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March 30, 1984

Docket No. 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 - Unit 2  
Regulatory Guide 1.97 Compliance

Gentlemen:

In letters dated September 22 and December 15, 1983, Alabama Power Company committed to describe the compliance of Farley Nuclear Plant - Unit 2 with Regulatory Guide 1.97 (R.G. 1.97) Compliance Report in March 1984. Attachments 1 and 2 of this letter and the enclosed Unit 2 R.G. 1.97 Compliance Report satisfy this commitment.

This commitment was made to satisfy the provisions of Supplement 1 to NUREG-0737 which address the Technical Support Center (TSC), the Emergency Operations Facility (EOF) and Control Room. The compliance of the Farley Nuclear Plant TSC and EOF to NUREG-0737, Supplement 1 is presented in Attachment 1. It is the opinion of Alabama Power Company that the EOF and TSC presently satisfy Supplement 1 to NUREG-0737 and that the Unit 2 Control Room will satisfy the provisions of R.G. 1.97 upon the implementation of the modifications and the completion of the ongoing evaluation as described herein.

The enclosed Unit 2 R.G. 1.97 Compliance Report presents the compliance of the Farley Nuclear Plant Unit 2 Control Room with R.G. 1.97. For each R.G. 1.97 variable, a Compliance Review Checklist, which summarizes the variable's compliance with the R.G. 1.97 provisions, is provided. Compliance with a R.G. 1.97 provision is indicated on the checklist by "Yes" and deviations by "No". The basis for compliance to R.G. 1.97 and the interpretation of the R.G. 1.97 provisions are presented in the R.G. 1.97 Design and Qualification Review Criteria which is included in the R.G. 1.97 Compliance Report. The format of the R.G. 1.97 Compliance Report and the information requested by Supplement 1 to NUREG-0737 are discussed in the Introduction and User's Guide, which is contained in the enclosed R.G. 1.97 Compliance Report.

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Mr. S. A. Varga  
U. S. Nuclear Regulatory Commission

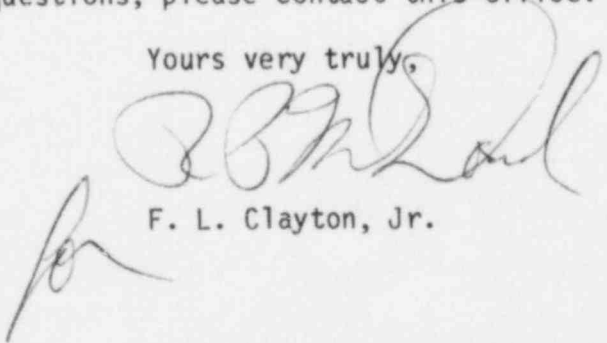
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The R.G. 1.97 Compliance Report presents justifications, modifications and/or ongoing evaluations that are provided as resolution for each deviation. The schedules for implementation of these modifications and completion of the ongoing evaluations are presented in Attachment 2.

It should be noted that the provisions of NUREG-0737, Supplement 1, including the R.G. 1.97 provisions, are to enhance the present emergency response capabilities and are not to provide the sole safety function. The present emergency response capability for accident monitoring (R.G. 1.97) is currently provided by the Farley Plant computer and the main control board. Based on the review performed to prepare the R.G. 1.97 Compliance Report, Alabama Power Company believes that the present instrumentation provides an adequate emergency response capability during the implementation of modifications and completion of ongoing evaluations to satisfy R.G. 1.97.

If there are any questions, please contact this office.

Yours very truly,



F. L. Clayton, Jr.

FLCJr/MAL:1sh-D5  
Attachments  
Enclosure

cc: Mr. R. A. Thomas  
Mr. J. P. O'Reilly  
Mr. E. A. Reeves  
Mr. W. H. Bradford  
Dr. I. L. Myers

## Attachment 1

### Compliance of the Farley Nuclear Plant TSC and EOF with Supplement 1 to NUREG-0737

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#### I. Technical Support Center (TSC)

##### A. NUREG-0737, Supplement 1 Provisions

The Type A, B, C, D and E variables that are essential for performance of TSC functions shall be available in the TSC.

