

OCTOBER 30 1980

Docket No. 50-348

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

ce/11

Dear Mr. Clayton:

The Commission has issued the enclosed Amendment No. 16 to Facility Operating License 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 application transmitted by letter dated August 15, 1980 supplemented by letter dated September 25, 1980.

The amendment lowers the core elevation radial peaking factor, Fxy, for the remainder of Cycle 2 and for the upcoming Cycle 3.

In addition, we are forwarding a corrected page 6-5 which was in error. Part of Specification 6.4.2 relating to an exception for Fire Brigade training sessions had been omitted inadvertently when Amendment No. 10 was issued on March 2, 1979. Please correct your Technical Specifications by replacing page 6-5 with the corrected page 6-5.

We have not yet completed our proprietary determination for the information you submitted on September 25, 1980. That determination will be sent to you under separate cover. All information claimed to be proprietary will be treated as such pending our determination.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by:  
S. A. Varga

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

8011050611

Enclosures:

- 1. Amendment No. 16 to NPF-1
- 2. Safety Evaluation
- 3. Notice of Issuance

cc: w/enclosures  
See next page

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SURNAME						
DATE						

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DATE	10/29/80	10/16/80	10/20/80	10/29/80	10/1/80	10/20/80

#9  
5/13/83

*not reg'd*  
*SA Power*  
*10/16/80*  
*see Monahan/Smith*  
*announcements*  
*propositional items*  
*10/20/80*  
*no legal objection*  
*to notice or amendment*

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In addition, the amendment contains page 6-5 which was in error. Part of Specification 6.4.2 relating to an exception for Fire Brigade training sessions had been omitted inadvertently when Amendment No. 10 was issued on March 2, 1979. Please correct your Technical Specifications by replacing page 6-5 with the corrected page 6-5.

We will continue to withhold your September 25, 1980 application from public disclosure in accordance with the provisions of 10 CFR 2.790(d).

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

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

*Changes made  
per Order  
10/30/80  
OB*

Enclosures:

- 1. Amendment No. to NPF-1
- 2. Safety Evaluation
- 3. Notice of Issuance

cc: w/enclosures

See next page

OFFICE ▶	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....



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

October 30, 1980

Docket No. 50-348

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

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Sincerely,

A handwritten signature in black ink, appearing to read "Steven A. Varga".

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

Enclosures:

1. Amendment No. 16 to NPF-1
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures  
See next page

Mr. F. L. Clayton  
Alabama Power Company

- 2 -

October 30, 1980

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

U. S. Environmental Protection Agency  
Region IV Office  
ATTN: EIS COORDINATOR  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

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

Chairman  
Houston County Commission  
Dothan, Alabama 36301

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

State Department of Public Health  
ATTN: State Health Officer  
State Office Building  
Montgomery, Alabama 36104

Director, Technical Assessment Division  
Office of Radiation Programs (AW-459)  
U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460



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. 16  
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 August 15, 1980 supplemented by letter dated September 25, 1980, 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.

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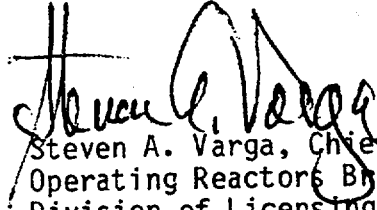
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-2 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 16, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: October 30, 1980

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 16 TO FACILITY OPERATING LICENSE NO. NPF-1

DOCKET NO. 50-348

Revise Appendix A as follows:

Remove Pages

3/4 2-7  
6-5

Insert Pages

3/4 2-7  
6-5



## SURVEILLANCE REQUIREMENTS (Continued)

2. When the  $F_{xy}^C$  is less than or equal to the  $F_{xy}^{RTP}$  limit for the appropriate measured core plane, additional power distribution maps shall be taken and  $F_{xy}^C$  compared to  $F_{xy}^{RTP}$  and  $F_{xy}^L$  at least once per 31 EFPD.
- e. The  $F_{xy}$  limits for RATED THERMAL POWER within specific core planes shall be:
1.  $F_{xy}^{RTP} \leq 1.71$  for all core planes containing bank "D" control rods, and
  2. For all unrodded core planes:
 

$F_{xy}^{RTP} \leq 1.68$  up to core elevations of 2.4 ft.

$F_{xy}^{RTP} \leq 1.70$  for core elevations from 2.4 ft. to 7.2 ft.

