

Docket No. 50-348

Mr. Alan R. Barton
Senior Vice President
Alabama Power Company
P. O. Box 2641
Birmingham, Alabama 35291

DISTRIBUTION

Docket File 50-248
NRC PDR
Local PDR
NRR Rdg
ORB1 Rdg
H. Denton
V. Stello
D. Eisenhower
R. Vollmer
B. Grimes
T. Carter
W. Russell
A. Schwencer
E. Reeves-(2)
C. Parrish

I&E (5)
B. Scharf (10)
B. Jones (4)
ACRS (16)
B. Harless
C. Miles
R. Diggs
TERA
J. Buchanan
L. KINTNER
T.N. EPPS-APC

Dear Mr. Barton:

The Commission has issued the enclosed Amendment No. 12 to Facility Operating License No. NPF-2 for the Farley Nuclear Plant, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application dated May 11, 1979, as supplemented by letter dated May 23, 1979.

The amendment revises the Appendix A Technical Specifications to require actuation of safety injection on two out of three channels of low pressurizer pressure. The change also eliminates the coincidence logic which required pressurizer low water level and pressurizer low pressure to initiate the safety injection.

These design changes will be made on Unit No. 1 during the current refueling outage (prior startup for Cycle 2 operation). Your action was in response to NRC IE Bulletin 79-06A.

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

Sincerely,

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:

1. Amendment No. 12 to NPF-2
2. Safety Evaluation
3. Notice of Issuance

7907190647

41
60

cc: w/enclosures

TAC 11684 C

| | | | | | | | |
|--------------|---------|---------------|-----------------|---------------|------------|--------------|--------------|
| #5 1941-a | OFFICE | See next page | DOR: STSC | DOR: ORB1 | DOR: ORB1 | DOR: AD: S&P | DOR: ORB1 |
| | SURNAME | E.R.D. 27 | D. S. [unclear] | E. Reeves: Jb | C. Parrish | R. Vollmer | A. Schwencer |
| | DATE | 6/8/79 | 6/6/79 | 06/06/79 | 06/6/79 | 06/7/79 | 06/11/79 |



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
June 11, 1979

Docket

Docket No. 50-348

Mr. Alan R. Barton
Senior Vice President
Alabama Power Company
P. O. Box 2641
Birmingham, Alabama 35291

Dear Mr. Barton:

The Commission has issued the enclosed Amendment No. 12 to Facility Operating License No. NPF-2 for the Farley Nuclear Plant, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application dated May 11, 1979, as supplemented by letter dated May 23, 1979.

The amendment revises the Appendix A Technical Specifications to require actuation of safety injection on two out of three channels of low pressurizer pressure. The change also eliminates the coincidence logic which required pressurizer low water level and pressurizer low pressure to initiate the safety injection.

These design changes will be made on Unit No. 1 during the current refueling outage (prior startup for Cycle 2 operation). Your action was in response to NRC IE Bulletin 79-06A.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Schwencer".

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures:

1. Amendment No. 12 to NPF-2
2. Safety Evaluation
3. Notice of Issuance

cc: w/enclosures
See next page

Mr. Alan R. Barton
Alabama Power Company

-2-

cc: Ruble A. Thomas, Vice President
Southern 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

John Bingham, Esquire
Balch, Bingham, Baker, Hawthorne,
Williams and Ward
600 North 18th Street
Birmingham, Alabama 35202

Edward H. Keiler, Esquire
Keiler and Buckley
9047 Jefferson Highway
River Ridge, Louisiana 70123

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



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

ALABAMA POWER COMPANY

DOCKET NO. 50-348

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 12
License No. NPF-2

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application for amendment by the Alabama Power Company (the licensee) dated May 11, 1979, as supplemented by letter dated May 23, 1979, 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

7907190 652

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. 12, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 11, 1979

