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F. L. CLAYTON, JR.
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Alabama Power
the southern electric system

March 19, 1981

Docket No. 50-348
Docket No. 50-364

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

Attention: Mr. S. A. Varga
Mr. A. T. Schwencer

Gentlemen:

Farley Nuclear Plant Units 1 and 2, Fire
Protection Upgrade Response to 10CFR50.48
and 10CFR50 Appendix R Requirements



Alabama Power Company submits this response as required by the referenced regulations. In compliance with these regulations, the following information is enclosed:

- Implementation Schedule - Attachments 1 and 2
- Plant Areas Inaccessible While Unit is Operating - Attachment 3
- Design Description for Alternate Shutdown - Attachment 4

Alabama Power has recently completed extensive modifications and upgrades to its fire protection program as a result of the Fire Protection Program Reevaluation; therefore, only Sections III.G, III.J and III.O of Appendix R apply to the Farley Plant.

The detail modifications that are planned in order to meet the requirements of Section III.G.3 of Appendix R are scheduled for submittal to the NRC for review and approval in October 1982 for Unit 1, and in March 1982 for Unit 2. We wish to call your attention to the implementation schedule bases in that this schedule is predicated upon estimated dates for material delivery and currently scheduled outages. The implementation of the necessary design changes will be completed no later than the return to power following the fifth refueling outage for Unit 1 and the second refueling outage for Unit 2. While this schedule is beyond the NRC schedule, the

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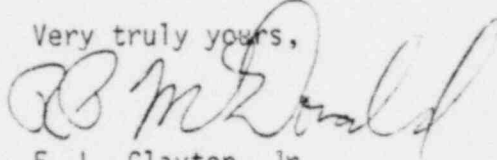
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necessary actions and accompanying schedule outlined in Attachment 2 is the only schedule that allows the required actions to be taken within the constraints of planned plant operations. As outlined in Attachment 2, certain actions cannot be performed during the same outage (e.g. designer walkdown and contractor walkdown).

If you have any questions, please advise.

Very truly yours,

for 
F. L. Clayton, Jr.

FLCJr/EAW:nac

Attachments

xc: Mr. R. A. Thomas
Mr. G. F. Trowbridge
Mr. L. L. Kintner
Mr. W. H. Bradford
Mr. E. A. Reeves

Attachment 1

ANTICIPATED OUTAGE SCHEDULE FOR FNP FOR APPENDIX R PLANNING

FNP UNIT NO.	100% POWER STARTUP DATE	OUTAGE (2 weeks)	<u>OUTAGE</u>				
			FIRST	SECOND	THIRD	FOURTH	FIFTH
1	4-1-81				2-22-82 to 4-1-82	2-22-83 to 4-1-83	2-22-84 to 4-1-84
2	7-1-81	4-1-82 to 4-15-82	1-1-83 to 2-8-83	1-1-84 to 2-8-84			

Attachment 2
Page 1 of 2
PLAN AND SCHEDULE FOR FIRE PROTECTION PROGRAM FOR
OPERATING POWER PLANTS
PART 50.48 AND 10 CFR 50 APPENDIX R

10 CFR 50 APPENDIX R	FNP UNIT NO.	<u>DESIGN SCHEDULE</u>				<u>CONTRACTOR SCHEDULE</u>			
		PREPARATION FOR WALKDOWN	WALKDOWN	ANALYSIS OF WALKDOWN	DESIGN AND CONTRACTOR SELECTION	PREPARATION FOR WALKDOWN	WALKDOWN	FINAL DESIGN AND PROCUREMENT	INSTALLATION COMPLETE
III G 2 (and G 1)	1 accessible areas only	5-1-81	6-1-81	8-1-81	9-1-81	10-1-81	11-1-81	12-1-81	5-1-82
	1 inaccessible areas	11-1-81	4-1-82*	8-1-82	9-1-82	12-1-82	4-1-83	8-1-83	4-1-84
	2	4-1-81	6-1-81	10-1-81	11-1-81	1-1-82	4-15-82 2 week turbine inspection	6-1-82	2-8-83
III G 3	1	3-1-82	4-1-82	8-1-82				10-1-82	4-1-84**
	2	4-1-81	6-1-81	10-1-81				3-1-82	2-8-84**
III F	Both	COMPLETE							
III O	1							10-1-81	4-1-82
	2							10-1-81	2-8-83

* Perform at refueling outage or at earlier unanticipated outage of sufficient duration assuming availability of hardware after completion of walkdown preparation.

** Predicated upon NRC review and approval of the detailed design.

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Schedule Bases

Bases for this schedule are as follows:

1. Walkdown and work functions in inaccessible areas are done only during scheduled outage or unscheduled outages of sufficient duration assuming availability of hardware.
2. Analysis of walkdown information is approximately two to four months dependent upon simultaneous workload of both units.
3. Based upon actual time tables for similar work on Units 1 and 2 to comply with the Fire Protection Program Reevaluation (FPPR):
 - a. Procurement of fire barrier material is approximately six months.
 - b. Procurement of smoke detectors approximately six months.
 - c. Completion of the vendor supplied smoke detector design is approximately nine months.
 - d. Procurement of alternate shutdown control multiplexing system is approximately 18 months.
 - e. Installation time for fire barriers is approximately six months.
 - f. Installation time for sprinklers is approximately six months.
 - g. Minimum time for the selection of the contractors will only be one month.
 - h. The schedule shown in Attachment 2 lists the various steps for completion. No step can be eliminated or performed simultaneously with a subsequent step, such as engineer and contractor walkdown.

ATTACHMENT 3

INACCESSIBLE AREAS FOR APPENDIX R IMPLEMENTATION

Containment

Cable Spread Room

Main Steam Valve Room

Battery Charger Room

D. C. Switch Gear Room

Rod Control Cabinet Room

Auxiliary Feedwater Pump Room

Charging Pump Room

Attachment 4

DESIGN DESCRIPTION FOR ALTERNATE SHUTDOWN FOR FARLEY NUCLEAR PLANT

In order to reassess the existing design features of the plant for compliance with the requirements of Section III.G.2 of Appendix R to 10CFR Part 50, additional plant walkdown and engineering analysis will be required. The scheduled completion dates for the walkdowns and analyses are shown on the attached schedule. Based on the information obtained from the walkdowns and analyses, a determination of compliance or non-compliance to Section III.G.2 of Appendix R will be made. For fire areas which do not comply with the requirements of Section III.G.2 of Appendix R, the following action will be taken:

- a) The non-compliance will be corrected by rerouting raceway or adding one-hour fire barriers and fire suppression and detection systems to comply with Section III.G.2 of Appendix R, or
- b) Alternative shutdown capability will be provided in compliance with Section III.G.3 of Appendix R, (engineering investigations include at this time the multiplexing of indication and control signals to and from the Alternate Shutdown Panel), or
- c) An exemption will be requested with sufficient justification.

Consideration in the evaluation will include the associated circuits, which are those circuits:

- a) considered associated by being electrically connected to the shutdown train,
- b) considered associated by proximity to the shutdown train.

Circuit breakers, fuses, and current limiters used in these associated circuits are considered to be sufficient to meet the protection criteria.

An alternate hot shutdown pane. is provided as backup for the control room and cable spreading room. Inadvertent water suppression is detrimental to plant safety and operation. The control room is continuously occupied which assures early fire detection and suppression. Dedicated suppression in these areas is impractical, as stated in the Farley Fire Protection Program Reevaluation.

The scheduled completion dates for performing the detailed engineering required for modifications, and the extended completion dates for implementing the required modifications are shown on Attachment 2.