413

APRIL 13 1979

Docket No. 50-348

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

Dear Mr. Barton:

The Commission has issued the enclosed Amendment No. 11 to Facility Operating License No. NPF-2 for the Joseph M. Farley Nuclear Plant, Unit No. 1, in response to your submittal dated September 15, 1977 as supplemented by letters dated February 23, July 14, October 27 and December 13, 1978 and January 3, 1979.

This amendment adds a license condition relating to the completion of facility modifications and implementation of administrative controls for fire protection. By Amendment No. 4 to Facility Operating License NPF-2, we issued Technical Specifications to incorporate limiting conditions for operation and surveillance requirements for existing fire protection systems and administrative controls. We request that you provide updated Technical Specifications for any completed modifications described in Tables 1, 2 and 3 of the attached evaluation. These specification changes should be provided within 60 days following the first and second fueling outages and within 60 days after all modifications affecting technical specifications are completed.

Additionally, we request that you provide for our approval a summary of the alternate shutdown methods including present design, electrical modifications and procedural steps, required to bring the plant to safe shutdown in the event of a fire. Since you have agreed to complete such modifications for Unit No. 1 by the end of the second refueling outage, you have agreeded to provide the design for our review by January 1, 1980. Details of your proposed method of installation of fire barriers for cable trays and conduits, as discussed with your staff, should be provided to us for information as soon as you have finalized the designs.

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We have determined that no license amendment fee is required to accompany your response to the aforementioned requests. This determination is limited to those applications or requests to incorporate our recommended Technical Specifications and those to add surveillance and other requirements for operable systems that have been added at our request. Any other unrelated changes or requests that you might choose to include in the fire protection requests would be subject to amendment fees in accordance with Section 170.22 of 10 CFR Part 170.

OFFICE ➤						
SURNAME ➤						
DATE ➤						

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Docket No. 50-348

Mr. A. R. Barton, Senior Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

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This amendment adds a license condition relating to the completion of facility modifications and implementation of administrative controls for fire protection. By Amendment No. 4 to Facility Operating License NPF-2 we issued Technical Specifications to incorporate limiting conditions for operation and surveillance requirements for existing fire protection systems and administrative controls. We request that you provide updated Technical Specifications for any completed modifications described in Tables 1, 2 and 3 of the attached evaluation within 30 days following the first and second fueling outages.

Additionally, we request that you provide us with the alternate shutdown system design for our approval. Since you have agreed to install such a system by October 1980, you should provide the design for our review no later than July 1, 1980. Details of your proposed method of installation of fire barriers for cable trays and conduits, as discussed with your staff, are needed as soon as you have finalized the designs.

We have determined that no license amendment feed is required to accompany your response to the aforementioned requests. This determination is limited to those applications or requests to incorporate our recommended Technical Specifications and those to add surveillance and other requirements for operable systems that have been added at our request. Any other unrelated changes or requests that you might choose to include in the fire protection requests would be subject to amendment fees in accordance with Section 170.22 of 10 CFR Part 170.

OFFICE ➤						
SURNAME ➤						
DATE ➤						

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

Sincerely,

Original Signed By

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

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

cc w/enclosures:
See next page

4-13-79 12:50 PM
Advised APC (Epps) of issuance by phone
E. Reeves

TAC 8671 - Completed

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DATE	4/5/79	4/9/79	4/6/79	4/12/79	4/11/79	4/12/79

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

April 13, 1979

Docket No. 50-348

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

Dear Mr. Barton:

The Commission has issued the enclosed Amendment No. 11 to Facility Operating License No. NPF-2 for the Joseph M. Farley Nuclear Plant, Unit No. 1, in response to your submittal dated September 15, 1977 as supplemented by letters dated February 23, July 14, October 27, and December 13, 1978 and January 3, 1979.

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Additionally, we request that you provide for our approval a summary of the alternate shutdown methods including present design, electrical modifications and procedural steps, required to bring the plant to safe shutdown in the event of a fire. Since you have agreed to complete such modifications for Unit No. 1 by the end of the second refueling outage, you have agreed to provide the design for our review by January 1, 1980. Details of your proposed method of installation of fire barriers for cable trays and conduits, as discussed with your staff, should be provided to us for information as soon as you have finalized the designs.

We have determined that no license amendment fee is required to accompany your response to the aforementioned requests. This determination is limited to those applications or requests to incorporate our recommended Technical Specifications and those to add surveillance and other requirements for operable systems that have been added at our request. Any other unrelated changes or requests that you might choose to include in the fire protection requests would be subject to amendment fees in accordance with Section 170.22 of 10 CFR Part 170.

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

Sincerely,

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

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

cc w/enclosures:
See next page

cc: Ruble A. Thomas, Vice President
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State Office Building
Montgomery, Alabama 36104

Director, Technical Assessment Division
Office of Radiation Programs (AW-459)
U. S. Environmental Protection Agency
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U. S. Environmental Protection Agency
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ATTN: EIS COORDINATOR
345 Courtland Street, N.E.
Atlanta, Georgia 30308

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. 11
License No. DPR-26

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

   A. The application for amendment by Alabama Power Company (the licensee) dated September 15, 1977, as supplemented by letters dated February 23, July 14, October 27, December 13, 1978 and January 3, 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, Facility Operating License No. NPF-2 is hereby amended by adding paragraph 2.C(4) to read as follows:

C.(4) Fire Protection Program

Alabama Power Company shall maintain in effect and fully implement all provisions of the approved fire protection plan. 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.

The licensee may proceed with and is required to complete the modifications identified in Tables 1, 2 and 3 of the NRC's Joseph M. Farley Safety Evaluation Report, Fire Protection Review, Unit Nos. 1 and 2 dated February 12, 1979. Most of the modifications will be completed before the end of the second refueling outage for Unit No. 1. Exceptions are smoke detectors, penetration seals and barriers which will be completed by September 1, 1980. In the event that these modifications cannot be completed as identified in Tables 1, 2 and 3, the licensee shall submit a report, explaining the circumstances, together with a revised schedule for NRC approval.
Administrative control changes and procedure revisions shall be implemented as described in NRC's Safety Evaluation Report dated February 12, 1979.

Further, by January 1, 1980, Alabama Power Company shall provide for Commission review and obtain Commission approval of the final design of the modifications prior to implementation which would allow the reactor to be taken to cold shutdown without reliance on the cable spreading room, or the control room.

The fire protection program modifications are described in the Commission approved Farley Nuclear Plant Fire Protection Program. Alabama Power Company is authorized to make other changes to the program without prior Commission approval provided that such changes do not result in a decrease in the effectiveness of the program.

