

March 31, 1981

Docket No. 50-364

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

Dear Mr. Clayton:

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 2 - ISSUANCE OF FACILITY
OPERATING LICENSE

The Nuclear Regulatory Commission has issued the enclosed Facility Operating License No. NPF-8 to the Alabama Power Company for the Joseph M. Farley Nuclear Plant, Unit 2, located in Houston County, Alabama. Facility Operating License NPF-8 authorizes operation of the Joseph M. Farley Nuclear Plant, Unit 2, at 100 percent power (2652 megawatts thermal) upon completion of certain related construction items.

Your attention is specifically directed to the 90-day requirement of license condition 2.5.(18)(b) to either (1) complete the documentation on environmental qualification for Class IE equipment, or (2) commit to alternative actions which will result in full compliance with NUREG-0588 no later than June 30, 1982.

Also enclosed is a copy of the Safety Evaluation Report Supplement No. 6 supporting this action (NUREG-0117), and a copy of the notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

D. G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License
2. Supplement No. 6
3. Federal Register notice

cc w/enclosures:
See next page

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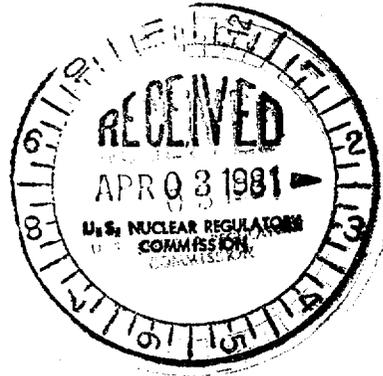
Handwritten notes:
 - Box around D. Ross 3/28/81
 - "no legal objection" written above STreby

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ccs w/enclosures:

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Vice President
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P. O. Box 2625
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1800 M Street, N. W.
Washington, D. C. 20036

Ira L. Myers, M.D.
State Health Officer
State Dept of Public Health
State Office Building
Montgomery, Alabama 36104

Honorable A. A. Middleton
Chairman
Houston County Commission
Dothan, Alabama 36301

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

U.S. Environmental Protection Agency
Attn: Ms. F. Munter
Office of Federal Activities
Room W-535, Waterside Mall
401 M Street, S. W.
Washington, D. C. 20460

Attorney General
State Capitol
Montgomery, Alabama 36104

Defense Mapping Agency
Aerospace Center
St. Louis Air Force Station
Missouri 63118

Federal Energy Regulatory Commission
825 North Capital Street, N.E.
Washington, D. C. 20426

Mr. W. Bradford
NRC Resident Inspector/Farley
P. O. Box 1814
Dothan, Alabama 36302

ALABAMA POWER COMPANY

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 2

FACILITY OPERATING LICENSE

License No. NPF-8

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
 - A. The application for licenses filed by the Alabama Power Company complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Joseph M. Farley Nuclear Plant, Unit 2 (the facility), has been substantially completed in conformity with Construction Permit No. CPPR-86 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this license 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 set forth in 10 CFR Chapter I;
 - E. The Alabama Power Company is technically and financially qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The Alabama Power Company has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

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DATE	3/30/81	3/20/81	3/ /81	3/ /81	3/31/81	3/31/81	3/31/81

no legal objection

- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. NPF-8, subject to the conditions for protection of the environment set forth in the Environmental Protection Plan which is Appendix B to this license, is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Pursuant to approval by the Nuclear Regulatory Commission at a meeting on March 11, 1981, the License for Fuel Loading and Low Power Testing (NPF-8), issued on October 23, 1980, as amended, is superseded by Facility Operating License NPF-8 which is hereby issued to the Alabama Power Company (the licensee) to read as follows:
- A. This license applies to the Joseph M. Farley Nuclear Plant, Unit 2, a pressurized water nuclear reactor and associated equipment (the facility), owned by the Alabama Power Company. The facility is located in Houston County, Alabama, and is described in the licensee's "Final Safety Analysis Report," as supplemented and amended, and in the licensee's Environmental Report, as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Alabama Power Company:
 - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, to possess, use, and operate the facility at the designated location in Houston County, Alabama, in accordance with the limitations set forth in this license;
 - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

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- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Alabama Power Company is authorized to operate the facility at reactor core power levels not in excess of 2652 megawatts thermal.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B attached hereto are hereby incorporated in this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Initial Test Program

The licensee shall conduct the initial test program (set forth in Section 14 of the licensee's Final Safety Analysis Report as amended) without making any modifications to this program unless such modifications are in accordance with the provisions of 10 CFR Section 50.59. In addition, the licensee shall not make any major modifications to this program unless the modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified as essential in Section 14 of the licensee's Final Safety Analysis Report, as amended;
- b. Modification of test objectives, methods or acceptance criteria for any test identified as essential in Section 14 of the licensee's Final Safety Analysis Report, as amended;

OFFICE ▶							
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- c. Performance of any test at a power level different from the level in the described program; and
- d. Failure to complete any tests included in the described program (planned or scheduled) for power levels up to the authorized power level.