ATTACHMENT TO LICENSE AMENDMENT NO. 12

FACILITY OPERATING LICENSE NO. NPF-2

DOCKET NO. 50-348

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Pages

3/4 3-15
3/4 3-22
3/4 3-23
3/4 3-28
3/4 3-31

TABLE 3.3-3
ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

| <u>FUNCTIONAL UNIT</u> | <u>TOTAL NO. OF CHANNELS</u> | <u>CHANNELS TO TRIP</u> | <u>MINIMUM CHANNELS OPERABLE</u> | <u>APPLICABLE MODES</u> | <u>ACTION</u> |
|---|------------------------------|--|----------------------------------|-------------------------|---------------|
| 1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION | | | | | |
| a. Manual Initiation | 2 | 1 | 2 | 1, 2, 3, 4 | 18 |
| b. Automatic Actuation Logic | 2 | 1 | 2 | 1, 2, 3, 4 | 13 |
| c. Containment Pressure-High | 3 | 2 | 2 | 1, 2, 3 | 14* |
| d. Pressurizer Pressure - Low | 3 | 2 | 2 | 1, 2, 3# | 14* |
| e. Differential Pressure Between Steam Lines - High | | | | 1, 2, 3## | |
| Three Loops Operating | 3/steam line | 2/steam line twice and 1/3 steam lines | 2/steam line | | 14* |
| Two Loops Operating | 3/operating steam line | 2###/steam line twice in either operating steam line | 2/operating steam line | | 15 |

TABLE 3.3-3 (Continued)
ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

| <u>FUNCTIONAL UNIT</u> | <u>TOTAL NO. OF CHANNELS</u> | <u>CHANNELS TO TRIP</u> | <u>MINIMUM CHANNELS OPERABLE</u> | <u>APPLICABLE MODES</u> | <u>ACTION</u> |
|---|------------------------------|---|----------------------------------|-------------------------|---------------|
| f. Steam Line Pressure-Low | | | | 1, 2, 3 ^{##} | |
| Three Loops Operating | 1 pressure/loop | 2 pressures any loops | 1 pressure any 2 loops | | 14* |
| Two Loops Operating | 1 pressure/loop | 1 ^{###} pressure in any operating loop | 1 pressure any operating loop | | 15 |
| 2. CONTAINMENT SPRAY | | | | | |
| a. Manual | 2 | 1 | 2 | 1, 2, 3, 4 | 18 |
| b. Automatic Actuation Logic | 2 | 1 | 2 | 1, 2, 3, 4 | 13 |
| c. Containment Pressure--High-High-High | 4 | 2 | 3 | 1, 2, 3 | 16 |

TABLE 3.3-3 (Continued)

TABLE NOTATION

- # Trip function may be bypassed in this MODE below P-11.
- ## Trip function may be bypassed in this MODE below P-12.
- ### The channel(s) associated with the protective functions derived from the out of service Reactor Coolant Loop shall be placed in the tripped mode.
- * The provisions of Specification 3.0.4 are not applicable.

ACTION STATEMENTS

- ACTION 13 - With the number of OPERABLE Channels one less than the Total Number of Channels, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.1.
- ACTION 14 - With the number of OPERABLE Channels one less than the Total Number of Channels, operation may proceed until performance of the next required CHANNEL FUNCTIONAL TEST provided the inoperable channel is placed in the tripped condition within 1 hour.
- ACTION 15 - With a channel associated with an operating loop inoperable, restore the inoperable channel to OPERABLE status within 2 hours or be in HOT SHUTDOWN within the following 12 hours; however, one channel associated with an operating loop may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.1.
- ACTION 16 - With the number of OPERABLE Channels one less than the Total Number of Channels, operation may proceed provided the inoperable channel is placed in the bypassed condition and the minimum Channels OPERABLE requirements is demonstrated within 1 hour; one additional channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.2.1.1.