FIRE PROTECTION

SAFETY EVALUATION REPORT

BY THE

OFFICE OF NUCLEAR REACTOR REGULATION

U.S. NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF

ALABAMA POWER COMPANY

JOSEPH M. FARLEY NUCLEAR PLANT

UNIT NOS. 1 AND 2

DOCKET NOS. 50-348/364

February 12, 1979

JOSEPH M. FARLEY EVALUATION REPORT

FIRE PROTECTION REVIEW

UNIT NOS. 1 AND 2

TABLE OF CONTENTS

I. INTRODUCTION

We have reviewed the Joseph M. Farley Fire Protection Program Reevaluation and Fire Hazards Analysis submitted by Alabama Power Company (APC) by letter dated September 15, 1977 including Amendments 1, 2, 3, and 4. The reevaluation was in response to our request dated November 8, 1976 that APC review its existing fire protection program against the guidelines of Appendix A to Branch Technical Position (BTP) APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants." As part of our review, we visited the Plant site on two occasions to examine the relationship of safety related components, systems, and structures in specific plant areas to both combustible materials and to the existing and proposed fire detection and suppression systems. The overall objective of our review was to ensure that in the event of a fire at Farley Unit No. 1 or Unit No. 2, APC personnel and equipment would be adequate to safely shutdown the reactor, to maintain the plant in a safe shutdown condition, and to minimize the release of radioactivity to the environment.

Our review included an evaluation of the automatic and manually operated water and gas fire suppression systems, the fire detection systems, fire barriers, fire doors and dampers, fire protection administrative controls, fire brigade size and training, and the existing fire protection Technical Specifications issued for Unit No. 1 by Licensing Amendment No. 4 dated February 14, 1978. Similar Technical Specifications will be issued for Unit No. 2 when the plant license is issued.

Since Unit Nos. 1 and 2 are of the same design, except where noted, all comments made in this report apply to both units.

Our conclusion, given in Section VIII, is that the Fire Protection Program at Unit No. 1 and Unit No. 2 of the Joseph M. Farley Plant is adequate at the present time and meets General Design Criterion 3. However, to further ensure the ability of these facilities to withstand the damaging effects of fires that could occur, we require, and APC has agreed to provide additional fire protection system improvements. Until the committed fire protection system improvements are operational, we consider the existing fire detection and suppression systems, the existing barriers between fire areas, improved administrative procedure for control of combustibles and ignition sources, the trained onsite fire brigade, the capability to extinguish fires manually, and the fire protection Technical Specifications provide adequate interim protection against a fire that would threaten safe shutdown of Unit No. 1. Unit No. 2 which is under construction is currently not expected to load fuel initially until December, 1979 or later.

APC is proceeding with plant modifications on a priority basis (see Table 2). Most of these additional fire protection features will be completed for Unit No. 1 prior to the end of the second refueling outage (Summer 1980). However, all smoke detectors, penetration seals and barriers will be completed by September 1, 1980. The program will be implemented and modifications completed prior to initial fuel loading for Unit No. 2 or by September 1, 1980. The schedule for specific fire protection system

improvements is presented in Tables 1, 2 and 3 at the end of the report. This report summarizes the results of our evaluation of the Fire Protection Program at these facilities. Our consultants, Gage-Babcock and Associates, Inc., who participated in the review of APC's Fire Protection Program and in the preparation of this safety evaluation concur with our findings.

II. FIRE PROTECTION SYSTEMS DESCRIPTION AND EVALUATION

A. Water Supply Systems

The water supply system is common to both units and consists of a 2500 gpm at 125 psi motor driven fire pump and two 2500 gpm at 125 psi diesel engine driven fire pumps. The water supply source consists of two 300,000 gallon storage tanks. The fire suppression system requiring the greatest water demand for areas containing or exposing safety related equipment or circuits is the automatic wet pipe sprinkler system and at least 1000 gpm for hose streams associated with fire area 13 in the Auxiliary Building. This water demand is 2,439 gpm.

B. Sprinkler, Fixed Foam and Standpipe Systems

The automatic/manual sprinkler systems and the hose stations are connected to the interior water supply header. At present, the two interior headers are each fed from a single connection to the water supply system. We require and APC has agreed to provide a cross connection between the two headers and to install sectionalizing valves at locations along the headers. Thus, a single break will not disrupt the entire water suppression capability at any area. Actuation of any water fire suppression system will cause a fire pump to start on a low header pressure signal. The low pressure alarm and a pump running signal actuate in the control room. Additionally, the automatic sprinkler systems have alarms which indicate in the control room.

The automatic sprinkler systems, e.g., wet sprinkler system, preaction sprinkler systems, deluge and water spray systems, are designed to the requirements of NFPA Standard No. 13, "Standard for Installation Sprinkler Systems," and NFPA Standard No. 15, "Standard for Water Spray Fixed System."

A separate pressure maintenance pump (jockey pump) maintains the system pressure between 100-125 psi. If the water supply system pressure falls to 90 psi, then the motor driven fire pump starts. One diesel pump actuates if the pressure falls to 80 psi and the other diesel pump starts at 70 psi. The jockey pump and fire pumps take suction from a fire supply header connected to two different ground level 300,000 gallon tanks.

Farley Plant has three fire pumps each rated at 100% capacity. However, only two fire pumps rated at 100% capacity are required by our guidelines. The fire pumps are all located in a single fire pump house. APC has agreed, at our request, to install three-hour fire

barriers between the fire pumps. Separate alarms are provided in the control room to monitor pump running, prime mover availability, or failure of a fire pump to start. The power supply associated with the control signal which automatically starts the fire pumps is supplied by the Class 1E station battery system. All three fire pumps are UL listed. The 4kv controller for the electric driven pump is not UL listed because UL does not list 4kv controllers. However, the installation of the pumps and controller meet the applicable requirements of NFPA 20 except for section 7-5.2.1 which calls for a provision to test the controller's pressure actuation feature. At our request, APC has agreed to install provisions for testing the pressure actuation feature, thus eliminating this exception.

There are two fire mains feeding into the auxiliary building. These mains will be cross connected and the pipe size will be increased to provide a more reliable system with greater flow capacity.

Manual hose stations are located throughout both units to ensure that an effective hose stream can be directed to any safety related area in the plant. These systems are consistent with the requirements of NFPA Standard No. 14, "Standpipe and Hose Systems" for Sizing, Spacing, and Pipe Support Requirements.

The areas that have been or will be equipped (see *footnote) with automatic water suppression systems are as follows:

- Automatic Deluge System

  a) Turbine Building (portions)
  b) Switch yard
  c) Cooling Towers

- Automatic Pre-Action Sprinkler System

  a) Turbine Building (portions)(wet pipe)
  b) Storage, Laundry and Cask Wash Room in Auxiliary Building (wet pipe)
  c) Fire Pump House (wet pipe)
  d) Cable Spreading Room*
  e) Rooms 185, 189, 190, and 194*
  f) Fire Area No. 1 Room 223*
  g) Fire Area No. 4 - Rooms 160, 161, 162, 163, 168, 175, 207, 208, 209, 222, 322, 402, 404, and 2403; Also, concealed spaces for rooms 415 and 417*
  h) Fire Area No. 5 Room 172 (Hallway)*
  i) Fire Area No. 8, 9, 13, 30 and 31* Cable Chases
  j) Rooms 210, 211, 213, 228, 244, 245, and all of 234*
  k) Fire Area No. 42 Corridor*
  l) Service Water Intake - Over pump area only*
  m) Cable Tunnel for Trains "A" & "B"* (wet pipe)

*Additional sprinklers to be installed - see schedule in Section VIII.

