Docket No. 50-348

MOV 0 1 1983

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

Dear Mr. Clayton:

The Commission has issued the enclosed Amendment No.

R Diggs J Taylor to Facility Operating ticense No. NPF-2 for the Joseph M. Farley Nuclear Plant, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your telecopy letter dated October 21, 1983. The amendment supports our letter October 21, 1983 wherein we granted emergency authorization accepting your core flux map accomplished on October 13, 1983, on a one-time basis pending completion of repairs to the moveable incore mapping system.

The amendment modifies Technical Specification 3.3.3.2a for one-time only to allow use of 74 percent vice 75 percent of the detector thimbles for the flux mappending October 13, 1983 (grace period ending October 22, 1983).

A copy of the Safety Evaluation is enclosed. The Notice of Issuance and Opportunity for Hearing will be included in the Commission's Monthly Notice.

Sincerely,

Steven A. Varga, Chief Operating Reactors Branch No. 1 Division of Licensing

Docket File
NRC PDR
Local PDR
H Denton
D Eisenhut
E Reeves (2)

C Parrish

L J Harmon

OPR C Miles

E Jordan

W Jones D Brinkman

OELD ACRS (10) T Barnhart (4)

SECY

ORB#1

Enclosures:

1. Amendment No. to NPF-2

2. Safety Evaluation

cc w/enclosures: See next page

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PDR ADDCK 05000348
PDR

OFFICE ORB#1. C. ORB

Mr. F. L. Clayton Alabama Power Company

cc: Mr. W. O. Whitt
Executive Vice President
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# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D. C. 20555

#### ALABAMA POWER COMPANY

DOCKET NO. 50-348

#### JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 1

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 36 License No. NPF-2

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Alabama Power Company (the licensee) dated October 21, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I:
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-2 is hereby amended to read as follows:

# (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 36, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment was effective as of October 21, 1983 on a one-time basis and will expire on about November 22, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

Oteven A. Varga, Chief Operating Reactors Branch No. 1 Division of Licensing

Attachment: Changes to the Technical Specifications

Date of Issuance: November 1, 1983

#### ATTACHMENT TO LICENSE AMENDMENT

### AMENDMENT NO. 36 TO FACILITY OPERATING LICENSE NO. NPF-2

### DOCKET NO. 50-348

Revise\*Appendix A as follows:

Remove Page

Insert Page

3/4-42

3/4 3-42

The page to be inserted is effective on a one-time basis from October 21, 1983 until the next core flux mapping is required \* Note: (about November 22, 1983). At that time the inserted page shall be removed and page 3/4 3-42 Amendment No. 26 is

effective again.

#### INSTRUMENTATION

#### MOVABLE INCORE DETECTORS

#### LIMITING CONDITION FOR OPERATION

- 3.3.3.2 The movable incore detection system shall be OPERABLE with:
  - a. At least 75% of the detector thimbles.
  - b. A minimum of 2 detector thimbles per core quadrant, and
  - C. Sufficient movable detectors, drive, and readout equipment to map these thimbles.

APPLICABILITY: When the movable incore detection system is used for:

- a. Recalibration of the excore neutron flux detection system,
- b. Monitoring the QUADRANT POWER TILT RATIO, or
- c. Measurement of  $F_{\Delta H}^{N}$ ,  $F_{Q}(Z)$  and  $F_{xy}$

#### ACTION:

With the movable incore detection system inoperable, do not use the system for the above applicable monitoring or calibration functions. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

- 4.3.3.2 The movable incore detection system shall be demonstrated OPERABLE, by normalizing each detector output during use when required for:
  - Recalibration of the excore neutron flux detection system, or
  - b. Monitoring the QUADRANT POWER TILT RATIO, or
  - c. Measurement of  $F_{\Delta H}^{N}$ ,  $F_{Q}(Z)$  and  $F_{xy}$ .
- \*A one-time only change allows use of 74% of the detector thimbles for the flux map taken for the period ending October 14, 1983 (grace period ends October 22, 1983).



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

#### SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.

TO FACILITY OPERATING LICENSE NO. NPF-2

#### ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 1

DOCKET NO. 50-348

#### INTRODUCTION

By letter dated October 21, 1983, Alabama Power Company (APCo) requested a one-time only change to Technical Specification 3.3.2a to allow the moveable incore detection system to be operable with 74 percent of the detector thimbles. The normal requirement is for 75 percent operable detector thimbles for performing core flux mapping every 31 effective full power days.

#### **EVALUATION**

On October 13, 1983 the licensee performed a flux map with 74 percent of the moveable detector thimbles due to mechanical thimble blockage. As a result, APCo applied a 50 percent extra uncertainty to the results of this map and determined that the parameters for power distribution monitoring still meet applicable Technical Specification requirements. In addition, APCo and Westinghouse have evaluated the use of 37 versus 38 (corresponding to the 74 percent versus the 75 percent requirement) of the incore thimbles to perform surveillance testing and have determined that there is only a minor difference in the flux measurements determined by each configuration. Our experience indicates that this is a reasonable and acceptable conclusion.

APCo personnel made numerous reactor containment building entries in attempts to repair the incore flux mapping system. However, due to high radiation fields caused when the IC incore detector drive unit became inoperable with its detector not in the storage position the job was terminated until radiation levels decayed. The next core map is required within 31 effective full power days or about November 22, 1983.

#### SUMMARY

The function of the requirement to measure the power distribution is to ensure that limiting power distributions used as input for accident analyses are not exceeded in normal operation of the power plant. Since the licensee has shown that the map when using only 74 percent vice 75 percent of the moveable incore detectors the Technical Specification requirements for all distribution parameters is still met, we conclude that the requested change does not involve a reduction in a margin of safety and is, therefore, acceptable.

# FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

By telecopy letter dated October 21, 1983 the licensee requested an emergency one-time only Technical Specification change to preclude plant shutdown on October 22, 1983. The licensee has determined that the one-time change does not involve a significant hazards consideration as defined in 10 CFR 50.92. The licensee also determined that the change is not consistent with any of the Commission's examples "likely to involve significant hazards considerations" (48 FR 14870). We agree. We have found that the requested change does not involve a significant hazards consideration also. Our basis is the evaluation summary, above, which concludes that the margin of safety is not reduced by accepting 74 percent vice 75 percent of the incore thimbles for the one-time flux map of October 13, 1983.

The licensee identified operational circumstances which necessitated emergency authorization in the form of Commission approval given by letter of October 21, 1983. Without our action at that time a plant shutdown would have been made by 7:00 a.m. on October 22, 1983. Prior to our action the State of Alabama was consulted on this matter and had no comments on the proposed determination. As discussed above, the acceptance on a one-time basis of the core flux map of October 13, 1983 does not constitute a reduction in safety margins. The change does not involve a significant increase in the probability of consequences of an accident previously evaluated; or create the possibility of a new or different kind of accident from any accident previously evaluated; or involve a significant reduction in a margin of safety. Therefore, the Commission has made a final determination that the amendment does not involve a significant hazards consideration.

# **Environmental Consideration**

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR \$51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

# Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: November 1, 1983

Principal Contributors: M. Dunnenfeld E. A. Reeves