$F_{xy}^{RTP} \leq 1.61$  for core elevations above 7.2 ft.
- f. The  $F_{xy}$  limits of e, above, are not applicable in the following core plane regions as measured in percent of core height from the bottom of the fuel:
1. Lower core region from 0 to 15%, inclusive.
  2. Upper core region from 85 to 100%, inclusive.
  3. Grid plane regions at  $17.8 \pm 2\%$ ,  $32.1 \pm 2\%$ ,  $46.4 \pm 2\%$ ,  $60.6 \pm 2\%$  and  $74.9 \pm 2\%$ , inclusive.
  4. Core plane regions within  $\pm 2\%$  of core height ( $\pm 2.88$  inches) about the bank demand position of the bank "D" control rods.
- g. With  $F_{xy}^C$  exceeding  $F_{xy}^L$ , the effects of  $F_{xy}$  on  $F_Q(Z)$  shall be evaluated to determine if  $F_Q(Z)$  is within its limit.

4.2.2.3 When  $F_Q(Z)$  is measured pursuant to specification 4.10.2.2, an overall measured  $F_Q(Z)$  shall be obtained from a power distribution map and increased by 3% to account for manufacturing tolerances and further increased by 5% to account for measurement uncertainty.

## ADMINISTRATIVE CONTROLS

### 6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Chemistry and Health Physics Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.\*

### 6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Training Supervisor and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Training Supervisor and shall meet or exceed the requirements of Section 27 of the NFPA Code-1976, except for Fire Brigade training sessions which shall be held at least quarterly.

### 6.5 REVIEW AND AUDIT

#### 6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

##### FUNCTION

6.5.1.1 The PORC shall function to advise the Plant Manager on all matters related to nuclear safety.

##### COMPOSITION

6.5.1.2 The PORC shall be composed of the:

Chairman:	Plant Manager
Vice Chairman:	Assistant Plant Manager
Member:	Technical Superintendent
Member:	Operations Superintendent
Member: (Non-voting)	Plant Quality Assurance Engineer
Member:	Maintenance Superintendent

##### ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than one alternate shall participate as voting members in PORC activities at any one time.

\*The Minimum qualifications requirement for the Chemistry and Health Physics Supervisor shall become effective when the initial incumbent in this position is replaced.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 16 TO FACILITY OPERATING LICENSE NO. NPF-2

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 1

DOCKET NO. 50-348

Background

Alabama Power Company (APCo) requested a change in the elevation dependent radial peaking factor ( $F_{xy}$ ) Technical Specifications for Farley Unit 1 in a letter to the Director, NRR, dated August 15, 1980. Supplementary information was provided by APCo letter dated September 25, 1980 in response to our concerns discussed via telecon on September 19, 1980.

Evaluation and Discussion

The proposed Technical Specification change revises  $F_{xy}$  for the remainder of Cycle 2 and the upcoming Cycle 3. The change lowers  $F_{xy}$  in the 40 to 60% axial height region from 1.75 to 1.70. At our request, the licensee provided the results of a Westinghouse analysis of the maximum peaking factor [ $F_0(Z)$ ] as a function of core height and power level predicted for Cycle 3 operation. These results are based upon use of constant axial offset control procedures which are in the Technical Specifications. The results show that the proposed reduction in  $F_{xy}$  is needed in order to meet the  $F_0(Z)$  limits.

The reduction in  $F_{xy}$  is automatically acceptable for the remainder of Cycle 2 operation because a reduction in  $F_{xy}$  reduces the predicted maximum  $F_0(Z)$ . The  $F_{xy}$  change for Cycle 3 is acceptable because the need for it was calculated with methods in use and approved for most reloads of Westinghouse designed reactors for a number of years.

Since the present  $F_0(Z)$  limits will not be changed, there is no decrease in safety margin associated with the change in  $F_{xy}$  limits. Therefore, the change does not constitute an unreviewed safety question as defined by 10 CFR 50.59 and is acceptable.

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### 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) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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: October 30, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-348ALABAMA POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 16 to Facility Operating License No. NPF-2 issued to Alabama Power Company (the licensee), which revised Technical Specifications for operation of the Joseph M. Farley Nuclear Plant, Unit No. 1 (the facility) located in Houston County, Alabama. The amendment is effective as of the date of issuance.

The amendment lowers the core elevation radial peaking factor,  $F_{xy}$ , for the remainder of Cycle 2 and for the upcoming Cycle 3.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that

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pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

The licensee's supplemental filing dated September 25, 1980 contained a portion claimed to be proprietary pursuant to 10 CFR 2.790(b). The staff has not yet completed its proprietary determination. The information claimed to be proprietary will be treated as such pending our determination. The non-proprietary portion of the September 25, 1980 submittal is available in the Public Document Room.

For further details with respect to this action, see (1) the application for amendment dated August 15, 1980 and the non-proprietary portion of the letter dated September 25, 1980, (2) Amendment No. 16 to License No. NPF-2, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the George S. Houston Memorial Library, 212 W. Burdeshaw Street, Dothan, Alabama 36303. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 30th day of October, 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

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