 2 9 0(3154 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27) The Robertshaw model SL-305-EI-X level switch's calibration had drifted. 1 0 It was immediately recalibrated, functionally tested, and returned to service. 1 See attached action plan for corrective action, category 3. 2 9 FACILITY STATUS 80 METHOD OF % POWER OTHER STATUS DISCOVERY DESCRIPTION (32) 0 0 0 0 NA Surveillance test B (31) CONTENT 4.4 ACTIVITY 46. 80 BELEASED OF HELEASE AMOUNT OF ACTIVITY (35 LOCATION OF HELEASE (36) Z (33) 2 (31) 10 NA NA 44 PERSONAL EXPOSITES 80 ALE 17. 111 E 14 TYPE DESCRIPTION (39) 0 0 0 Z G 01 111 NA PEHSONNEL INJUNES 13 80 OESCRIPTION(41) NUMBER OF 010 0 NA LOSS OF ON DAWAGE TO FACILITY (43) 80 DESCRIPTION TOPE 4 Z (42 NA PUBLICITY DESCRIPTION (15 I NIGI NAC USE ONLY NA 8210130438 821007 ADOCK 05000259 PDR 63 5.9 80 Irbv (205) 720-0841 PDR

Tennessee Valley Authority Browns Ferry Nuclear Plant

Form BF 17 BF 15.2 2/12/82

LER SUPPLEMENTAL INFORMATION

BFRO-50-259 / 82070 Technical Specification Involved Table 3.2.C Reported Under Technical Specification 6.7.2.b.(2)* Date Due NRC 10/08/82

Event Narrative:

Unit 1 was in startup mode, unit 2 in a refueling outage, and unit 3 operating normally at 98-percent power. Only unit 1 was affected by this event. While performing Surveillance Instruction 4.1.A-8 (Reactor Protection System High-Water Level in Scram Discharge Tank), level switch LS-85-45E operated at 27 gallons. Technical Specification Table 3.2.C requires the switch to operate at ≤ 25 gallons. Above this level will cause a rod withdrawal block. The Robertshaw model SL-305-EI-X level switch's calibration had drifted. It was immediately recalibrated, functionally tested, and returned to service. See attached action plan for corrective action, category 3. There was no effect on public health and safety. The unit was in the startup mode. No rods were withdrawn until the switch was returned to service.

* Previous Similar Events:

BFR0-50-260/81001, 81002, 81016 BFR0-50-296/81012

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision:

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

BACKGROUND

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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.