TABLE 3.3-3 (Continued)

- ACTION 17 - With less than the Minimum Channels OPERABLE, operation may continue provided the containment purge and exhaust valves are maintained closed.
- ACTION 18 - With the number of OPERABLE Channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

ENGINEERED SAFETY FEATURES INTERLOCKS

| <u>DESIGNATION</u> | <u>CONDITION AND SETPOINT</u> | <u>FUNCTION</u> |
|--------------------|---|---|
| P-11 | With 2 of 3 pressurizer pressure channels \geq 2010 psig. | P-11 prevents manual block of safety injection actuation on low pressurizer pressure. |
| P-12 | With 2 of 3 T_{avg} channels $<$ 541°F. | Permits manual block of S.I; Causes steam line isolation on high steam flow; Affects steam dump blocks. |
| | With 2 of 3 T_{avg} channels $>$ 545°F | Prevents manual block of safety injection actuation on low steam line pressure. |

TABLE 3.3-4ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

| <u>FUNCTIONAL UNIT</u> | <u>TRIP SETPOINT</u> | <u>ALLOWABLE VALUES</u> |
|---|-------------------------------------|-------------------------------------|
| 1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION | | |
| a. Manual Initiation | Not Applicable | Not Applicable |
| b. Automatic Actuation Logic | Not Applicable | Not Applicable |
| c. Containment Pressure--High | ≤ 5.4 psig | ≤ 5.9 psig |
| d. Pressurizer Pressure--Low | ≥ 1850 psig | ≥ 1840 psig |
| e. Differential Pressure Between Steam Lines--High | ≤ 100 psi | ≤ 112 psi |
| f. Steam Line Pressure--Low | ≥ 585 psig steam line pressure | ≥ 575 psig steam line pressure |

FARLEY - UNIT 1

3/4 3-24

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

| <u>FUNCTIONAL UNIT</u> | <u>TRIP SETPOINT</u> | <u>ALLOWABLE VALUES</u> |
|---|----------------------|-------------------------|
| 2. CONTAINMENT SPRAY | | |
| a. Manual Initiation | Not Applicable | Not Applicable |
| b. Automatic Actuation Logic | Not Applicable | Not Applicable |
| c. Containment Pressure--High-High-High | ≤ 27 psig | ≤ 29 psig |
| 3. CONTAINMENT ISOLATION | | |
| a. Phase "A" Isolation | | |
| 1. Manual | Not Applicable | Not Applicable |
| 2. From Safety Injection Automatic Actuation logic | Not Applicable | Not Applicable |
| b. Phase "B" Isolation | | |
| 1. Manual | Not Applicable | Not Applicable |
| 2. Automatic Actuation Logic | Not Applicable | Not Applicable |
| 3. Containment Pressure-- High-High-High | ≤ 27 psig | ≤ 29 psig |
| c. Purge and Exhaust Isolation | | |
| 1. Manual | Not Applicable | Not Applicable |

TABLE 3.3-5

ENGINEERED SAFETY FEATURES RESPONSE TIMES

INITIATING SIGNAL AND FUNCTION

RESPONSE TIME IN SECONDS

| | | |
|----|--------------------------------------|----------------|
| 1. | <u>Manual</u> | |
| a. | Safety Injection (ECCS) | Not Applicable |
| | Feedwater Isolation | Not Applicable |
| | Reactor Trip (SI) | Not Applicable |
| | Containment Isolation-Phase "A" | Not Applicable |
| | Containment Vent and Purge Isolation | Not Applicable |
| | Auxiliary Feedwater Pumps | Not Applicable |
| | Essential Service Water System | Not Applicable |
| | Containment Air Recirculation Fan | Not Applicable |
| b. | Containment Spray | Not Applicable |
| | Containment Isolation-Phase "B" | Not Applicable |
| | Containment Vent and Purge Isolation | Not applicable |
| c. | Containment Isolation-Phase "A" | Not Applicable |
| | Containment Vent and Purge Isolation | Not Applicable |
| d. | Steam Line Isolation | Not Applicable |
| 2. | <u>Containment Pressure-High</u> | |
| a. | Safety Injection (ECCS) | ≤ 27.0* |
| b. | Reactor Trip (from SI) | ≤ 2.0 |
| c. | Feedwater Isolation | ≤ 32.0### |
| d. | Containment Isolation-Phase "A" | ≤ 17.0#/27.0## |
| e. | Containment Vent and Purge Isolation | Not Applicable |
| f. | Auxiliary Feedwater Pumps | Not Applicable |
| g. | Essential Service Water System | ≤ 77.0#/87.0## |
| h. | Containment air Cooler Fan | ≤ 27.4 |