- (i) BWR incore thermocouples and continuous offsite dose monitors are not required pending their further development and consideration as requirements.
- (ii) The indicators and associated circuitry shall be of reliable design but need not meet Class 1E, single-failure or seismic qualification requirements.

##### B. TSC Compliance

Farley Nuclear Plant is a Westinghouse pressurized water reactor (PWR). NUREG-0737, Supplement 1 provision Item (i) above does not apply to Farley Nuclear Plant.

Alabama Power Company's philosophy of data monitoring is that a person would be located at the main control room computer console and would communicate with the TSC via sound-power phones. TSC personnel would request display of the desired data in the TSC. Upon activation of the TSC, one of the two CRTs normally located in the main control room (one per unit) would be moved to the TSC for use by support personnel. A two-pen recorder located in the TSC has the capability to trend two parameters. Parameters can be trended on the line printers or recorders providing a hard copy of data for review. The system will address monitoring and display equipment between TSC and main control room. In addition, main control board displays can be read on the closed circuit TV system. The TSC is provided with all information essential for the performance of its designed functions. This information includes the appropriate R.G. 1.97 variables. The TSC also has the capability to monitor and display data regarding wind speed, wind direction and atmospheric stability. Reliable voice communication is available between the TSC and the National Weather Service. As an addition to the existing TSC indications, provisions have been made to incorporate the SPDS display into the TSC. This information will further enhance the TSC personnel capability for providing emergency response.

## II. Emergency Operations Facility (EOF)

### A. NUREG-0737, Supplement 1 Provisions

- (i) Those primary indicators needed to monitor containment conditions and releases of radioactivity from the plant shall be available in the EOF.
- (ii) The EOF data indications and associated circuitry shall be of reliable design but need not meet Class 1E, single-failure or seismic qualification requirements.

### B. Emergency Operating Facility (EOF) Compliance

Information regarding reactor coolant system, containment conditions, meteorological data, emergency core cooling and projected radiation dose rates would be transmitted via telephone from the TSC to the EOF and recorded on the post-accident status boards. The EOF is provided with all information essential for the performance of its designed functions. This information includes the appropriate R.G. 1.97 variables. The EOF also has the capability to monitor and display data regarding wind speed, wind direction and atmospheric stability. Reliable voice communications is available between the TSC and the National Weather Service.

## Attachment 2

### Schedules to Complete R.G. 1.97 Modifications and Ongoing Evaluation

NUREG-0737, Supplement 1 requires a schedule to be submitted with the R.G. 1.97 Compliance Report for any modifications or evaluations for resolution of any deviations. These modifications and evaluations are presented in the R.G. 1.97 Compliance Report. For scheduling purposes, the modifications and evaluations may be categorized as follows:

- 1) Ongoing MCB Seismic Evaluations
- 2) 10CFR50.49 Modifications
- 3) Main Control Board Modifications
- 4) All Other R.G. 1.97 Modifications

The schedule to complete each of these categories of modifications and evaluations will be consistent with previous APCo schedule commitments regarding R.G. 1.97 and Control Room Design Review (CRDR). These schedules are discussed below:

#### I. Ongoing MCB Seismic Evaluations

Scope: Seismic qualification of the Main Control Board (MCB) and associated display devices.

Completion Schedule: To be identified in September 1984 submittal

Basis: Schedule for completion and submittal of the CRDR Summary Report. (Reference APCo letter dated December 15, 1983).

Discussion: The MCB, Category 1 and safety-related Category 2 display devices, and MCB termination cabinets are required by R.G. 1.97 to be seismically qualified. Preliminary analysis indicates that these components may be seismically qualified; however, additional supports and/or restraints for some MCB display devices may be required. Relocation of certain MCB display devices, potentially resulting from the CRDR, could impact the seismic qualification of the MCB and result in a re-analysis. The CRDR Summary Report will outline proposed control room changes. APCo letter dated December 15, 1983 committed to provide a submittal date for the CRDR Summary Report by September 1984. The final computer run to determine the qualification status of the MCB will be made after the determination of the final modifications from the CRDR but prior to the submittal of the CRDR Summary Report to the NRC in order to verify the proposed MCB changes do not adversely impact the MCB qualification. Therefore, the MCB seismic qualification completion date will be included in the September 1984 submittal.

