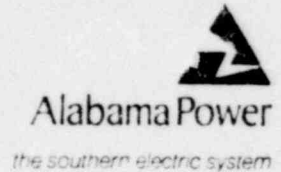


Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 323-5341

Alan R. Barton
Executive Vice President



December 20, 1978

Joseph M. Farley Nuclear Plant - Unit 2
Auxiliary Feedwater System
File: A-35.62.47
Log: 78-248

Mr. James P. O'Reilly
U. S. Nuclear Regulatory Commission
230 Peachtree Street NW - Suite 1217
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

The problem with the DC power supplies for the auxiliary feedwater system and the corrective action was originally reported to the NRC on January 10, 1978. Supplemental corrective action was provided on June 19, 1978.

Alabama Power Company has continued review of this problem and has determined that even though the corrective action already submitted is adequate, system reliability can be improved by the attached modified corrective action. Therefore we are submitting the attached as replacement for the previously submitted corrective action.

Very truly yours,

Alan R. Barton
Alan R. Barton

ARB:CBBh

Attachment

cc + Attachment: Mr. M. D. Hunt

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ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT-UNIT 2

Report of Modified Corrective Action for Auxiliary Feedwater System

The problem concerning the DC power supplies for the auxiliary feedwater system was originally reported to the NRC by our letter dated January 10, 1978. It was determined at that time that a single failure of DC Bus 2A would render the A train motor-driven auxiliary feedwater pump unable to start and would also result in loss of the turbine-driven auxiliary feedwater pump.

Subsequent to the submittal of the above letter, several telephone conferences were held with the NRC Staff concerning corrective action to the subject problem and a letter of supplemental corrective action was provided to the NRC on June 19, 1978.

Since that time Alabama Power Company has been continuing the review of this problem. Based on our evaluation it was determined that the supplemental corrective action presented in our letter dated June 19, 1978 is adequate. However, in order to further improve system reliability the following corrective action is to be implemented in lieu of that which was previously reported.

A separate UPS (Uninterruptible Power System) will be added to the auxiliary feedwater system (Attachment 1). This system will be a 3KVA UPS and will have a Seismic Category I 48V battery which will be able to supply the required power to the turbine-driven auxiliary feedwater system for two hours. This system will also have a battery charger and inverter to furnish the required DC and AC. This UPS system will be located in the northwest portion of the auxiliary building in Room 2194 at elevation 100' where there is an existing ventilation system.

This UPS will supply power to the following loads:

- ...DC to the turbine-driven auxiliary feedwater pump control panel.
- ...DC to the turbine-driven auxiliary feedwater pump steam admission valves HV-3235A, HV-3235B, and HV-3226.
- ; ...AC to BOP Panel 2J for turbine speed control.

In addition to the above modification, as we previously described in our letter dated June 19, 1978 the control circuitry of the turbine-driven auxiliary feedwater pump steam admission valves HV-3235A, HV-3235B and HV-3226 will be modified to provide an automatic opening signal from both solid state protection panels, Train A and Train B. In order to maintain train separation, auxiliary relays will be used as isolation devices.

By above modifications, as long as offsite power or diesel is available AC as well as DC will be available through this unit without using stored energy of the battery. When loss of AC power is experienced at the MCC, which powers the UPS unit, DC and AC will still be obtained directly from the UPS. Switching to the battery will be automatic upon loss of AC input.

These modifications will be implemented on Unit 2 before initial fuel loading.