We have reviewed the design criteria, the proposed modifications, and the bases for the water suppression systems. We conclude that these systems with the modifications described in A, B and C above would meet the guidelines of Appendix A to BTP ASB 9.5.1 and are acceptable.

C. Gas Fire Suppression Systems

Total flooding low pressure CO_2 Systems are provided for the following areas:

a) Individual Electrical Cabinets in Auxiliary Building
b) Cable Spreading Room
c) Diesel Generator Building

Low pressure CO_2 hose reels are also provide for portions of the Auxiliary and Turbine Building.

A high pressure CO_2 system provides direct application for electrical equipment in outlying areas such as:

a) Cooling Tower Switchgear Bldg. 1A, 1B, and 1C
b) River Water Building Switchgear
c) Service Water Building Switchgear

Halon systems protect the following areas:

a) Control Systems Cabinet Room
b) Computer Room
c) Communication Room
d) Service Building File Room

The 1301 halon concentration is designed to be 6% and the systems are actuated by the smoke detection systems. The systems have capability for two separate and redundant discharges of halon. The CO_2 and halon suppression systems are designed in accordance with the NFPA Standards No. 12 and 12A. We have reviewed the design criteria and bases for these fire suppression systems. We conclude that these systems satisfy the provisions of Appendix A to BTP ASB 9.5.1 and are acceptable.

D. Fire Detection Systems

The fire detection system consists of the detectors, associated electrical power supplies, and the annunciation panels. The types of detectors used at the Farley Nuclear Plant are ionization (products of combustion) and thermal (heat sensors). Fire detection systems give an audible and visual alarm which annunciate in the plant control room. Local, audible and/or visual alarms are also provided. Both types of fire detection systems are connected to the emergency power supply.

Areas that have been or will be equipped (see *footnote) with fire detectors are as follows:

a) Switchgear Room - Train A & B*
b) Fire Area No. 1 (RHR Pumps and Heat Exchangers, Waste Evaporation Feed Pumps, Containment Spray Pumps, etc.)*
c) Fire Area No. 4 (Letdown Heat Exchanger, Boric Acid transfer pumps, Misc. Equipment)*
d) Fire Area No. 5 - Charging Pumps*
e) Fire Area No. 6 - Component Cooling Water Pumps*
f) Fire Area No. 8 and 9 - Cable Chase*
g) Fire Area No. 12 - Unit Nos. 1 & 2 Hot shutdown Panel*
h) Fire Area No. 13 - Vertical Cable Chase*
i) Fire Area No. 30 and 31 - Cable Chase*
j) Fire Area No. 34 and 35 - Penetration Rooms*
k) Fire Area No. 39 - New Fuel Storage*
l) Fire Area No. 20 Battery Rooms (1A and 1B)*
m) Turbine Building
n) Emergency Diesel Generator Rooms
o) Direct Current Switchgear Area
p) Motor Generator Set
q) Water Treatment Building
r) Auxiliary Building
s) Supply Cabinets Room
t) Control Room and Adjoining Rooms*
u) Service Water Building*
v) River Water Building

The fire detection systems have been installed or will be installed according to NFPA No. 72D, "Standard for the Installation, Maintenance, and Use of Proprietary Protection Signalling Systems."

We have reviewed the fire detection systems to ensure that fire detectors are adequate to provide detection and alarm of fires that could occur. We have also reviewed the fire detection system's design criteria to ensure that they conform to the applicant sections of NFPA No. 72D. We conclude that the design and the installation of the fire detection systems, coupled with the additional detectors to be installed, meet the guidelines of Appendix A to BTP ASB 9.5-1 and are acceptable.

III. OTHER ITEMS RELATED TO THE STATION FIRE PROTECTION PROGRAM

A. Fire Barriers and Fire Barrier Penetrations

All floors, walls, and ceilings enclosing fire areas are rated at a minimum of 3-hour fire ratings except for stairwells and elevator shafts or in cases where water curtains are used in lieu of barriers. APC has provided acceptable documentation to substantiate the fire

*Additional detectors to be installed - see schedule in Section VIII.

rating of the barriers and 3-hour penetration seals used in the penetrations for cable trays, conduits, and piping.

B. Fire Doors and Dampers

We have reviewed the placement of fire doors to ensure that fire doors of the proper fire rating have been provided.

The licensee has or will provide 3-hour ventilation fire dampers for 3-hour wall, ceiling/floor assemblies. In some areas, existing dampers which are not located at the duct penetration through a fire barrier will be relocated or additional dampers will be installed at the rated barrier.

The fire barriers, barrier penetrations, fire doors and dampers will be provided in accordance with the guidelines of Appendix A to BTP ASB 9.5-1 and are acceptable.

IV. FIRE PROTECTION FOR SPECIFIC AREAS

A. Cable Spreading Room

A separate cable spreading room containing redundant cable divisions is provided for each unit. The cable spreading rooms for Unit Nos. 1 and 2 are separated from each other and from the balance of the plant by 3-hour rated fire barriers. Two access doors to each unit's cable spreading room are located at opposite ends of a common corridor to allow room access from two directions.

Currently, a manually actuated total flood CO_2 system is installed for the Unit No. 1 cable spreading room. APC has agreed to provide a ceiling mounted preaction sprinkler system for both cable spreading rooms to meet the guidelines of BTP ASB 9.5-1, Appendix A. The sprinkler system serves as the primary fire extinguishing system for the cable spreading room. Additional backup to these fire suppression systems is provided by standpipe systems and portable extinguishers located at both entrances to each cable spreading room. When the CO_2 system actuates, the ventilation system will isolate the cable spreading room. Smoke venting can be started from manual control stations to actuate an exhaust fan. Portable fans are also available. In addition, installed smoke detectors will initiate an alarm in the control room.

We were concerned that a fire could affect redundant safe shutdown systems in the cable spreading room, control room, and in the cable chase of either unit. APC has committed to complete modifications to the plant and plant procedures by the end of the second refueling outage for Unit No. 1 and by fuel loading for Unit No. 2 to enable the plant to be brought to safe shutdown with a fire in the cable spreading room, or control room or a cable chase tunnel. Cable chase tunnels in Fire Areas 8, 9, 30, 31 are channel separated while the cable chase in Fire Area 13 has both train cables. This cable chase

is provided with sprinklers and fire barriers to preclude loss of safe shutdown capability in event of a fire.

We have reviewed APC's Fire Hazards Analysis and the fire protection system changes proposed for the cable spreading room. We consider that appropriate fire protection will be provided after the modifications are implemented. The cable spreading room will then conform to the provisions of Appendix A to BTP ASB 9.5-1 and is acceptable.

