TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401

TVA 40TH ANNIVERSARY OF PEOPLE IN PARTNERSHIP

November 23, 1973

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U.S. Atomic Energy Commission
Washington, DC 20545

Dear Mr. O'Leary:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 - DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL OCCURRENCE REPORT BFAO-7339W

The enclosed report is to provide details concerning reactor protection system condenser low-vacuum switch malfunction which occurred on Browns Ferry Nuclear Plant unit 1 on November 15, 1973, and is submitted in accordance with Appendix A to Regulatory Guide 1.16, Revision 1, October 1973.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

E. F. Thomas
Director of Power Production

Enclosure
CC (Enclosure):
Mr. Norman C. Moseley, Director
Region II Regulatory Operations Office, USAEC
230 Peachtree Street, NW.
Atlanta, Georgia 30303

ABNORMAL OCCURRENCE REPORT

Report No.--BFAO-7339W
Report Date--November 23, 1973
Occurrence Date--November 15, 1973
Facility--Browns Ferry Nuclear Plant unit 1

Identification of Occurrence

Unit 1 reactor protection system condenser low-vacuum switch malfunction.

Conditions Prior to Occurrence

Reactor at 25-percent thermal power during startup testing.

Description of Occurrence

During accelerated surveillance testing on November 15, 1973, condenser low-vacuum pressure switch PS-2-1B was found to operate outside the technical specification setpoint of equal to or greater than 23 inches mercury vacuum as specified in Table 3.1.A. The as-found setting was 22.8 inches.

Analysis of Occurrence

The vacuum switches are arranged in a one out of two taken twice logic in the reactor protection system. The other three channels were tested and found to operate satisfactorily; and, if required, the RPS would have performed its intended function.

Corrective Action

The switch was replaced with a new switch, calibrated, and functionally tested before returning to service. The accelerated testing frequency will be continued until three consecutive weekly tests prove satisfactory results. The testing frequency will then be reduced to biweekly and the original test schedule of once a month resumed after three consecutive biweekly tests prove satisfactory.

Failure Data

Barksdale Model DIT-N1855. Serial No.: None.

Failure Data (continued)

Switch	Date	Failure	Corrective Action
PS-2-1A	10/11/73	Operated outside tech spec limits	Reset switch
PS-2-1B	10/11/73	Operated outside tech spec limits	Reset switch
PS-2-1A	10/25/73	Operated outside tech spec limits	Reset switch
PS-2-1B	10/25/73	Operated outside tech spec limits	Reset switch
PS-2-1B	11/15/73	Operated outside tech spec limits	Reset switch