

# LICENSEE EVENT REPORT

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

0 1 A L B R F 1 2 0 0 - 0 0 0 0 0 0 0 0 3 4 1 1 1 1 4 5  
7 8 9 14 15 25 26 30 57 CAT 58  
LICENSEE CODE LICENSE NUMBER LICENSE TYPE

CON'T  
0 1 L 6 0 5 0 0 0 2 5 9 7 0 8 1 8 8 2 8 0 9 1 5 8 2 9  
7 8 60 61 68 69 74 75 80  
REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

0 2 1 During normal operation of unit 1, while calibrating a differential pressure  
0 3 switch that initiates the pressure suppression chamber to reactor building vacuum  
0 4 breakers (SI 4.7.A.3.a), differential pressure switch 1-PDIS-64-21 operated at  
0 5 0.504 psid. T. S. 3.7.A.3.a requires the switch to operate at 0.5 psid. There  
0 6 was no effect on public health and safety. A redundant switch was available  
0 7 and operable.

0 9 S A 11 E 12 E 13 I N S T R U 14 S 15 Z 16  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
17 8 2 0 5 9 0 3 L 0  
7 8 21 22 23 24 25 26 27 28 29 30 31  
LER/RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.  
E 18 C 19 Z 20 Z 21 0 0 0 0 Y 23 Y 24 L 25 B 0 8 0 0 26  
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47  
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NRPD-4 FORM SCS PRIME COMP. SUPPLIER COMPONENT MANUFACTURER

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

1 0 1 The Barton model 289 differential pressure switch calibration had drifted. It was  
1 1 immediately recalibrated, functionally tested and returned to service. See  
1 2 attached action plan for corrective action, category 3.

1 3  
1 4

1 5 E 28 0 9 7 29 NA 30 B 31 Surveillance test 32  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION

1 6 Z 33 Z 34 NA 35 NA 36  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

1 7 0 0 0 37 Z 38 NA 39  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

1 8 0 0 0 40 NA 41  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
PERSONNEL INJURIES NUMBER DESCRIPTION

1 9 Z 42 NA 43  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

2 0 N 44 NA 45  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
PUBLICITY ISSUED DESCRIPTION

8209200230 820915  
PDR AD0CK 05000259  
S PDR

NRC USE ONLY

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LER SUPPLEMENTAL INFORMATION

BFRO-50- 259 / 82059 Technical Specification Involved 3.7.A.3.a

Reported Under Technical Specification 6.7.2.b.(1)\* Date Due NRC 09/17/82

Event Narrative:

Unit 1 and 3 were operating normally at 97-percent and 95-percent power respectively. Unit 2 was in a refueling outage. Unit 1 was the only unit affected by this event. While performing Surveillance Instruction (SI) 4.7.A.3.a (Pressure Suppression Chamber - Reactor Building Vacuum Breakers Functional Test and Calibration) on unit 1, differential pressure switch 1-PDIS-64-21 operated at 0.504 psid. Technical Specification 3.7.A.3.a requires the switch to operate at 0.5 psid. The differential pressure switch applies power to operate the vacuum breakers. The setpoint on the switch had drifted. The Barton model 289 differential pressure switch was immediately recalibrated per SI 4.7.A.3.a and returned to service. There was no effect on public health and safety. A redundant switch was available and operable. See attached action plan for corrective action, category 3.

\* Previous Similar Events:

NONE

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 instruments 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.