B. Component Cooling Pump Area

The component cooling water (CCW) pumps are located in the Auxiliary Building. Three CCW pumps are in each unit. All three pumps of one unit are in the same fire area. However, only one pump is needed per unit to achieve hot shutdown. APC will provide a one-hour fire rated barrier for one train of cables to minimize effects of an exposure fire on the CCW system cables.

At our request, APC has also agreed to provide the following improvements to protect the CCW pumps and other cables against an exposure fire:

a) Area smoke detection system
b) A sprinkler system that will provide total area coverage
c) Half-hour fire rated barriers on the control/power cables to the CCW pumps and on other essential and identified cables
d) Install six-inch high concrete curbs from wall to walkway between the CCW pumps.

With the proposed modifications the CCW pump area fire protection will be in accordance with Appendix A to BTP ASB 9.5-1 and is acceptable.

C. Fire Protection Inside Containment

The major fire hazard associated with the Reactor Coolant Pump (RCP) is that of oil spraying under pressure from the thrust bearing lift pump or from bearing lubricating oil should a leak develop. The RCP's are located 60 feet apart. To prevent an oil fire, APC has agreed to provide, at our request, an engineered oil containment and collection system for each RCP. Physical separation of redundant safety related cables is maintained to inhibit the spread of cable fires to ensure safe shutdown capability. Further, three hose stations supplied from the service water system are to be provided inside containment. Fire detection is also provided for the area.

We have reviewed APC's Fire Hazards Analysis for the areas inside containment. With the addition of the modifications noted above the fire protection will meet the guidelines of Appendix A BTP ASB 9.5-1 and is acceptable.

D. Battery Room Area Corridor - Fire Area 20

This fire area covers the following portions of the Farley plant:

a) Room 210 Corridor
b) Room 211 Corridor
c) Room 213 Battery Service Room
d) Room 228 Corridor
e) Room 234 Hallway
f) Room 244 and 245 Battery 1B and 1A Rooms Mezzanine
g) Room 225 Battery Charger Room

The fire protection for this area will be increased to provide smoke detectors, water and CO_2 hose stations, sprinklers, and fire rated barriers for electrical cables as shown in Table 3. This fire area has a very low quantity of combustibles. The primary concern is with a transient exposure fire that could affect electrical cables in the area. Safe shutdown capability will be maintained by a one-hour fire barrier protecting one electrical safety train.

We have reviewed APC's Fire Hazards Analysis for the battery room and corridor. With the addition of one water hose station, smoke detectors, sprinklers, and fire barriers for cables in this area, the fire protection will meet the guidelines of Appendix A BTP ASB 9.5-1 and is acceptable.

E. Other Plant Areas

APC's Fire Hazards Analysis addresses other plant areas not specifically discussed in this report. APC agreed to install additional sprinklers, fire rated barriers, fire detectors, portable extinguishers, hose stations, and additional emergency lighting as identified in Tables 1, 2 and 3. These individual areas, with the proposed changes will be in accordance with the guidelines of Appendix A of BTP ASB 9.5-1, and are acceptable.

V. ADMINISTRATIVE CONTROLS AND FIRE BRIGADE

The administrative controls for fire protection consists of the fire protection organization, the fire brigade training, the controls over combustibles and ignition source, the prefire plans and procedures for fighting fires. By letter dated August 29, 1977 we provided supplemental staff guidelines entitled "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance" for use by APC.

In Amendment No. 3 to the Farley Fire Protection Program Reevaluation, APC compared the existing administrative controls, with planned changes, to our supplemental guidance in this area. We have reviewed APC's administrative controls program and have discussed our concerns with the APC staff. The four specific activities where complete conformance did not exist and the current status of each is as follows:

(a) Fire brigade training is in compliance with our supplemental guidance relating to such training with the exception of supervisory critiques of drills of each fire brigade. APC has agreed that, plant supervisors or assistant group supervisors will now critique at least one drill per year for each fire brigade. This is acceptable.

(b) Controls of combustibles are a part of APC procedure FNP-0-AP-35 which requires some specific changes not yet completed. However, APC has agreed to implement interim compensatory controls pending formal procedure changes. These interim controls which we accept are:

(1) Specific interim guidelines will be used to control the use of resins and other combustible materials,

(2) Daily inspections of selected work activities will be made by the Plant Fire Marshal to ensure that adequately installed or portable fire suppession capability is available when intermediate fire loads may result in added fire hazards,

(3) Periodic inspections will be made by the Plant Fire Marshall to ensure adequate removal of waste or work debris which might be a fire hazard, and

(4) Only flame retardant wood will be allowed for maintenance related activities in safety related areas.

(c) Control of ignition sources is in compliance with our supplemental guidance with certain procedural exceptions. The following are APC's interim controls to be followed pending formal procedure changes and completion of training of all shift foremen:

(1) Open flame permits will be approved by the shift supervisor until permanent plant procedures are modified to provide approval by Shift Foremen who have received the required training,

(2) Oxyacetylene equipment will be leak checked prior to entering the work area, and

(3) "No smoking" signs have now been posted in all safety-related areas. Thus, this previously open item is closed.

(d) Fire fighting procedures comply with our supplemental guidance with the exception that:

(1) Preplanned strategies for fire fighting in specific areas as described in the "Farley Nuclear Plant Fire Protection Program Reevaluation" Amendment No. 3, NRC question 53 response, have not yet been prepared by APC and its consultants. In the interim existing fire fighting procedures will be used in the event of a fire.

(2) Procedure changes requiring yearly fire drills including off-site fire fighting organizations have not been completed. APC is planning a drill for Spring, 1979 pending completion of the formal procedure change

APC has agreed to revise the administrative controls and training procedures, where necessary, to follow our supplemental staff guidelines contained in "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls and Quality Assurance." We require that APC complete the remaining changes to the plant administrative controls and procedures as soon as practicable. Since the Farley Unit No. 1 Cycle 2 fueling outage commenced on March 8, 1979, APC has agreed to implement the interim controls noted above during this fueling outage. We consider APC's existing administrative controls and procedures as well as the interim controls discussed above to be adequate. However, within 90 days following the startup for Cycle 2 operation, we require and APC agrees to finalize all administrative controls and procedures.

The plant fire brigade of at least five members is organized to provide immediate response to fire that may occur at the site. The plant fire brigade will be equipped with pressure demand breathing apparatus, portable communications equipment, portable lanterns, and other necessary fire fighting equipment. Spare air cylinders and recharge capability are provided to satisfy the guidelines of Appendix A to BTP ASB 9.5-1.

The fire fighting brigade will participate in periodic drills. Liaison between the plant fire brigade and the local fire departments has been established. The local fire departments have been on plant tours and have also been involved in training sessions with the plant fire brigade.

We conclude that the fire brigade equipment and training conform to the recommendations of the National Fire Protection Association, to Appendix A to BTP ASB 9.5-1, and to our supplemental staff guidelines and are acceptable.

VI. TECHNICAL SPECIFICATIONS

The Technical Specifications for the fire protection systems in use have been issued for Unit No. 1. The same fire protection Technical Specifications will be issued as part of the Unit No. 2 Operating License.

