ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-50-260/755W
Report Date: February 14, 1975
Occurrence Date: February 5, 1975
Facility: Browns Ferry Nuclear Plant units 1 and 2

Identification of Occurrence

Loss of 250-V d-c power supply to 4-kV shutdown board "D" emergency control bus.

Conditions Prior to Occurrence

Unit 1 was in cold shutdown condition; unit 2 was at approximately 65-percent power. Unit 250-V battery board 1 had been isolated from all plant loads for battery discharge surveillance test as required by the technical specifications.

Description of Occurrence

At approximately 0900 hours, an undervoltage alarm was observed on the central diesel generator annunciator panel. Subsequent investigation revealed that the emergency control bus on 4-kV shutdown board "D" was deenergized. This negated automatic starting capability of RHR pumps 1D and 2D, core spray pumps 1D and 2D, RHRSW pump D1, and diesel generator D (undervoltage initiation only). Control voltage was immediately restored to the emergency bus following the investigation.

Designation of Apparent Cause of Occurrence

The battery discharge surveillance instruction did not contain a specific step for transferring the 250-V d-c power supply to 4-kV shutdown board "D" emergency control bus before the test.

Analysis of Occurrence

As a result of the deenergized control bus, the aforementioned equipment had no automatic starting capability for approximately 39 hours.

During the 39-hour period, each of the previously listed "D" pumps was capable of manual starting with the exception of RHR pump 1D which was out of service for maintenance. Diesel generator D was capable of automatic starting from all initiating signals except undervoltage on 4-kV shutdown board "D." All other diesel generators and emergency core cooling pumps on both units 1 and 2 were operable (except RHR pump 1B which was out of service for maintenance) during the 39-hour period.

There was no damage to critical structures or components; and there were no adverse effects to the environment, public, or plant personnel.

Corrective Action

The battery discharge surveillance instruction has been changed to include a step transferring the 250-V d-c power supply to the emergency bus. It will also be expanded to include verification of annunciations. A modification change request has been initiated to install power-available indicating lights over the 4-kV shutdown board control bus selector switches.

Failure Data

None

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

February 14, 1975

Mr. Edson G. Case
Acting Director of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20545

Dear Mr. Case:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 2 - DOCKET NO. 50-260 - FACILITY OPERATING LICENSE DPR-52 - ABNORMAL OCCURRENCE REPORT BFAO-50-260/755W

The enclosed report is to provide details concerning loss of 250-V d-c power supply to 4-kV shutdown board "D" emergency control bus and is submitted in accordance with Appendix A to Regulatory Guide 1.16, Revision 1, October 1973. This event occurred on Browns Ferry Nuclear Plant units 1 and 2 on February 5, 1975.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

for J. F. Thomas
Director of Power Production

Enclosure
CC (Enclosure):
Mr. Norman C. Moseley, Director
U.S. Nuclear Regulatory Commission
Regional Office
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303

50-260 incident

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