

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME: 01 A L B R F 2 0 0 - 0 0 0 0 0 - 0 0 4 1 1 1 1 0 1

LICENSE NUMBER: 0 0 - 0 0 0 0 0 0 - 0 0

LICENSE TYPE: 4 1 1 1 1

EVENT TYPE: 0 1

CATEGORY: 01 CONT *

REPORT TYPE: 0

REPORT SOURCE: L

DOCKET NUMBER: 0 5 0 - 0 2 6 0

EVENT DATE: 0 4 1 2 7 6

REPORT DATE:

EVENT DESCRIPTION

02 During RMCS retesting, five reed relay failures were discovered, four of which would
03 permit the sequential selection and withdrawal of adjacent control rods when in the
04 REFUEL mode, and one of which would allow two control rods to be withdrawn
05 simultaneously in all but shutdown mode of operation. (BFA0-50-260/763W)
06

SYSTEM CODE: 07 R B

CAUSE CODE: B

COMPONENT CODE: R E L A Y X

PRIME COMPONENT SUPPLIER: N

COMPONENT MANUFACTURER: C 3 4 5

VIOLATION: N

CAUSE DESCRIPTION

08 Failed contacts on C. P. Claire reed relays (model MR4MC-1023)
09
10

FACILITY STATUS: 11 G

% POWER: 0 0 0

OTHER STATUS: NA

METHOD OF DISCOVERY: C

DISCOVERY DESCRIPTION: NA

FORM OF ACTIVITY RELEASED: 12 Z

CONTENT OF RELEASE: Z

AMOUNT OF ACTIVITY: NA

LOCATION OF RELEASE: NA

PERSONNEL EXPOSURES

13 0 0 0 Z NA

PERSONNEL INJURIES

14 0 0 0 NA

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

16 Z NA

PUBLICITY

17 NA

ADDITIONAL FACTORS

18 SEE ATTACHMENT

19 8306290065 760512
PDR AD0CK 05000260
S PDR

NAME: _____ PHONE: _____

ADDITIONAL FACTORS

Simultaneous withdrawal of two control rods require the following conditions coincidentally:

1. Control rod with the failed (contacts closed) reed relay selected first, and
 - a. In the startup and run modes, the second control rod must be selected within the first 0.4 second of the withdrawal cycle of the first control rod, or
 - b. In the refuel mode, there is no time restraint in selecting and withdrawing the second control rod.

Sequential withdrawal of two adjacent control rods requires:

1. Control rod with the failed (contacts open) reed relay selected and withdrawn, it is then possible to select and withdraw a second adjacent control rod, without a time restraint.

To correct this problem, a voltage monitoring circuit will be added to the RSCS and a rod withdrawal prohibit circuit will be added to the RMCS on all units. Defective reed relays were replaced and proper circuit functions verified.



TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

260/76-3

May 12, 1976



Mr. Norman C. Moseley, Director
U.S. Nuclear Regulatory Commission
Region II
230 Peachtree Street, NW., 8th Floor
Atlanta, Georgia 30303

Dear Mr. Moseley:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 2 -
DOCKET NO. 50-260 - FACILITY OPERATING LICENSE DFR-52 - ABNORMAL
OCCURRENCE REPORT BFAC-50-260/763W

The enclosed report is to provide details concerning five reed relay failures which were discovered during RDS retesting and is submitted in accordance with Appendix E to Regulatory Guide 1.16, Revision 4, August 1975. This event occurred on Browns Ferry Nuclear Plant unit 2.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

H. S. Fox
Director of Power Production

Enclosure (3)

CC (Enclosure):

Director (3)

Office of Management Information and Program Control
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Director (40)

Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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