- (4) The licensee shall not use the spent fuel cask crane for the purpose of moving spent fuel casks prior to approval by the NRC of the lifting devices which attach the spent fuel cask to the crane.
- (5) The interval for testing pumps and valves in accordance with 10 CFR 50.55 a(g)(2) is 120 months commencing with the start of commercial operation. The licensee shall provide additional information needed by the NRC to complete its detailed review of the licensee's inservice testing program for pumps and valves no later than 6 months prior to the end of the first 120-month interval.

(6) Fire Protection Program

The licensee shall maintain in effect and fully implement all provisions of the approved fire protection plan except as modified by the NRC's Joseph M. Farley Safety Evaluation Report, Fire Protection Review, Units 1 and 2, transmitted to the licensee on April 13, 1979 (Fire Protection SER). The approved fire protection plan consists of the document entitled "Farley Nuclear Plant Fire Protection Program Reevaluation" which includes:

Initial Issue, submitted with letter dated September 15, 1977;

Amendment 1, submitted with letter dated February 23, 1978;

Amendment 2, submitted with letter dated July 14, 1978;

Amendment 3, submitted with letter dated October 27, 1978;

Amendment 4, submitted with letter dated January 3, 1979, and amended by letter dated October 21, 1980.

Administrative control changes and procedure revisions shall be implemented and maintained in effect as described in NRC's Fire Protection SER.

The licensee shall comply with the fire protection program set forth in Appendix R to 10 CFR Part 50 in accordance with the requirements of §50.48 of 10 CFR Part 50.

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- (7) No later than 90 days from the date of issuance of this license, the licensee shall report to the NRC the status of any items related to emergency preparedness identified by FEMA in its plan, evaluation, and exercise critique, or by the NRC in its SER and Supplements as requiring further action.

The licensee shall complete its plans for prompt notification, staffing for emergencies, upgrading the meteorological program, and upgrading emergency support facilities on the NRC approved schedule identified in the following sections of SER Supplement 5:

Section 22.5, Dated Requirements:

- Item III.A.1.2 Upgrade Emergency Support Facilities
- Item III.A.2 Long Term Emergency Preparedness

Appendix B Emergency Preparedness Evaluation Report:

- Section B Onsite Emergency Organization
- Section E Notification Methods and Procedures

- (8) On a one-time only basis, The Action Statement of Technical Specification 3.7.4. shall be replaced by the following:

Action:

With only one service water loop OPERABLE, restore at least two loops to OPERABLE status within 72* hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*This 72-hour limit is extended on a one-time only basis to a maximum of 10 days for the recirculation portion of each service water loop to permit system modifications. Modifications, affecting operability, shall be made on only one of the two service water loops at a time. One loop shall remain OPERABLE until the other loop has been modified and returned to OPERABLE status. All other portions of the service water system are not covered by this one-time only change. All modifications to both loops are scheduled for completion by May 15, 1981.

For record purposes, this license condition expires 90 days from date of license issuance.

- (9) (a) Prior to exceeding 5 percent power, the licensee shall provide to the NRC the results of the following seven augmented low power tests:

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- . natural circulation
 - . natural circulation with simulated loss of offsite power
 - . natural circulation with loss of pressurized heaters
 - . effect of steam generator secondary side isolation on natural circulation
 - . natural circulation at reduced pressure
 - . cooldown capability of the charging and let down system
 - . simulated loss of all onsite and offsite ac power
- (b) Within 60 days after operation for 25,000 MW(e) days, results for the test of natural circulation cooldown with boron mixing shall be submitted to the NRC.
- (10) Prior to exceeding 5 percent power, the licensee shall make fully operational the post-accident sampling system.
- (11) Prior to exceeding 5 percent power, the licensee shall complete the training for mitigating core damage.
- (12) The licensee shall modify procedures and, if necessary, equipment used for natural circulation cooldown as follows:
- (a) Prior to exceeding 5 percent power, the licensee shall perform tests to demonstrate manual operation of an atmospheric steam dump valve.
 - (b) Prior to startup following the first refueling, the licensee shall make provisions (or modifications) as necessary to assure that the safety grade backup means of reactor coolant system depressurization is in accordance with the requirements of Table 1 in Branch Technical Position RSB 5-1, Rev. 1.
 - (c) Prior to startup following the first refueling, the licensee shall provide to the NRC natural circulation cooldown procedures, based on reactor natural circulation cooldown test results applicable to Farley Unit 2.
- (13) Prior to exceeding 5 percent power, the licensee shall (a) modify and test reset circuits for the containment air mixing fans, containment purge isolation valves, and auxiliary feedwater pump discharge valves to meet the requirements of IE Bulletin 80-06 "Engineered Safety Feature Reset Controls", and (b) revise procedures to be consistent with the modified designs required by (a).
- (14) Prior to exceeding 5 percent power, the following equipment which was not required to be operable by the Fuel Loading and Low Power Testing License is exempt from the Technical Specification (TS) that requires a demonstration of operability:

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

- . All fire detectors listed in TS Table 3.3-12 except those in containment (Fire Zone 55)
 - . Reactor coolant system isolation valves listed in TS Table 3.4-1.
- (15) Prior to May 31, 1981, the licensee shall complete modifications to the subcooling monitor system identified in Item II.F.2, Section 22.3 in SER Supplement 5, NUREG-0117.
- (16) The licensee shall re-evaluate and modify, as necessary, safety-related masonry walls in accordance with IE Bulletin 80-11 "Masonry Wall Design". During the re-evaluation if the operability of any safety-related system is judged to be in jeopardy, that system shall be declared to be inoperable and actions taken as required by Technical Specifications for that inoperable system. Prior to May 17, 1981, the licensee shall provide its response to IE Bulletin 80-11, including its re-evaluation report. Prior to startup following the first refueling, the licensee shall complete any modifications needed to assure the structural integrity of safety-related masonry walls.
- (17) Prior to October 1, 1981, the licensee shall submit to the NRC the design of a modified containment vent and purge system to reduce the use of the 18-inch purge valves during power operation. Prior to startup following the first refueling, the licensee shall install the modified system.
- (18) The licensee shall take the following remedial actions, or alternative actions, acceptable to the NRC, with regard to the environmental qualification requirements for Class IE equipment:
- (a) Complete and auditable records shall be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," dated December 1979. Such records shall be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified to document complete compliance no later than June 30, 1982.
 - (b) Within 90 days of receipt of the equipment qualification safety evaluation (Appendix B to SER Supplement 6, NUREG-0117), the licensee shall either (i) provide missing documentation identified in Sections 3.0, 4.2 and 4.3 of the equipment qualification safety evaluation which will demonstrate compliance of the applicable equipment with NUREG-0588, or (ii) commit to corrective actions which will result in documentation of compliance of applicable equipment with NUREG-0588 no later than June 30, 1982.

OFFICE ▶
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- (c) No later than June 30, 1982, all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of NUREG-0588.
- (19) Prior to resuming power operation following the first refueling, the licensee shall:
 - (a) Provide additional evaluations of the Westinghouse fuel performance code (PAD 3.3) to demonstrate its applicability to fuel burnups during successive fuel cycles.
 - (b) Complete modifications of the primary and backup circuit protection devices in containment electrical penetration circuits.
 - (c) Modify the lubrication system of the two Fairbanks-Morse opposed-piston diesel generators by installing a pre-lube pump arranged for automatic and manual start and powered from a reliable DC power supply or install an equivalent or better system which will prevent dry starting of the diesel generators on an automatic start signal. The licensee shall submit the system final design and implementation schedule to the NRC within six months after this license is issued.
 - (d) Inspect the main steam turbine for indications of low pressure rotor disc cracking, or replace the present low pressure rotors with refurbished rotors.
- (20) Prior to April 30, 1981, the licensee shall provide a schedule to the NRC for bringing the facility into compliance with Revision 2 of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," dated December 1980.
- (21) The licensee shall complete each of the following conditions to the satisfaction of the NRC by the times indicated. Each of the following conditions references the appropriate item in Section 22.5, "Dated Requirements" in SER Supplement 5, NUREG-0117:
 - (a) Guidance for the Evaluation and Development of Procedures for Transients and Accidents (I.C.1)
 Prior to startup following the first refueling after January 1, 1982, complete the upgrading of emergency procedures and associated operator training.
 - (b) Reactor Coolant System Vents (II.B.1)
 Submit a design description and operating procedures for reactor coolant system vents prior to July 1, 1981 and complete installation prior to July 1, 1982.