We have reviewed the currently approved Technical Specifications for Unit No. 1 (issued February 14, 1978). The specifications are consistent with our Standard Technical Specifications for fire protection. Following the implementation of the modifications of fire protection systems and administrative controls resulting from this review, the Technical Specifications will be modified accordingly to incorporate additional limiting conditions for operation and surveillance requirements to reflect these modifications.

We have added license condition 2.C.(4) to Facility Operating License No. NPF-2, for Farley Unit No. 1 requiring APC to maintain in effect an approved Fire Protection Program. APC is authorized to make changes in the program provided such changes do not degrade the effectiveness of the program. License condition 2.C.(4) would insure that fire program will not deviate from the descriptions of approved modifications but will allow the licensee to make certain additional improvements without prior Commission approval.

VII. ENVIRONMENTAL CONSIDERATION

With respect Farley Unit No. 1 which as been licensed to operate, we have determined that the license 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 5.15(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.

VIII. SAFETY SUMMARY

The fire protection system for Farley Unit Nos. 1 and 2 was evaluated and found to meet General Design Criterion 3 "Fire Protection" at the time the original Safety Evaluation Report was issued on May 2, 1975.

As a result of investigations conducted by the staff on the fire protection systems, fire protection criteria were developed and further requirements were imposed to improve the capability of the fire protection system to prevent unacceptable damage that may result from a fire. At our request, APC conducted a re-evaluation of its proposed fire protection system for Farley Unit Nos. 1 and 2. APC submitted on September 15, 1977, a Fire Protection Program Reevaluation including a Fire Hazards Analysis. Subsequently in response to our additional positions, APC submitted four amendments to the program. APC has compared the program, in detail, with the guidelines of Appendix A to BTP ASB 9.5-1, "Guidelines for Fire Protection for Nuclear Plants."

During the course of our review we have reviewed APC's submittals and responses to our requests for additional information. In addition, we have made two site visits to evaluate the fire hazards that might exist in the Farley Plant and the existing and proposed design features and fire protection systems provided to minimize these hazards.

APC has either made modifications to improve or will improve the fire resistance capability for fire doors, dampers, fire barriers, and barrier penetration seals.

APC has also proposed to install additional sprinkler systems for areas such as the cable spreading room, component cooling pump area, and various other areas. To ensure that fires can be detected rapidly and the plant

operators informed promptly. additional detectors will be installed in various areas of the plant.

In addition, APC has committed to establishing emergency shutdown procedures to bring the plants to safe cold shutdown condition in the event of a damaging fire in either the cable spreading room or the main control room.

APC agreed to complete all required improvements for Unit Nos. 1 and 2 in a timely manner. We have reviewed the proposed schedule and priorities and find them acceptable. We have included Tables 1, 2 and 3 in this report to show implementation dates, priorities of Unit No. 1 work, and a summary of the proposed modifications for each fire area.

Until the committed fire protection system improvements are operational, we consider the existing fire detection and suppression systems, the existing barriers between fire areas, improved administrative procedures for control of combustibles and ignition sources, the trained onsite fire brigade, the capability to extinguish fires manually, and the Fire Protection System Technical Specifications provide adequate protection against fire that would threaten safe shutdown.

Our overall conclusion is that a fire occurring in any area of the Farley Nuclear Plant will not prevent either unit from being brought to a controlled safe cold shutdown. Further, such a fire would not cause the release of significant amounts of radiation.

In summary, the Fire Protection Program for the Farley Nuclear Plant with the improvements already made, is adequate at the present time and, with the scheduled modifications, will meet the guidelines contained in Appendix A to BTP ASB 9.5-1. The Fire Protection Program as currently designed and installed meets the General Criterion 3 and is acceptable.

IX. CONCLUSION

With respect to Farley Unit No. 1 which has been licensed to operate, 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 or 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.

TABLE 1

IMPLEMENTATION DATES FOR PROPOSED MODIFICATIONS

Item	Date	
	Unit 1	Unit 2
1. Sprinkler (All systems) Room 234, Area 16	End of 2nd refueling outage[1] Spring, 1979	Before fuel load N/A
2. Yard Hydrants	11/1/79[2]	N/A
3. Portable Extinguishers	End of 1st refueling outage	Before fuel load
4. Hose Stations	10/1/79[3]	Before fuel load
5. Smoke Detectors	9/1/80[4]	9/1/80
6. UL Rated Doors	12/1/79[5]	Before fuel load
7. Penetration Seals	9/1/80[6]	Before fuel load
8. Portable Smoke Removal	1/1/79	N/A
9. Term. Cabinet Water Protection	End of 1st refueling outage	Before fuel load
10. Damper Rework	End of 2nd refueling outage[7]	4/15/80
11. Eight Hour Battery Packs	End of 1st refueling outage	Before fuel load
12. Hose Stations in CTMT	End of 2nd refueling outage	Before fuel load
13. RCP Oil Collection	End of 2nd refueling outage	Before fuel load
14. Fire Pump Barriers	2/1/79	N/A
15. DG Pot Transformer Circuit	End of 1st refueling outage	Before fuel load
16. Barriers	9/1/80[8]	9/1/80
17. Inside Water Supply	10/1/79	Before fuel load
18. HSP Switch Relocation	End of 2nd refueling outage	Before fuel load
19. HSP Instrument Mods.	End of 2nd refueling outage	Before fuel load
20. Barriers in S. W. Structure	End of 1st refueling outage	Before fuel load
21. Fireproof Control Room Kit	6/1/79	N/A
22. Modify New Fuel Storage Racks	End of 2nd refueling outage	N/A

The numbers under Unit 1 column correspond to priority designated in Table 2.

TABLE 2

UNIT 1 WORK PRIORITIES

Note No.	Item (from Table 4.2-2)	Priority of Work Start
1	Sprinklers	(a) Hall on 121' El. outside hot shutdown panel room (1-5-79)* (b) Cable spreading room (Room 318) (c) Areas requiring new smoke detection systems (d) Other areas
2	Yard Hydrants	(a) Service Water Structure (10-24-78)* (b) Diesel Generator Building (12-19-78)*
3	Hose Stations	Schedule in similar sequence to sprinklers.
4	Smoke Detectors	(a) Spent fuel area - Room 240 (12-4-78)* (b) CCW Heat Exchanger Room - Room No. 185 (c) Hallway on 121' El. outside hot shutdown panel (d) Filter removal hatch room - Room No. 404 (e) Other
5	UL Rated Doors	(a) Upgrade existing doors to appropriate UL class (11-7-78)* (b) Replace access hatches with UL doors
6	Penetration Seals	(a) Seals where none are presently installed (b) Upgrade existing seals
7	Damper Rework	(a) Dampers where none are presently installed (b) Relocate existing dampers to fire boundary wall
8	Barriers	(a) Room 185 (b) Hallway outside hot shutdown panel (c) Other

* Dates in parentheses are the start dates for installation work already in progress.

