

LICENSEE EVENT REPORT

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CONT

0	1
7	8

REPORT SOURCE

L	6	0	5	0	0	0	2	9	6	7	0	4	0	7	8	2	8	0	5	0	5	8	2	9
60	61								68	69						74	75							80
DOCKET NUMBER										EVENT DATE										REPORT DATE				

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

09		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE	
7	8	I	B	E		E		I	N	S	T	R	U	S	Z
		9	10	11	12	12	13	13	14	15	16	17	18	19	20
17 LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.					
82		009		03		L		0							
21		22		23		24		25		26					
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED					
E		F		Z		Z		0000		Y					
33		34		35		36		37		38					
18		19		20		21		22		23					
NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER											
N		L		B069											
42		43		44											

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
1	5	H	28	d	0	0	29	NA	30
ACTIVITY		CONTENT		AMOUNT OF ACTIVITY		LOCATION OF RELEASE			
1	6	Z	33	Z	34	NA	35	NA	36
PERSONNEL EXPOSURES		TYPE		DESCRIPTION					
1	7	0	0	0	37	Z	38	NA	39
PERSONNEL INJURIES		TYPE		DESCRIPTION					
1	8	0	0	0	40			NA	41
LOSS OF OR DAMAGE TO FACILITY		TYPE		DESCRIPTION					
1	9	Z	42			NA	43		44

PUBLICITY (45)

NRC USE ONLY

NA

NAME OF PREPARATION

B. J. Irby

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LER SUPPLEMENTAL INFORMATION

BFRO-50- 296 / 8209

Technical Specification Involved 3.2.A

Reported Under Technical Specification 6.7.2.b.1 Date Due NRC 5/6/82

Event Narrative

Units 1 and 2 were operating normally when the event occurred; unit 3 was in a refueling outage. Only unit 3 was affected by this event. During the performance of Surveillance Instruction (SI) 4.2.A-6, Primary Containment and Reactor Building Isolation Instrumentation Low Pressure Main Steam Line, pressure switches 3-PS-1-76 and 3-PS-1-82 were found to operate outside the limits of Technical Specification Table 3.2.A. The pressure switches operated at 815.7 psig and 813.7 psig respectively. Table 3.2.A specifies the trip setting to be ≥ 825 psig. Pressure below this setting initiates isolation of the main steam lines. The failure of these switches was due to setpoint drift.

The switches were recalibrated in accordance with SI 4.2.A-6 and were returned to service. Redundant pressure switches 3-PS-1-72 and 3-PS-1-86 were available and operable in each trip system.

The attached action plan delineates the recurrence control to be implemented.

* Previous Similar Events:

BFRO 260/79024, 80057; 296/80045, 81007

Retention Period - Lifetime Responsibility - Document Control Supervisor

*Revision: JRV

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.