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(c) Plant Shielding (II.B.2)

Prior to April 1, 1982, complete all modifications to assure access to vital areas and protection of safety equipment following an accident resulting in a degraded core.

(d) Relief and Safety Valve Tests (II.D.1)

Provide information to the NRC based on tests to demonstrate qualification of relief valves, block valves, and associated piping as follows:

- (1) Report demonstrating qualification of relief valves, and associated piping prior to October 1, 1981.
- (2) Report demonstrating qualification of block valves prior to July 1, 1982.

(e) Auxiliary Feedwater Initiation and Indication (II.E.1.2)

Prior to startup following the first refueling, make modifications to the control and protection circuits for the auxiliary feedwater system to enhance the reliability and tolerance of the system to failures. Submit the design of these modifications to the NRC prior to July 1, 1981.

(f) Additional Accident Monitoring Instruments (II.F.1)

Install and provide information regarding accident monitoring instruments as follows:

- (1) Install noble gas effluent monitors prior to January 1, 1982.
- (2) Install capability for continuous sampling of plant gas effluents prior to exceeding 5 percent power.
- (3) Install high-range radioactivity monitors in the containment prior to January 1, 1982.
- (4) Provide a description of containment pressure instruments prior to June 1, 1981 and install pressure instruments prior to January 1, 1982.
- (5) Provide a description of a containment water level measurement system prior to June 1, 1981 and install water level system prior to January 1, 1982.

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(6) Provide a description of the use of the installed hydrogen indication monitors prior to June 1, 1981 and make modifications, if required, prior to January 1, 1982.

(g) Inadequate Core Cooling Instruments (II.F.2)

For the proposed reactor vessel water level instrument,

- (1) Provide detailed design information identified in Section 22.5 of SER Supplement 5, Requirement A, Parts (1)(a), (3), (4), (7), (8), and (9) prior to July 1, 1981.
- (2) Provide results of tests on Farley Unit 1 for consideration in this facility prior to July 1, 1981.
- (3) Provide planned program to complete development, including any additional test data needed to determine feasibility, prior to January 1, 1982.

(h) Commission Orders on Babcock & Wilcox Plants, Subsequently Applied to all PWR Plants (II.K.2)

Prior to January 1, 1982,

- (1) Submit a detailed analysis of the thermal mechanical conditions in the reactor vessel during recovery from small break LOCAs with an extended loss of all feedwater (II.K.2.13).
- (2) Provide an analysis of the potential for voiding in the reactor coolant system during anticipated transients (II.K.2.17).
- (3) Provide a bench mark analysis of sequential auxiliary feedwater flow to the steam generators following a loss of main feedwater (II.K.2.19).

(i) Final Recommendations of B&O Task Force (II.K.3)

- (1) With respect to an automatic power-operated relief valve (PORV) isolation system (II.K.3.1 and II.K.3.2):
 - (i) Perform a safety examination of an automatic PORV isolation system (II.K.3.1) per the requirement of II.K.3.2.
 - (ii) If an automatic PORV isolation system is required per (i) above, provide the information identified under the "Documentation Required" section of II.K.3.1 of NUREG-0737 by July 1, 1981.
 - (iii) If required from (i) above, complete installation and testing of the modified automatic PORV isolation system prior to startup following the first refueling outage that is scheduled to occur more than 6 months after NRC approval of the design.

OFFICE ▶
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- (2) With respect to tripping of reactor coolant pumps (RCPs) (II.K.3.5):
 - (i) Submit to the NRC for approval either (1) an evaluation which shows that sufficient time is available to the operator to manually trip the RCPs in the event of a small break LOCA, or (2) a description of design modifications required to provide for an automatic pump trip. This submittal is required within three months after NRC determination of acceptability of the small break LOCA model based on comparisons with LOFT test L3-6.
 - (ii) If required based on (i) above, complete plant modifications to provide for automatic tripping of reactor coolant pumps within 11 months after NRC determination of model acceptability, provided there is an appropriate outage during that time interval to complete installation or during the first such scheduled outage occurring thereafter.
- (3) With respect to reliability of reactor coolant pump seal cooling (II.K.3.25),
 - (i) Prior to January 1, 1982, submit results of analyses or experiments to determine consequences of a loss of cooling water to the reactor coolant pump seal coolers and describe any modifications found necessary.
 - (ii) Prior to July 1, 1982, complete any necessary modifications.
- (4) With respect to a revised small break LOCA model,
 - (i) Prior to January 1, 1982, submit to the NRC a revised model to account for recent experimental data (II.K.3.30).
 - (ii) Submit to the NRC the results of plant-specific calculations using the NRC-approved revised model prior to January 1, 1983.

