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Chairman, ASLAB

DEC 3 1981

Docket No. 50-364

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. 11 to Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your telecopy request transmitted by letter dated October 12, 1981, as confirmed by letter of the same date. This amendment was authorized by telephone on October 12, 1981 and was confirmed by letter dated October 13, 1981.

The amendment modifies the Technical Specifications to allow one-time temporary relief from diesel generator operability and surveillance frequency requirements for three days during repairs to diesel generator 1-2A.

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

Sincerely,

Original Signed By:

Edward A. Reeves, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosures:
1. Amendment No. 11 to NPF-8
2. Safety Evaluation
3. Notice of Issuance

cc w/enclosures:
See next page

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PDR ADOCK 05000364
P PDR

ORAB DVR
D. PICKETT
11/20/81

OFFICE	ORB 1	ORB 1	ORB 1	OR:AD	OELD		
SURNAME	CParrish	EReves/rs	SVarga	RNovak	D Swanson		
DATE	11/20/81	11/20/81	11/24/81	11/24/81	11/30/81		

no legal objection to and a notice

Mr. F. L. Clayton
Alabama Power Company

DEC 3 1981

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

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Southern Company Services, Inc.
Post Office Box 2625
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Chairman
Houston County Commission
Dothan, Alabama 36301

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Post Office Box 306
Birmingham, Alabama 35201

George S. Houston Memorial Library
212 W. Burdeshaw Street
Dothan, Alabama 36303

Resident Inspector
U. S. Nuclear Regulatory Commission
Post Office Box 24-Route 2
Columbia, Alabama 36319

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

Regional Radiation Representatives
EPA Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

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Mr. R. P. McDonald
Vice President - Nuclear Generation
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

ALABAMA POWER COMPANY

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11
License No. DPF-8

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The request for amendment by Alabama Power Company (the licensee) dated October 12, 1981, 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-8 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 11, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment was effective on October 12, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: DEC 3 1981

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPR-8

DOCKET NO. 50-364

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 8-1	3/4 8-1
3/4 8-3	3/4 8-3

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. Two physically independent circuits between the offsite transmission network to the switchyard and two physically independent circuits from the switchyard to the onsite Class 1E distribution system, and

b. Two separate and independent diesel generator sets (Set A: DG 1-2A and DG-1C, Set B: DG-2B and DG-2C) each with:

   1. Separate day tanks containing a minimum volume of 500 gallons of fuel for the 4075 kw diesel generators and 700 gallons of fuel for the 2850 kw diesel generator.

   2. A separate fuel transfer pump for each diesel.

c. A fuel storage system consisting of four, independent storage tanks each containing a minimum of 25,000 gallons of fuel.*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With an offsite circuit inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits 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.

b. With one diesel generator set inoperable, demonstrate the operability of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours*** thereafter. Restore both diesel generator sets to OPERABLE status within 72** hours or comply with the following:

   1) Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*One inoperable fuel storage tank is equivalent to one inoperable diesel generator set.

**One time only exception for repair of Diesel 1-2A the 72 hour action statement for operability of Diesel 1-2A may be extended to a period of 6 days provided Diesel 1-2A is returned to OPERABLE status as soon as maintenance is completed. The provisons of specification 3.0.4 are not applicable for this one time change.

***One time only exception during repair of Diesel 1-2A the 8 hour interval test is extended to 72 hours.

ACTION: (Continued)

e. With both of the above required diesel generator sets inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours** thereafter; restore at least one of the inoperable diesel generator sets to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore both diesel generator sets to OPERABLE status within 72* hours from time of initial loss or be in least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and

b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

a. In accordance with the frequency specified in Table 4.8-1 on a STAGGERED TEST BASIS by:

1. Verifying the fuel level in the day tank,

2. Verifying the fuel level in the fuel storage tanks,

3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank,

4. Verifying the diesel starts from ambient condition and accelerates to at least 900 rpm, for the 2850 kw generator and 514 rpm for the 4075 kw generators, in less than or equal to 10 seconds. The generator voltage and frequency shall be ≥ 3952 volts and ≥ 57 Hz within 10 seconds after the start signal.

5. Verifying the generator is synchronized, loaded to greater than or equal to its continuous rating, and operates for greater than or equal 60 minutes,

*One time only exception for repair of Diesel 1-2A 72 hour action statement for operability of Diesel 1-2A may be extended to a period of 6 days provided Diesel 1-2A is returned to OPERABLE status as soon as maintenance is completed. The provisions of specification 3.0.4 are not applicable for this one time change.

