

CONTROL BLOCK

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 ALBRF 32 00-000000-0003 411114

CONT

01 REPORT SOURCE L 05 00002967 052083 060283

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

02 During normal operation, while performing SI 4.2.B-7 (Instrumentation that
03 Initiate or Control the CSCS Reactor Low Pressure), pressure switches
04 3-PS-3-74B switch 1 and switch 2, and 3-PS-68-96 switch 2 had as-found
05 calibration values of 271.43, 429.43, and 429.7 psig respectively.
06 T. S. Table 3.2.B requires values of 230 \pm 15, 450 \pm 15 and 450 \pm 15 psig
07 respectively. Redundant switches were available and operable for 3-PS-3-74B
08 switch 1. There was no danger to the health or safety of the public.

09 I B 11 E 12 E 13 I N S T R U 14 S 15 Z 16
17 8 3 0 3 1 0 1 T 0
18 X 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 L 25 B 0 8 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

10 Pressure switches 3-PS-3-74B switches 1 & 2 and 3-PS-68-96 switch 2
11 experienced setpoint drift. The Barton model 288 pressure switches were
12 immediately recalibrated, functionally tested and returned to service.
13 See attached action plan for corrective action, category 3.

15 E 1 0 0 N/A B Surveillance Testing
16 Z Z N/A N/A
17 0 0 0 Z N/A
18 0 0 0 N/A
19 0 0 0 N/A
20 Z N/A
21 N/A
22 N/A
23 N/A
24 N/A
25 N/A
26 N/A
27 N/A
28 N/A
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PDR ADOCK 03000296
S PDR

NUC USE ONLY

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LER SUPPLEMENTAL INFORMATION

BFRO-50- 296 / 8331 Technical Specification Involved 3.2.B

Reported Under Technical Specification 6.7.2.A.5 * Date Due NRC 06/03/83

Event Narrative:

Unit 1 was in a refueling outage, units 2 and 3 were operating at 3194 MW(t) and 3287 MT(t) respectively. While performing SI 4.2.B-7 (Instrumentation that Initiate or Control the CSCS Reactor Low Pressure) pressure switches 3-PS-3-74B switch 1, 3-PS-3-74B switch 2 and 3-PS-68-96 switch 2 had as-found calibration values of 271.43, 429.43 and 429.7 respectively. Technical Specifications (Table 3.2.B) require values of 230 ± 15 , 450 ± 15 and 450 ± 15 psig respectively. Pressures below the trip setting for pressure switches 3-PS-3-74B switch 2 and 3-PS-68-96 switch 2 permits the opening of CSS and LPCI admission valves. Pressures below the trip setting for 3-PS-3-74B switch 1 causes closure of the recirculation discharge valves. Redundant switches were available and operable for 3-PS-3-74B switch 1, and the worst of the other two switches was out of Technical Specification tolerance by only 5.57 psig (1.28%). There was no danger to the health or safety of the public.

The pressure switches setpoints had drifted. The Barton model 288 pressure switches were immediately recalibrated, functionally tested and returned to service. See the attached action plan for corrective action, category 3.

* Previous Similar Events:

BFRO-50-259/81038, 77002, 81064, 82038
260/81059, 82003, 82013, 83002
296/79010, 79028, 8018, 82021

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

June 2, 1983

83 JUN 7 9:27

USNRC REGION 1
ATLANTA, GEORGIA

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-50-296/83031

The enclosed report provides details concerning setpoint drift of three
pressure switches. 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):

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Washington, D.C. 20555

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NRC Inspector, Browns Ferry

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