D. The licensee shall fully implement and maintain in effect the physical security plan, withheld from public disclosure pursuant to 10 CFR 2.790(d), entitled, "Joseph M. Farley Nuclear Plant Security Plan" dated March 5, 1981, and as amended in accordance with the provisions of 10 CFR 50.54(p) (The Physical Security Plan).

Prior to August 1, 1981, the licensee shall have fully implemented the commitments identified in Chapter 15, items 15.1 d, f, and g of The Physical Security Plan. Until such time that these commitments are implemented the licensee shall follow the provisions contained in their letter of March 12, 1979.

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- E. The licensee shall report any violations of the requirements contained in Section 2, Items C.(3) through C.(21), and D of this license within 24 hours by telephone and confirm by telegram, mailgram, or facsimile transmission to the Director for Region II of the Office of Inspection and Enforcement, or the Director's designate, no later than the first working day following the violation, with a written followup report within 14 days.

- F. Antitrust aspects are pending before the Atomic Safety and Licensing Appeal Panel and the following antitrust conditions may be modified as a result of this continued litigation. Alabama Power Company (the Licensee) shall meet the following antitrust conditions:
 - (1) Licensee shall recognize and accord to Alabama Electric Cooperative, Inc. (AEC), the status of a competing electric utility in central and southern Alabama, and shall take no actions and engage in no course of conduct having the purpose and effect of treating AEC as a mere customer of Licensee for the sale of wholesale power.

 - (2) Licensee will sell to AEC unit power from Units 1 and 2 of Joseph M. Farley Nuclear Plant. The amount of capacity to be sold by Licensee from such units to AEC shall be an amount based on a ratio of (a) the aggregate coincident demand of all wholesale-for-resale members of AEC in Alabama during the hour of peak demand on the electric system of Licensee in 1976 to (b) the sum of such coincident demands of AEC and the territorial peak-hour demands of Licensee (excluding therefrom the peak-hour demands imposed by members of AEC upon the electric system of Licensee) during the hour of peak demand on Licensee's electric system in 1976. Contractual arrangements will be entered into between Licensee and AEC by the terms of which AEC will be entitled to purchase and receive the percentage of electrical output of the respective Farley units determined in accordance with the foregoing ratio. Such output from the respective units will be supplied by Licensee to AEC for the entire commercial service life of the particular units. Such contractual arrangements will also provide that AEC shall pay Licensee on a monthly basis for the capacity portion of such unit power, amounts representing the percentage of Licensee's fixed costs in such nuclear units based upon the ratio described above. Such contractual arrangements shall also provide that AEC shall pay Licensee on a monthly basis for the energy portion of such unit power, amounts representing the percentage of Licensee's variable costs incurred in the operation of such units based upon the ratio of energy generated for AEC's account to the total energy generated by such units during the billing month. The provisions of such contractual arrangements shall clearly provide that the net effect of such payments to be made by AEC shall be that AEC will pay its proportionate share of

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Licensee's total costs related to such nuclear units including, but not limited to, all costs of construction, installation, ownership, licensing and operation of such units, but no more than such proportionate share. The contracts covering such unit power shares shall embrace pricing and charges reflecting conventional accounting and rate-making concepts established and applied by the Federal Power Commission or its successor in function, and any disputes concerning the identification or application of such concepts shall be determined by and in accordance with procedures of the Federal Power Commission or its successor in function.

- (3) Licensee will provide transmission services to enable AEC to receive on its electric system such portion of its entitlement to the output of the Farley units as AEC requires in the operation of its integrated electric system, and, in addition, Licensee will provide transmission services to the existing members of AEC physically connected to Licensee to enable such members to utilize any of the allocation of AEC's portion of the output of the Farley units. Contractual arrangements will be entered into between Licensee and AEC or, at the option of AEC, between Licensee and such members by the terms of which Licensee will be paid for such transmission services on the basis of the ownership, maintenance and operation costs associated with such transmission services. The contractual arrangements covering such transmission services shall embrace rates and charges reflecting conventional accounting and rate-making concepts followed by the Federal Power Commission or its successor in function in testing the reasonableness of rates and charges for transmission services. Such contractual arrangements shall contain provisions protecting Licensee against any economic detriment resulting from transmission line or transformation losses associated with such transmission services.