**One time only exception during repair of Diesel 1-2A - the 8 hour interval test is extended to 72 hours.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-8

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 2

DOCKET NO. 50-364

INTRODUCTION

During routine preventive maintenance on diesel generator (DG) 1-2A the engine driven jacket water pump bearing required replacement. A spare replacement bearing was dropped during an attempt to install it. Additional spares were unavailable on site. Colt Industries, the DG representative, was on site to assist Alabama Power Company (APCo) representatives during DG maintenance. It was estimated that between 48 and 72 hours would be needed after receipt of a new bearing. The new bearing was scheduled to arrive late on October 12. On this basis, the currently allowed outage time of 72 hours would be exceeded at 11:31 PM on October 12. Therefore, APCo advised the NRC staff by phone of its request for a temporary authorization for a three-day extension to DG 1-2A allowed outage time. The action would preclude a Unit No. 2 shutdown. Unit No. 1 is currently in a refueling shutdown, thus there is enough excess emergency power available from the other DG sets to allow continued operation of Unit No. 2. A follow-up telecopy letter was sent to NRC. Subsequently, the NRC staff reviewedthe safety aspects of the request as discussed below and then granted the emergency authorization on October 12, 1981 by telephone. Our letter of October 13, 1981 confirmed the authorization.

DISCUSSION AND EVALUTION

The Farley site emergency power system has a total of five DG's to furnish standby emergency power. Such power would only be needed if the off-site electrical grids were to fail. This event is described as a Loss of Off-Site Power (LOSP). For this case, Unit No. 2 emergency power would be provided to both safety trains from DG's 1C and 2B. Unit No. 1 (shutdown for refueling) would have emergency power to safety train B from DG 1B.

For an event requiring safety injection (SI) actuation on Unit No. 2 concurrent with the LOSP to both Units No. 1 and No. 2, DG 2B would provide the loss of coolant accident (LOCA) loads for Unit No. 2 (safety train B). Operator action (using established manual loadings procedures) could then provide many of redundant safety train A loads. Thus, all of one safety train loads would be provided automatically. In addition, many of the redundant train A loads would be available. The probability of the coincident event described above during the three-day extension period requested is acceptably low. Adequate safety train power is available.

For the more unlikely case of failure of the service water pond (ultimate heat sink) concurrent with the LOSP, sufficient emergency power is also available. Six river water pumps provide make-up water to the service water pond. With Unit No. 1 shutdown and Unit No. 2 operating (current situation) only two river water pumps are needed for accident conditions. APCo evaluated a further, more extreme case where the train B river water pipe line to the service water pond also failed. This would result in only one river water pump operating in train A. The probability of this more unlikely event during the three-day extension period requested is acceptably low.

APCo also requested that for the added three days the surveillance testing of the remaining AC sources be reduced. The current Technical Specification requires tests within one hour and at least once every eight hours for all remaining power sources. Such tests would start and run the remaining DG's about thirty additional times. APCo considers added starts and test runs excessive due to the potential for accelerated wear on the DG's. Off-site power transmission lines are operable and have no scheduled outages during the repair period on DG 1-2A. We have granted such relief previously during repairs to DG-1C and DG-2C. We are currently reviewing the need for such accelerated testing of the operable DG units during maintenance or repairs to inoperable DG units. For the three day extension period, we agree that the requested reduction in additional checks is prudent and acceptable.

SUMMARY

During the short interval of time while one DG is being repaired at Farley site the emergency power supplies are adequate. Four other DG's are available for use either automatically or by manual switching. Written procedures are available. Senior Reactor Operators and Shift Technical Advisors are trained and briefed on the power capabilities existing during the short period with a non-standard power lineup. We consider that adequate safety margin exists at Farley site with Unit No. 1 shutdown and Unit No. 2 operating during the three-day extension needed to repair DG 1-2A.

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: DEC 3 1981

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-364

ALABAMA POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 11 to Facility Operating License No. NPF-8 issued to Alabama Power Company (the licensee), which revised Technical Specifications for operation of the Joseph M. Farley Nuclear Plant, Unit No. 2 (the facility) located in Houston County, Alabama. The amendment was effective on October 12, 1981.

The amendment modifies the Technical Specifications to allow one-time temporary relief from diesel generator operability and surveillance frequency requirements for three days during repairs to diesel generator 1-2A. The amendment was authorized on an expedited basis to maintain the plant at a steady-state condition and avoid a shutdown transient shown by our evaluation to be unnecessary but required by Technical Specifications unless amended.

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 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.

For further details with respect to this action, see (1) the request for amendment dated October 12, 1981, (2) the Commission's letter to the licensee dated October 13, 1981, (3) Amendment No. 11 to License No. NPF-8 and (4) 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), (3) and (4) 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 3rd day of December 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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