TABLE 3.3-5 (Continued)
ENGINEERED SAFETY FEATURES RESPONSE TIMES

| <u>INITIATING SIGNAL AND FUNCTION</u> | <u>RESPONSE TIME IN SECONDS</u> |
|---|---|
| 3. <u>Pressurizer Pressure-Low</u> | |
| a. Safety Injection (ECCS) | ≤ 12.0 [#] /27.0 [*] |
| b. Reactor Trip (from SI) | ≤ 2.0 |
| c. Feedwater Isolation | ≤ 32.0 ^{###} |
| d. Containment Isolation-Phase "A" | ≤ 17.0 [#] |
| e. Containment Vent and Purge Isolation | Not Applicable |
| f. Auxiliary Feedwater Pumps | Not Applicable |
| g. Essential Service Water System | ≤ 77.0 [#] /87.0 [*] |
| 4. <u>Differential Pressure Between Steam Lines-High</u> | |
| a. Safety Injection (ECCS) | ≤ 12.0 [#] /22.0 ^{##} |
| b. Reactor Trip (from SI) | ≤ 2.0 |
| c. Feedwater Isolation | ≤ 32.0 ^{###} |
| d. Containment Isolation-Phase "A" | ≤ 17.0 [#] /27.0 ^{##} |
| e. Containment Vent and Purge Isolation | Not Applicable |
| f. Auxiliary Feedwater Pumps | Not Applicable |
| g. Essential Service Water System | ≤ 77.0 [#] /87.0 ^{##} |
| 5. <u>Steam Flow in Two Steam Lines - High Coincident with T_{avg}--Low-Low</u> | |
| a. Steam Line Isolation | ≤ 9.0 |
| 6. <u>Steam Line Pressure-Low</u> | |
| a. Safety Injection (ECCS) | ≤ 12.0 [#] /22.0 ^{##} |
| b. Reactor Trip (from SI) | ≤ 2.0 |
| c. Feedwater Isolation | ≤ 32.0 ^{###} |
| d. Containment Isolation-Phase "A" | ≤ 17.0 [#] /27.0 ^{##} |
| e. Containment Vent and Purge Isolation | Not Applicable |
| f. Auxiliary Feedwater Pumps | Not Applicable |
| g. Essential Service Water System | ≤ 77.0 [#] /87.0 ^{##} |
| h. Steam Line Isolation | ≤ 7.0 |

TABLE 4.3-2

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

| <u>FUNCTIONAL UNIT</u> | <u>CHANNEL CHECK</u> | <u>CHANNEL CALIBRATION</u> | <u>CHANNEL FUNCTIONAL TEST</u> | <u>MODES IN WHICH SURVEILLANCE REQUIRED</u> |
|---|----------------------|----------------------------|--------------------------------|---|
| 1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION | | | | |
| a. Manual Initiation | N.A. | N.A. | M(1) | 1, 2, 3, 4 |
| b. Automatic Actuation Logic | N.A. | N.A. | M(2) | 1, 2, 3, 4 |
| c. Containment Pressure-High | S | R | M | 1, 2, 3 |
| d. Pressurizer Pressure--Low | S | R | M | 1, 2, 3 |
| e. Differential Pressure Between Steam Lines--High | S | R | M | 1, 2, 3 |
| f. Steam Line Pressure-Low | S | R | M | 1, 2, 3 |
| 2. CONTAINMENT SPRAY | | | | |
| a. Manual Initiation | N.A. | N.A. | M(1) | 1, 2, 3, 4 |
| b. Automatic Actuation Logic | N.A. | N.A. | M(2) | 1, 2, 3, 4 |
| c. Containment Pressure--High-High-High | S | R | M | 1, 2, 3 |