- (4) Licensee will also provide AEC such other bulk power supply services as may be required by it or such members to cover situations where such unit power to which AEC shall become contractually entitled is unavailable because of forced outages, maintenance requirements or other unavailability of the Farley Nuclear Unit for any reason whatever. Such additional or supplemental services may be considered in the context of the 1972 Interconnection Agreement now in effect or as such agreement might be modified in accordance with paragraph four hereof. In addition, Licensee will supply the partial power requirements of the existing members of AEC physically connected to Licensee which may be reasonably necessary to cover their requirements over and above (a) the power available to them through their arrangements with SEPA and (b) the allocation of any unit power from AEC under the arrangements contemplated under paragraphs two and three above. The contractual arrangements covering the services described in this paragraph shall be on a basis reflecting Licensee's costs and at rates and charges reflecting conventional accounting and rate-making concepts followed by the Federal Power Commission or its successors in function.

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- (5) Licensee will enter into appropriate contractual arrangements amending the 1972 Interconnection Agreement as last amended to provide for a reserve sharing arrangement between Licensee and AEC under which the reserve obligation of AEC is no greater than the reserve obligation undertaken by Licensee under the terms of the Southern Company Pool Interchange Agreement. It is the intent and purpose of such contract modification to eliminate from the 1972 Interconnection Agreement between Licensee and AEC a provision relating to protective capacity purchased by AEC.
- (6) The foregoing conditions shall be implemented in a manner consistent with the provisions of the Federal Power Act and the Alabama Public Utility laws and regulations thereunder and all rates, charges, services or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.
- G. The facility requires relief from certain requirements of 10 CFR 50.55a(g) and exemptions from Appendices G, H and J to 10 CFR Part 50. The relief and exemptions are described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 5. They are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, the relief and exemptions are hereby granted. With the granting of these the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.
- H. The Alabama Power Company shall immediately notify the NRC of any accident at this facility which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission.
- I. The Alabama Power Company shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- J. This license is effective as of the date of issuance and shall expire August 16, 2012.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachment:

- 1. Appendix A - Technical Specifications (NUREG-0697, as revised)
- 2. Appendix B - Environmental Protection Plan

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DOCKET NO. 50-364

ALABAMA POWER COMPANY

NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Facility Operating License No. NPF-8 to Alabama Power Company which authorizes operation of the Joseph M. Farley Nuclear Plant, Unit 2, (Farley Unit 2), at reactor core power levels not in excess of 2652 megawatts thermal (100 percent power) in accordance with the provisions and conditions of the license, the appended Technical Specifications and the Environmental Protection Plan. Prior to operation at power levels exceeding 5 percent, certain license conditions must be met. This license supersedes the Fuel Loading and Low Power Testing License issued October 23, 1980.

Farley Unit 2, is a pressurized water reactor located in Houston County, Alabama. Prior public notice of the overall action involving the proposed issuance of facility operating license was issued in the Federal Register on November 29, 1973 (38 FR 29907).

The application complies with the standards and requirements of the Act and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the facility operating license.

The Commission has determined that the issuance of this facility full power operating license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

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A copy of (1) Facility Operating License NPF-8, complete with Technical Specifications (NUREG-0697 as revised) and Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards dated June 12, 1975; (3) the Office of Nuclear Reactor Regulation's Safety Evaluation Report (NUREG-75/034) dated May 1975, Supplement 1 dated October 1975, Supplement 2 dated October 1976, Supplement 3 dated June 1978, Supplement 4 dated September 1980, and Supplements and 6 dated March 1981 (supplements are NUREG-0117); (4) the Final Safety Analysis Report and amendments thereto; (5) the licensee's Environmental Report and supplements thereto; (6) the NRC Draft Environmental Statement dated July 1974; (7) the NRC Final Environmental Statement (FES) dated December 1974, the NRC Environmental Assessment dated April 1977, and the FES Addendum dated September 1980 (NUREG-0727); and (8) the NRC Flood Plain Review of the Joseph M. Farley Nuclear Plant site dated September 17, 1980, are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., and the G. S. Houston Memorial Library, 212 W. Burdeshaw Street, Dothan, Alabama 36303.

A copy of the facility operating license may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Copies of the Safety Evaluation Report and Supplements, and the Final Environmental Statement and Addendum may be purchased at current rates from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing to the U.S. Nuclear

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Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO
deposit holders can call 301-492-9530.

Dated at Bethesda, Maryland, this 31st day of March 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

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