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JUN 17 1981

Docket No. 50-348

Mr. F. L. Clayton, Jr.
Senior Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291



Dear Mr. Clayton:

SUBJECT: AUXILIARY FEEDWATER (AFW) SYSTEM RELIABILITY EVALUATION FOR JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 1

We have reviewed the information provided by your letters dated November 20, 1979 and April 1 and 21, May 27, July 16, and December 4, 1980, which responded to the NRC requirements forwarded by our letter dated October 13, 1979. As a result of our review, we have determined that your responses have satisfied the NRC requirements for the AFW systems to the extent that we can now issued a Safety Evaluation Report (SER). Our letter of April 8, 1980 provided a status of our reviews at that time.

As you know, the NRC requirements to which we have evaluated your responses are included, not only in our October 13, 1979 letter, but also in NUREG-0611 (Farley part) and in TMI Action Plan (NUREG-0737) Items II.E.1.1 and II.E.1.2.

An additional item in our SER relates to the power for the solenoid valves for the auxiliary feedwater control valves. This item was discussed in your letters of July 11, July 29 and September 8, 1980. In your January 14, 1981 response for item II.E.1.1 of NUREG-0737 you stated that the power trains for these solenoids would be separated prior to return to power from the refueling outage which ended in late March 1981. Mr. Ron George of your staff advised our Project Manager, Mr. Ed Reeves, on May 21, 1981 that these modifications were completed. Therefore, this item is considered closed.

During the operating license review of the AFW system for Unit No. 2 certain NRC concerns arose regarding the control system design. At a site visit on October 22, 1980 our staff and your staff reviewed these concerns. As a result of this meeting design changes are necessary in the following areas:

1. Removal of single power source dependence for the control valves.
2. Modification to the protection system logic to preclude interference in the automatic opening of the control valves by the mode selecting switches.

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Mr. F.L. Clayton

-2-

- 3. Modifications to allow surveillance tests of the air accumulator operation of the turbine driven AFW pump.

We have agreed that interim measures you have taken are satisfactory. We also agree with your design modifications which you have proposed. The schedule for accomplishment (during refueling outage about March 1982) of the modifications is acceptable. We will condition the operating license accordingly with the next license amendment to be issued.

The one remaining item relating to the AFW system yet to be resolved is Automatic Initiation, Item II.E.1.2 of NUREG-0737. By your letter of February 28, 1980 you requested deletion of testing of the automatic start of AFW pumps on loss of main feedwater pumps. At this time, we cannot agree with your staff recommendation to delete the surveillance testing of this feature. Our intention is to resolve this item along with Item II.E.1.2 and the upgrading of Unit No. 1 Technical Specifications to agree with Unit No. 2. Therefore, the action on your letter of February 28, 1980 is considered closed.

The Safety Evaluation resulting from our review of your submittals is enclosed for your information.

You can consider your action concerning the NRC requirements specified by letter dated October 13, 1979, for auxiliary feedwater systems at Farley Nuclear Plant, Unit No. 1 to be complete with the exception of the items described in this letter. The review and resolution of these items will be pursued individually as described herein. If you have any questions, please contact the Project Manager, Mr. Ed Reeves.

Sincerely,

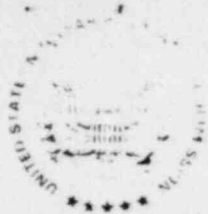
Original signed by:
S. A. Varga

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosure:
Safety Evaluation Report

cc w/encl:
See next page

OFFICE	ORB#1:DL	ORB#1:DL				
SURNAME	EReeves:ds	SVarga				
DATE	6/10/81	6/10/81				



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Darker

June 17, 1981

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Senior Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

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3. Modifications to allow surveillance tests of the air accumulator operation of the turbine driven AFW pump.

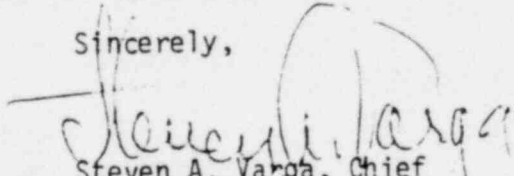
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Sincerely,



Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosure:
Safety Evaluation Report

cc w/encl:
See next page

Mr. F. L. Clayton, Jr.
Alabama Power Company

cc: Mr. W. O. Whitt
Executive Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

Ruble A. Thomas, Vice President
Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202

George F. Trowbridge, Esquire
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N.W.
Washington, D. C. 20036

Mr. Robert A. Buettner, Esquire
Balch, Bingham, Baker, Hawthorne,
Williams and Ward
Post Office Box 306
Birmingham, Alabama 35201

George S. Houston Memorial Library
212 W. Burdeshaw Street
Dothan, Alabama 36303

Resident Inspector
U.S. Nuclear Regulatory Commission
Post Office Box 24-Route 2
Columbia, Alabama 36319