TABLE 3

PROPOSED MODIFICATION SUMMARY

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
1	H_2 recombiners, waste gas decay tank, waste monitor tank and pump, RHR pumps, RHR Heat exchangers, waste evaporator feed pump, Containment spray pumps.	-- 3 Hr rated fire dampers between Room 169 and Room 163 -- Area Detection System, except in rooms noted in hazard analysis. -- Automatic water suppression system in Room 223. -- Fire barriers per section 4.3.5.1.*
2,3	Area Number Not Used	
4	Waste gas decay tanks, letdown heat exchanger, Boric acid transfer pumps, boric acid tanks. Holdup tanks, waste evaporator package, miscellaneous equipment.	-- Area Detection System except in rooms noted in hazards analysis. -- Sprinkler systems in Rooms 161, 162, 163, 168, 175, 208, 209, 222, 322, 402, 404, part of 160, part of 207, 2403 (Unit 2 only). -- Sprinklers for concealed space in rooms 415 & 417. -- Additional hose stations to satisfy requirements of NFPA-14. -- Fire barriers per section 4.3.5.1.* -- Additional fire damper doors for area boundary penetrations.

*See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
		-- Class B UL rated fire damper doors for penetrations through duct chase walls (Room 215) into Area 4. -- Upgrading walls and penetrations into Room 215 to 2 hour rating.
5	Charging pumps, contaminated storage area.	-- 3 Hr. rated fire dampers between Room 172 & Room 223. -- Automatic water suppression system in Rooms 172 -- Fire barriers per section 4.3.5.1.* -- Area detection system.
6	Component cooling water pumps and heat exchangers, auxiliary feedwater pumps.	-- Automatic water suppression system in Rooms 185, 189, 190, & 194. -- Fire barriers per section 4.3.5.1.* -- Area detection system except in rooms noted in hazards analysis. -- Relocation of one cable to avoid congested cable area in CCW pump rooms. -- Construct 6 inch curbing between CCW pumps.
7	Area Number Not Used	
8	Cable Chase	-- Add Automatic sprinkler system. -- Area Detection System.

*See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
		-- Replace steel plate between Rooms 116 and 335 with Class A door.
9	Cable Chase	-- Add Automatic Sprinkler System. -- Area Detection System. -- Fire barriers per section 4.3.5.1. * -- Reroute one train A cable.
10, 11	Area Number Not Used	
12	(Unit 1 only) Hot shutdown panel.	-- Area Detection System. -- Relocate Selector Switches (One Train) from this room to Area 15 (Unit 1 only). -- Modify Instrumentation to Panel to make independent of cable spreading room, control room, and either train cable chase. -- Seal Penetrations in Area boundary. -- At Unit 2 fuel load, open the sealed door between Room 254 & Unit 2. -- Relocate selector switches (one train) from Fire Area 15 to this room (Unit 2 only)
13	Vertical Cable Chase	-- Area Detection System. -- Automatic Water Suppression System. -- Sealing penetration to turbine building. -- UL Class A door on chase to turbine building. -- Fire barriers per section 4.3.5.1.* -- Seal penetrations to area 20 (rooms 211 & 228)

*See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
14	Computer Room	-- No changes.
15	Communication Room	-- 3 Hour Rated Fire Dampers in Ducts for battery room exhaust. -- Selector switches (one train) relocated from hot shutdown panel to this room. (Unit 1 only) -- Selector switches (one train) relocated from this room to Fire Area 12. (Unit 2 only)
16	Battery Room	-- No changes.
17	Battery Room	-- No changes.
18	DC Switchgear Room	-- No changes.
19	DC Switchgear Room	-- No changes.
20	Battery Room Area Corridors	-- Seal Penetrations in Area Boundary. -- Automatic Water Suppression systems in Rooms 211, 213, 244, 245 & 234, 210, 228. -- Area Detection System. -- Water Hose Station in Room 234. -- Fire barriers per section 4.3.5.1. *
21	Switchgear Room	-- Fire barriers per sections 4.3.5.1.* -- Area detection system. -- Dampers relocated to fire area boundary.
22	Area Number Not Used	

*See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
23	Switchgear Room	-- No Changes -- Relocate Dampers to boundary walls
24, 25, 26 27, 28, 29	Area Number Not Used	
30	Cable Chase	-- Area Detection System. -- Automatic Water Suppression System. -- Replacement of steel access plates between Room 249 (Area 30) & Rooms 235 (Area 23) & 346 (Area 41) with UL Class A doors.
31	Cable Chase	-- Area Detection System. -- Automatic Water Suppression System. -- Replacement of steel access plates between Room 250 (Area 31) & Rooms 235 (Area 23) & 346 (Area 41) with UL Class A doors.
32, 33	Area Number Not Used	
34	Penetration Rooms	-- Seal Penetrations in Room 317. -- 3 Hour Rated Fire Dampers in Ceiling of Room 317 & in duct to 322. -- Detection System in Room 317. -- Fire barriers per Section 4.3.5.1.*

See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
35	Penetration Rooms	
36, 37, 38	Area Numbers Not Used	
39	New Fuel Storage	-- Area Detection System. -- Portable Extinguishers in Room 446. -- Replacement of New Fuel Storage Racks
40	Cable Spreading Room	-- Automatic Water Suppression System. -- Protect termination cabinets from water damage. -- Spray or fireproofing to assume full coating of exposed structural members.
41	Load Center Rooms Switchgear & MG Sets	-- Fire barriers per Section 4.3.5.1. * -- Damper Relocated to Fire Area Boundary.
42	Corridor	-- Seal Penetrations in Area Boundary. -- Water Hose Station in Area. -- Automatic Water Suppression System. -- Fire Barriers per section 4.3.5.1. *
43	Miscellaneous Areas	-- No changes.

*See APC's "Fire Protection Program Reevaluation"

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
44	Control Room & Adjoining Rooms	-- Addtional extinguishers. -- Additional hose station outside entrance. -- Enclosure of kitchen, kitchen closet & storage room to one-hour rating. -- Additional detection above false ceiling & in kitchen offices & storeroom.
45, 46, 47 48, 49, 50	Area Numbers Not Used	
51	Control Room Ventilation Equipment	-- Add Detection System. -- Relocate hose to entrance. -- Fire barriers per Section 4.3.5.1* -- Relocate fire dampers to fire area boundary.
52	Area Number Not Used	
53	Elevator Machine Room	-- No changes.
54	Elevator Machine Room	-- No changes.
55	Containment	-- Hose Stations as required.

