Mailing Address
Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6090

R. P. McDonald
Vice President—Nuclear Generation
Flintridge Building

Alabama Power
the southern electric system

May 11, 1984

Docket Nos. 50-348
50-364

Director, Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. S. A. Varga

Joseph M. Farley Nuclear Plant - Units 1 and 2
Inadequate Core Cooling Instrumentation System

Gentlemen:

On April 13, 1984, Alabama Power Company received NRC letter dated April 2, 1984 addressing Alabama Power Company's responses to NUREG-0737, II.F.2 and Generic Letter 82-28, "Inadequate Core Cooling Instrumentation System." This NRC letter requests that, by May 13, 1984, Alabama Power Company "initiate necessary actions to implement procurement and installation of" a reactor vessel level system at Farley Nuclear Plant - Units 1 and 2.

One of the bases stated by NRC for this request, is that Alabama Power Company has not carried out "its commitment to select and to install the best [reactor vessel level] system available as rapidly as practicable." Alabama Power Company contends, however, that it has not failed to satisfy its commitment for the installation of instrumentation that can detect the approach to inadequate core cooling.

Alabama Power Company committed in a February 9, 1981 letter to install the best available reactor vessel level system as soon as practicable. This commitment was predicated on the non-invasive water level system (a pilot project conducted by Alabama Power Company and EPRI) satisfying its performance expectations. Alabama Power Company informed the NRC in letter dated August 3, 1982 that the non-invasive water level system did not satisfy its performance expectations and that a review of the other available reactor vessel level systems had begun. In letter dated March 10, 1983, Alabama Power Company submitted the results of its review. This review stated that the installation of either of the two reactor vessel

A002 1/1 Aperture Card Dist Drawing E. Reeves To:

level systems available at that time (Westinghouse and Combustion Engineering) was not practicable until resolution of problems regarding their design, installation and operation had been complete and until such a system was determined operationally acceptable by the NRC. Installation of such a system is considered by Alabama Power Company to be a research and development activity similar to that which has already been undertaken by Alabama Power Company; i.e., the non-invasive water level system. It is the judgement of Alabama Power Company that the installation of a technically proven system for operator use in such applications must take precedence over implementation schedular constraints. This position was emphasized during a meeting with NRC senior project management on March 16, 1984 at the Farley Nuclear Plant. Alabama Power Company believes that the position of resolving known problems by active monitoring of and coordination with the system vendors and utilities with installed systems has been proven to be prudent and therefore takes exception with the NRC contention that Alabama Power Company has taken a "wait and see" position.

While the original two commercially available systems have been "generically approved" by the NRC for installation and operator training and familiarization (Ref: Generic Letter 82-28), neither has received NRC operational approval. Alabama Power Company has been actively monitoring the efforts of utilities that have installed vessel level systems and the system vendors to determine the current status of problem resolution. As a result of this review, the Combustion Engineering system appears to have the most potential for reliable operational service. Alabama Power Company, however, now understands that Technology for Engineering Corporation has a vessel level system that is currently under full prototype testing which may also be acceptable.

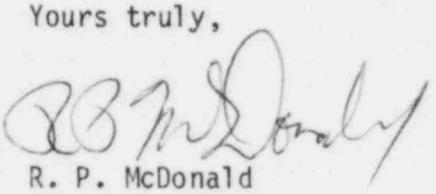
Based on the results of the continuing coordination with the vendors and utilities that have been attempting to make reactor vessel level systems operable, Alabama Power Company believes that the remaining technical concerns can be resolved in a timely manner. Alabama Power Company hereby commits to install either the Combustion Engineering or Technology for Energy Corporation reactor vessel level system at Farley Nuclear Plant within three refueling outages for each unit. Implementation on a more expedited schedule could entail significant outage startup delays and could delay implementation of currently schedule modifications associated with the Safety Parameter Display System, Regulatory Guide 1.97 and 10CFR50 Appendix R, Alternate Shutdown Capability.

Attached is a schedule to January 1987 of all work, walkdowns, installations, etc. associated with design, maintenance and licensing activities. It should be noted that for a typical outage sixty design changes can be performed. In addition, major installations typically require one outage for walkdowns and two for installation. Current planning includes completion of approximately seventy design changes per unit over

the next two outages related to compliance with NRC licensing requirements. This schedule will be updated in December to reflect the status of design completion, procurement and outage planning. In addition, detailed consideration must be given by Alabama Power Company to the integration of any reactor vessel level system with modifications required under Regulatory Guide 1.97 for Core Exit Thermocouples to preclude unnecessary duplication of systems. Alabama Power Company will address the milestones identified in Enclosure 2 of the NRC April 2, 1984 letter after selection of a reactor vessel level system vendor.

If there are any questions, please advise.

Yours truly,



R. P. McDonald

RPM/JAR:ddr-D3
Attachment
cc: Mr. L. B. Long
Mr. J. P. O'Reilly
Mr. E. A. Reeves
Mr. W. H. Bradford

Attachment

Farley Nuclear Plant
Integrated Schedule For
Licensing, Design and Maintenance

DOCUMENT/ PAGE PULLED

ANO. 8405210321

NO. OF PAGES 1

REASON

☐ PAGE ILLEGIBLE

☐ HARD COPY FILED AT. PDR CF

OTHER _____

☐ BETTER COPY REQUESTED ON __/__/__

☑ PAGE TOO LARGE TO FILM

☑ HARD COPY FILED AT. PDR (CF).

OTHER _____

☐ FILMED ON APERTURE CARD NO 8405210321-