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

| <u>FUNCTIONAL UNIT</u> | <u>CHANNEL CHECK</u> | <u>CHANNEL CALIBRATION</u> | <u>CHANNEL FUNCTIONAL TEST</u> | <u>MODES IN WHICH SURVEILLANCE REQUIRED</u> |
|--|----------------------|----------------------------|--------------------------------|---|
| 3. CONTAINMENT ISOLATION | | | | |
| a. Phase "A" Isolation | | | | |
| 1) Manual | N.A. | N.A. | M(1) | 1, 2, 3, 4 |
| 2) From Safety Injection Automatic Actuation Logic | N.A. | N.A. | M(2) | 1, 2, 3, 4 |
| b. Phase "B" Isolation | | | | |
| 1) Manual | N.A. | N.A. | M(1) | 1, 2, 3, 4 |
| 2) Automatic Actuation Logic | N.A. | N.A. | M(2) | 1, 2, 3, 4 |
| 3) Containment Pressure-- High-High-High | S | R | M | 1, 2, 3 |
| c. Purge and Exhaust Isolation | | | | |
| 1) Manual | N.A. | N.A. | M(1) | 1, 2, 3, 4 |

FARLEY - UNIT 1

3/4 3-32



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 12 TO FACILITY OPERATING LICENSE NO. NPF-2

ALABAMA POWER COMPANY

FARLEY NUCLEAR PLANT, UNIT NO. 1

DOCKET NO. 50-348

Introduction

By letter dated May 11, 1979 as supplemented May 23, 1979, Alabama Power Company (APC) proposed changes to the Appendix A Technical Specifications for Farley Nuclear Plant (FNP), Unit No. 1. The proposals included revisions to the reactor protection system logic to require actuation of safety injection on two out of three channels of low pressurizer pressure. The change also eliminates the coincidence logic which required pressurizer low water level and pressurizer low pressure to initiate safety injection. These changes were considered necessary by the NRC and by Westinghouse Electric Corporation (the Nuclear Steam Supply System designer) as a result of the evaluation of the Three Mile Island incident on March 28, 1979. The design changes will be accomplished during a refueling outage for Cycle 2 operation now scheduled to start in mid-June 1979.

Discussion

As a result of our ongoing review of the events associated with the March 28, 1979 incident at Three Mile Island Unit 2, the NRC Office of Inspection and Enforcement issued a number of IE Bulletins describing actions to be taken by licensees. IE Bulletin 79-06 (April 11, 1979) advised licensees with Westinghouse Pressurized Water Reactors to instruct reactor operators to manually initiate safety injection when the pressure indication reaches the actuation setpoint whether or not the water level indication has dropped to the actuation setpoint. Item 3 of IE Bulletin 79-06A (April 14, 1979) further advised these licensees to trip the low pressurizer level bistables manually such that, when the pressurizer pressure reached the low setpoint for safety injection, it would automatically initiate regardless of the pressurizer level. This action was unnecessary at FNP as the first refueling at FNP started on March 8, 1979 and was still underway when IE Bulletin 79-06A was issued.

Since the reactor was shut down for refueling, APC proposed to modify the reactor protection logic circuitry to preclude manual tripping of pressurizer low level bistables. Such action would have had the effect of reducing the safety injection actuation logic to a one out of three logic. A single instrument failure of one of the three low pressure bistable channels would then result in an unwanted safety injection. To prevent this, APC proposed in their May 11, 1979 letter, a design modification which is evaluated below.

Evaluation

The proposed modification to the safety injection actuation system would remove the pressurizer level signal from each of the pressurizer level, pressurizer pressure coincidence channels and convert the system to a two-out-of-three pressurizer low pressure trip. The instrumentation logic receives pressurizer pressure signals from three pressure transmitters and initiates a safety injection actuation when two of the three signals reach the low pressure setpoint of 1850 psig. These modifications will satisfy the requirements of IEEE 279-1971, and other applicable standards.