*See APC's "Fire Protection Program Reevaluation"

TABLE 3
(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
2 - 89	(Unit 2 only) Lube Oil Storage	-- Oil Containment and Collection System for Reactor Coolant Pumps.
Auxiliary Building General		-- Dike in lube oil storage room. -- Eight hour rated batteries for emergency lights. -- Provide proper UL rated doors for the following: a. between R.184 and R.162 b. between R.172 and R.161 c. replace steel plate between Rooms 116 and 335 with UL A door. d. between R.254 and R.211 e. between Rooms 465 and 466 and the outside f. between R.300 and R.319 g. between R.210 and R.254 h. between R.249 and R.346 i. between R.250 and R.346 j. between R.317 and R.322 k. between R.346 and Rooms 249 and 250. l. between R.319 and R.300 m. between Area 56A and 56B n. between R.228 and R.229 o. between R.228 and R.233 p. between R.335 and R.116 q. between R.226 and R.211 r. between R.471 and R,2432 s. between R.474 and Outside

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
		-- Sealing of penetrations in fire area boundaries. -- Placement of portable smoke removal fans & hose. -- Additional hose stations to meet NFPA-14. -- Additional fire extinguishers to meet NFPA-10. -- Delete automatic closure of fire main motor operated valve & raise alarm setpoint to 2700 gpm. -- Install new larger diameter fire mains in auxiliary building & interconnect water supplies. Cross connect supply headers; add isolation valve.
56 A	Switchgear Room - Train A	-- Class A Door between Area 56A & Fire Zone 56B (Foyer). -- Area Detection System.
56 B, C	Foyer & Switchgear Room Train B	-- Area Detection System.
57	Diesel Generator 2C	-- No changes.
58	Diesel Generator 1B	-- No changes.
59	Diesel Generator 2B	-- No changes.

TABLE 3
(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
60	Diesel Generator 1C	-- No changes.
61	Diesel Generator 1-2A	-- No changes.
62	Day Tank Room 2C	-- No changes.
63	Day Tank Room 1B	-- No changes.
64	Day Tank Room 2B	-- No changes.
65	Day Tank Room 1C	-- No changes.
66	Day Tank Room 1-2A	-- No changes.
Diesel Generator-General		-- Provide isolation of Diesel Generator PT circuits from cable spreading room. -- Link diesel generator building fire detection circuit supervisory alarm signal to CO_2 trouble alarm in Control Room. -- Provide a new fire hydrant and hose house inside security fence at the diesel building. -- Additional hose stations in the switchgear rooms with 100 ft. hoses. -- Provide proper UL rated doors for the following:* a. between areas 71 and 61 b. between areas 71 and 60 * Please note that these doors are UL Class A rated per the Report

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
		c. between areas 71 and 59
		d. between areas 71 and 58
		e. between areas 71 and 57
		f. between areas 71 and 62
		g. between areas 71 and 63
		h. between areas 71 and 64
		i. between areas 71 and 65
		j. between areas 56A and 61
		k. between areas 56A and 60
		l. between areas 56B and 59
		m. between areas 56C and 58
		n. between areas 56C and 57

TABLE 3
(Continued)

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
AUXILIARY BUILDING		
71	Corridor	-- No changes.
River Water Intake 67, 68, 69, 70	Intake Pumps & Switchgear	-- No changes.
Service Water Intake 72	Fire Zones	-- Provide proper UL rated doors between Fire Areas 72D and 74.* -- Provide proper UL rated fire doors between Fire Areas 72C and 73.*
	Zone A-pump room	-- Fire barriers between pump trains, detection system and curbs. -- Automatic water suppression system.
	Zone B-Switchgear	-- No changes.
	Zone C-4kV Disconnect Switch - Train B	-- Add Detection System.
	Zone D-4kV Disconnect Switch - Train A	-- Add Detection System.
	Zone E-Switchgear	-- No changes.
73	Battery Room	-- No changes.
74	Battery Room	-- No changes.
Service Water - General		-- Add yard hydrant & hose station outside building.

* Note that these doors are UL rated Class A per the Report

TABLE 3

(Continued)

AUXILIARY BUILDING

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
		-- Provide portable smoke removal fan & hose. -- Remove flamable liquid cabinet.
Cable Tunnel 75	Cable tunnel between auxiliary & diesel generator buildings, train "A".	-- Add Automatic sprinkler system. -- Add fire resistant coating to water-tight door & bulkhead into auxiliary building. -- Provide Hose Stations as necessary between diesel generator building and Unit 2 Aux. Bldg. to provide fire fighting capability in tunnel.
76	Cable tunnel between auxiliary & diesel generator buildings, train "B".	-- Add automatic sprinkler system. -- Add fire resistant coating to water-tight door & bulkhead into auxiliary building. -- Provide Hose Stations, as necessary between diesel generator building and Unit 2 Aux. Bldg. to provide fire fighting capability in tunnel.
Yard Area 77, 78, 79, 80	Misc. Outside Equipment	-- Provide gasoline-powered smoke removal fans in the utility building.

TABLE 3

(Continued)

Fire Area No.	Plant Fire Area Description/Major Equipment	Proposed Modification
AUXILIARY BUILDING		
Turbine Building		
81, 82, 83, 84, 85, 86, 87, 88	Misc. Turbine Building Equipment	-- No Changes
Fire Protection Pump Building		
NA	Fire Pumps	-- Add separation barriers. -- Add provisions to test pressure actuation feature.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-348

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-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 was effective as of its date of issuance.

The amendment adds a license condition relating to the completion of facility modifications and implementation of administrative controls for fire protection.

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 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 September 15, 1977, as supplemented by letters dated February 23, July 14, October 27, December 13, 1978, and January 3, 1979, (2) Amendment No. 11 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 Public Document Room, 1717 H Street, NW., 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 13th day of April, 1979.

FOR THE NUCLEAR REGULATORY COMMISSION

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

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May 4, 1979

Mr. Jerome Saltzman, Chief
Office of Antitrust & Indemnity
Nuclear Reactor Regulation
Nuclear Regulatory Commission
Washington, D. C. 20555

M&M Nuclear Consultants

Alabama Power Company
J. M. Farley Nuclear Plant
ANI Policy NF-238
Endorsement No. 23
Certified Copies

Dear Jerry:

Enclosed for your records are eight certified copies of Endorsement No. 23 to Alabama Power Company's J. M. Farley Nuclear Plant ANI Facility Policy NF-238.

This endorsement amends the 1978 Standard and Reserve Premiums.

Very truly yours,

John R. Duck, Jr.

cc: N. Horsley
R. Lynn
J. McSweeny

jf

Enclosure

M001
S
1/1

7905100304

Nuclear Energy Liability Insurance
NUCLEAR ENERGY LIABILITY INSURANCE ASSOCIATION

ADVANCE PREMIUM AND STANDARD PREMIUM ENDORSEMENT

CALENDAR YEAR 1978

It is agreed that Items 1a. and 1b. of Endorsement No. 19 are amended to read:

1a. ADVANCE PREMIUM: It is agreed that the Advance Premium due the companies for the period designated above is: $187,550.00.

1b. STANDARD PREMIUM AND RESERVE PREMIUM: In the absence of a change in the Advance Premium indicated above, it is agreed that, subject to the provisions of the Industry Credit Rating Plan, the Standard Premium is said Advance Premium and the Reserve Premium is: $140,213.00.

ADDITIONAL PREMIUM: $2,325.00.

This is to certify that this is a true copy of the original Endorsement having the endorsement number and being made part of the Nuclear Energy Liability Policy (Facility Form) as designated hereon. No Insurance is afforded hereunder.

Charles R. Bardes, Vice President-Liability Underwriting
American Nuclear Insurers

Effective Date of this Endorsement January 1, 1978 12:01 A.M. Standard Time

To form a part of Policy No NF-238

Issued to Alabama Power Company

Date of Issue April 27, 1979

For the subscribing companies

By _____
General Manager

Endorsement No 23

Countersigned by _____

NE-36

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May 4, 1979

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Nuclear Regulatory Commission
Washington, D. C. 20555

M&M Nuclear Consultants

Alabama Power Company
J. M. Farley Nuclear Plant
ANI Policy NF-238
Endorsement No. 23
Certified Copies

Dear Jerry:

Enclosed for your records are eight certified copies of Endorsement No. 23 to Alabama Power Company's J. M. Farley Nuclear Plant ANI Facility Policy NF-238.

This endorsement amends the 1978 Standard and Reserve Premiums.

Very truly yours,

John R. Duck, Jr.

cc: N. Horsley
R. Lynn
J. McSweeny

jf

Enclosure

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J

7905100304

Nuclear Energy Liability Insurance
NUCLEAR ENERGY LIABILITY INSURANCE ASSOCIATION

ADVANCE PREMIUM AND STANDARD PREMIUM ENDORSEMENT

CALENDAR YEAR 1978

It is agreed that Items 1a. and 1b. of Endorsement No. 19 are amended to read:

1a. ADVANCE PREMIUM: It is agreed that the Advance Premium due the companies for the period designated above is: $187,550.00.

1b. STANDARD PREMIUM AND RESERVE PREMIUM: In the absence of a change in the Advance Premium indicated above, it is agreed that, subject to the provisions of the Industry Credit Rating Plan, the Standard Premium is said Advance Premium and the Reserve Premium is: $ 140,213.00.

ADDITIONAL PREMIUM: $2,325.00.

This is to certify that this is a true copy of the original Endorsement having the endorsement number and being made part of the Nuclear Energy Liability Policy (Facility Form) as designated hereon. No Insurance is afforded hereunder.

Charles R. Bardes, Vice President-Liability Underwriting
American Nuclear Insurers

Effective Date of this Endorsement January 1, 1978 12:01 A.M. Standard Time To form a part of Policy No NF-238

Issued to Alabama Power Company

Date of Issue April 27, 1979

For the subscribing companies

By _____
General Manager

Endorsement No 23

Countersigned by _____

NE-36

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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50-29 YANKEE-ROWE NUCLEAR POWER STATION, YANKEE ATOMIC ELECT 05000029
50-348
AUTH.NAME AUTHOR AFFILIATION
ROBERTS,D.M. AFFILIATION UNKNOWN
RECIP.NAME RECIPIENT AFFILIATION
DINITZ,I. ANTITRUST & INDEMNITY GROUP

PLUS 163 EXTRA DOCKETS ENTERED AS SUPPLEMENTS TO #582.

SUBJECT: CONFIRMS INCREASE IN LIABILITY LIMIT TO $36,000,000 FOR POLICIES MF-22,26,29,38,39,44,46,47,49,50,51,52,53,54,55,56, 57,58,60,61,64,66,67,68,69,70,71,72,74,76,77,78,79,80,86,87, 88,90,91,92,93,94,95 & 96.

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MAY 9 1979

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NRC 9HDA

WU INFOMASTER 1-0112310121 05/01/79
TWX AMRECO CGO
01 CHICAGO IL MAY 1, 1979
TWX 710-824-0415 NRC 9HDA
U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C.

ATTN: MR. IRA DINITZ ✔

THIS WILL CONFIRM THAT MAELU HAS BOUND EFFECTIVE 12:01 A.M. MAY 1, 1979 AN INCREASE IN LIMIT OF LIABILITY FROM $31,500,000 TO $36,000,000 UNDER EACH OF THE FOLLOWING POLICIES:

POLICY NO.	INSURED
MF-22	COMMONWEALTH EDISON COMPANY
MF-26	YANKEE ATOMIC ELECTRIC COMPANY
MF-29	CONSOLIDATED EDISON CO. OF NEW YORK
MF-38	SOUTHERN CALIFORNIA EDISON CO.
MF-39	CONNECTICUT YANKEE ATOMIC POWER CO.
MF-44	JERSEY CENTRAL POWER & LIGHT
MF-46	NIAGRA MOHAWK POWER CORP.
MF-47	ROCHESTER GAS & ELECTRIC
MF-49	CAROLINA POWER & LIGHT
MF-50	CONSUMERS POWER COMPANY
MF-51	NORTHERN STATES POWER CO.
MF-52	CONNECTICUT LIGHT & POWER COMPANY
MF-53	WISCONSIN ELECTRIC POWER COMPANY
MF-54	COMMONWEALTH EDISON CO.
MF-55	FLORIDA POWER & LIGHT CO.
MF-56	VERMONT YANKEE NUCLEAR POWER CORP.
MF-57	VIRGINIA ELECTRIC & POWER CO.
MF-58	BOSTON EDISON CO.
MF-60	MAINE YANKEE ATOMIC POWER CO.
MF-61	DUKE POWER CO.
MF-64	COMMONWEALTH EDISON CO.
MF-66	TENNESSEE VALLEY AUTHORITY
MF-67	PHILADELPHIA ELECTRIC COMPANY
MF-68	NORTHERN STATES POWER CO.
MF-69	PUBLIC SERVICE CO. OF COLORADO
MF-70	NEBRASKA PUBLIC POWER DISTRICT
MF-71	WISCONSIN PUBLIC SERVICE CORP.
MF-72	IOWA ELECTRIC LIGHT & POWER CO.
MF-74	ARKANSAS POWER & LIGHT CO.
MF-76	BALTIMORE GAS & ELECTRIC CO.
MF-77	POWER AUTHORITY OF STATE OF NEW YORK
MF-78	GEORGIA POWER CO.
MF-79	INDIANA & MICHIGAN POWER CO.
MF-80	CAROLINA POWER & LIGHT CO.
MF-86	PORTLAND GENERAL ELECTRIC CO.
MF-87	DUQUESNE LIGHT CO.
MF-88	FLORIDA POWER & LIGHT CO.
MF-90	PUBLIC SERVICE ELECTRIC & GAS CO.
MF-91	FLORIDA POWER CORP.
MF-92	TOLEDO EDISON CO.
MF-93	ALABAMA POWER CO.
MF-94	EXXON NUCLEAR CO.
MF-95	GENERAL ELECTRIC CO.
MF-96	VIRGINIA ELECTRIC & POWER CO.

DIANE M. ROBERTS
MUTUAL ATOMIC ENERGY
LIABILITY UNDERWRITERS

TWX 910-221-2119

1058 EST

NRC 9HDA

Westinghouse + 2 B+W fuel fabricators have already purchased $160 million in insurance. Mod 5/10

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