## II. 10CFR50.49 Modifications

Scope: Environmental qualification of Category 1 and 2 instruments whose only deviation from R.G. 1.97 is environmental qualification.

Completion Schedule: Unit 2 third refueling outage (March 31, 1985)

Basis: NRC granted extension to 10CFR50.49

Discussion: In letter dated September 27, 1983 APCo requested an extension to the schedule provided in 10CFR50.49 for upgrading the environmental qualification of R.G. 1.97 equipment for Units 1 and 2. The NRC granted an extension to March 31, 1985 for Unit 2 R.G. 1.97 equipment in a letter dated October 21, 1983. The scope of the R.G. 1.97 equipment addressed by the 10CFR50.49 schedule was redefined based on additional clarifying criteria for Unit 1 in letter dated February 22, 1983. The clarifying criteria provides for the qualification of Category 1 and 2 equipment within the 10CFR50.49 schedule whose only deviation to R.G. 1.97 is environmental qualification. The scope of Unit 2 R.G. 1.97 equipment addressed by the 10CFR50.49 schedule is as follows:

- a) Containment spray flow transmitter (FT958 A,B)
- b) Charging line flow transmitter (FT122)
- c) Letdown flow transmitter (FT150)
- d) Volume control tank level transmitter (LT115)
- e) Reactor coolant pump seal injection flow transmitter (FT124, 127 and 130) and local indications (FI124B, 127B and 130B)
- f) Containment high range radiation monitor cable outside containment (2VAI5011F, H and 1VBI5009F,H)

## III. MCB Modifications

Scope: MCB modifications which include the addition of display devices for new instruments, replacement of existing display devices and the installation of supports and/or restraints of certain MCB display devices.

Completion Schedule: Unit 2 fifth refueling outage (October 1987)

Basis: Schedule for completion of CRDR modifications (Reference APCo letter dated December 15, 1983)



Discussion: Certain MCB modifications, including the relocation of MCB display devices, may be performed to resolve human engineering discrepancies resulting from the CRDR. The MCB modifications resulting from R.G. 1.97 and CRDR will be integrated to avoid overlapping and costly modifications. The CRDR modifications are committed to be completed by the end of the Unit 2 fifth refueling outage (October 1987). The MCB modifications associated with R.G. 1.97 will be implemented in accordance with the schedule for CRDR modifications.

#### IV. Other R.G. 1.97 Modifications

Scope: These modifications, other than those in the above categories, include replacing sensors, re-routing cables, changing power supplies, providing diesel power, etc.

Completion Schedule: Unit 2 fifth refueling outage (October 1987)

Basis: Schedule for completion of R.G. 1.97 modifications (Reference APCo letter dated December 15, 1983)

Discussion: APCo committed to complete the R.G. 1.97 modifications by the end of the Unit 2 fifth refueling outage (October 1987) in letter dated December 15, 1983. The R.G. 1.97 modifications have been included in an integrated implementation schedule of all other NRC commitments and other design modifications and maintenance activities. This integrated schedule includes implementation of commitments related to IE Bulletins, Generic Letters, 10CFR50 provisions such as environmental qualification and Appendix R, as well as other NUREG-0737, Supplement 1 activities. Implementation of the licensing items must be coordinated with ongoing plant activities including refueling outages and other design modifications and maintenance activities. Typical refueling outages at Farley Nuclear Plant are six weeks in duration with the installation of all modifications on a pre-planned and packaged basis. A modification is pre-planned and packaged when all design reviews are completed, manpower requirements assessed, detailed work sequences identified, acceptance testing planned, field procurement identified and all material received onsite prior to the outage. It is the philosophy of Alabama Power Company that only refueling-related work will be performed on the outage critical path unless a safety issue is involved. The R.G. 1.97 modifications are to enhance the present emergency response capabilities and are not to provide the sole safety function. Consequently, a safe operation of Farley Nuclear Plant - Unit 2 will not be jeopardized during the interval required to implement the R.G. 1.97 modifications.