We have reviewed the instrumentation channels for pressurizer pressure measurements and their power supplies. Separate and independent pressure transmitters are provided for each channel of the protection function and for the pressurizer pressure control system. The power sources for the protection channels are derived from three of four separate inverters. The normal source of power to the four inverters is through rectifiers from two 600 volt emergency power buses. On a loss of a 600 volt bus, an automatic transfer is made to one of the two 125 volt batteries by an auctioneering circuit within the inverter. A backup supply to each vital bus is provided from one of two regulated instrument buses. Transfer to this backup power source is by manual means. The power source for the pressure transmitters which operate the controls for pressurizer spray and heater operation is derived from the inverter power source not associated with the protection system transmitters noted above. A second pressure transmitter, used for control of one of the power operated relief valves (PORV) on the pressurizer, derives its power from one of the inverter power sources used by the protection system transmitters. The effect of the postulated loss of this inverter power source would result in a trip of the protection system channel and a loss of the control action derived from the pressure transmitter. Thus, only the one PORV with control power from this inverter would not respond to an increase in pressurizer pressure. However, a postulated failure which would cause both pressure transmitters to indicate higher than actual pressure would be of concern. This could result in a control action to open the PORV and to reduce pressurizer pressure. At this time only one of the three pressure protection channels would fail to initiate corrective action

due to the actual low pressure and the postulated high pressure indication. The other two pressure protection channels would function properly. The effect of a postulated abnormal output voltage at the inverter would not result in an erroneous high reading from the pressure transmitters which share this one power source. Thus, there are no unsafe effects due to control and protection system interaction due to the sharing of one inverter power source with the PORV control transmitter and one of the three protection pressure transmitters. The independence of control and protection is further assured due to the physical separation of field cables for the control and protection systems. Adequate measures exist to satisfy the independence requirements of IEEE 279-1971 for control and protection system interaction. There is adequate assurance for a reliable automatic initiation of safety injection with the proposed modifications for a two-out-of-three logic on low pressurizer pressure.

The proposed Technical Specifications revise Tables 3.3-3, 3.3-4, 3.3-5, and 4.3-2 to specify automatic safety injection actuation on a two-out-of-three pressurizer low pressure of 1850 psig. These changes are consistent with the proposed change in the actuation of safety injection on two-out-of-three low pressure signals and are acceptable.

Based on our review of APC's submittals, we conclude that the modifications to the safety injection actuation system logic meet the requirements of IEEE 279-1971 and are acceptable.

We also conclude that the proposed change will be in accordance with the above standards and guides. None of the transient and accident analyses are adversely affected by the change. The only effect may be a safety injection actuation sooner than previously reviewed. This is more conservative and is acceptable.

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 consideration 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: June 11, 1979

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-348ALABAMA POWER COMPANYJOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1NOTICE OF ISSUANCE OF AMENDMENT TO FACILITYOPERATING LICENSE

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

The amendment revises the Appendix A Technical Specifications to require actuation of safety injection on two out of three channels of low pressurizer pressure. The change also eliminates the coincidence logic which required pressurizer low water level and pressurizer low pressure to initiate the safety injection.

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

- 2 -

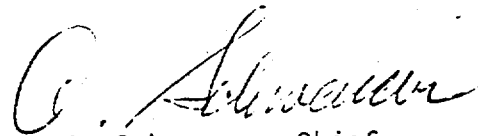
amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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 application for amendment dated May 11, 1979 as supplemented May 23, 1979, (2) Amendment No. 12 to License No. NPF-2, and (3) the Commission's related Safety Evaluation. 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. Vurdeshaw Street, Dothan, Alabama 36301. 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 Operating Reactors.

Dated at Bethesda, Maryland, this 11th day of June

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-348ALABAMA POWER COMPANYJOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1NOTICE OF ISSUANCE OF AMENDMENT TO FACILITYOPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 12 to Facility Operating License No. NPF-2, issued to the Alabama Power Company which revised Technical Specifications for operation of the Joseph M. Farley Nuclear Plant, Unit 1 (the facility) located in Houston County, Alabama. The amendment was effective as of its date of issuance.

The amendment revises the Appendix A Technical Specifications to require actuation of safety injection on two out of three channels of low pressurizer pressure. The change also eliminates the coincidence logic which required pressurizer low water level and pressurizer low pressure to initiate the safety injection.

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

- 2 -

amendment. Prior public notice of this amendment was not required since the 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 application for amendment dated May 11, 1979 as supplemented May 23, 1979, (2) Amendment No. 12 to License No. NPF-2, and (3) the Commission's related Safety Evaluation. 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. Vurdeshaw Street, Dothan, Alabama 36301. 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 Operating Reactors.

Dated at Bethesda, Maryland, this 11th day of June

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors