

Docket Nos. 50-348 June 22, 1984
and 50-364

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

Dear Mr. McDonald:

The Commission has issued the enclosed Amendment No. 46 to Facility Operating License No. NPF-2 and Amendment No. 37 to NPF-8 for the Joseph M. Farley Nuclear Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated March 4, 1983, supplemented March 1, 1984.

The amendments modify Technical Specifications to clarify and update the charcoal filter surveillance testing. Specific filter test efficiency requirements are shown rather than referencing Regulatory Guide 1.52. An existing error is also corrected since the plant design does not have a bypass filter system.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular monthly Federal Register notice.

Sincerely,

/s/EReeves

Edward A. Reeves, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:

1. Amendment No. 46 to NPF-2
2. Amendment No. 37 to NPF-8
3. Safety Evaluation

cc: w/enclosures
See next page

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Mr. R. P. McDonald
Alabama Power Company

Joseph M. Farley Nuclear Plant
Units 1 and 2

cc: Mr. W. O. Whitt
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Atlanta, GA 30303



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. 46
License No. NPF-2

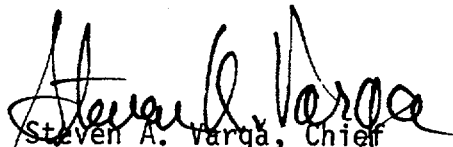
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Alabama Power Company (the licensee) dated March 4, 1983, supplemented March 1, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-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.46 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 22, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 46
AMENDMENT NO. ⁴⁶ FACILITY OPERATING LICENSE NO. NPF-2
DOCKET NO. 50-348

Revised Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
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PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent control room emergency air cleanup systems shall be OPERABLE.

APPLICABILITY: ALL MODES.

ACTION:

MODES 1, 2, 3 and 4:

With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 (during irradiated fuel movement, or movement of loads over irradiated fuel):

- a. With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode.
- b. With both control room emergency air cleanup systems inoperable, suspend all operations involving the movement of irradiated fuel or movement of loads over irradiated fuel.
- c. The provisions of Specification 3.0.3 are not applicable in MODE 6.

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 120°F.
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the pressurization and recirculation system HEPA filters and charcoal adsorbers and verifying that the system has operated for at least 10 hours with the heaters on during the past 31 days.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release that could have contaminated the charcoal adsorbers or HEPA filters in any ventilation zone communicating with the system by:

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater than or equal to 99.5% filter efficiency while operating the system at a flow rate indicated in Note 1 and using the following test procedures:
 - (a) A visual inspection of the control room emergency air cleanup system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.
3. Verifying a system flow rate as indicated in Note 1 during system operation when tested in accordance with Section 8 of ANSI N510-1980.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.
- e. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate indicated in Note 1.
 2. Verifying that the filter train starts on a Safety Injection Actuation test signal.#

Surveillance Requirement 4.7.7.e.2 does not apply in MODES 5 and 6.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

3. Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/8 inch water guage relative to the outside atmosphere during system operation.
4. Verifying that the heaters dissipate $7.5 + 0.8$ kw when tested in accordance with Section 14 of ANSI N510-1980.
- f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980 while operating the system at a flow rate indicated in Note 1.
- g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the system at a flow rate indicated in Note 1.

Note 1. a. Control Room Recirculation Filter Unit 2000 cfm \pm 10%
 b. Control Room Filter Unit 1000 cfm \pm 10%
 c. Control Room Pressurization Filter Unit 300 cfm \pm 10%

Note 2. a. Control Room Recirculation Filter Unit > 99%
 b. Control Room Filter Unit > 99%
 c. Control Room Pressurization > 99.825%

PLANT SYSTEMS

3/4.7.8 PENETRATION ROOM FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.8 Two independent penetration room filtration systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one penetration room filtration system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.8 Each penetration room filtration system shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, the flow through the HEPA filters and charcoal adsorbers and verifying that the system has operated for at least 10 hours with the heaters on during the past 31 days.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release that could have contaminated the charcoal adsorbers or HEPA filters in any ventilation zone communicating with the system by:
 1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater than or equal to 99.5% filter efficiency while operating the system at a flow rate of 5000 cfm \pm 10 percent and using the following test procedures:
 - (a) A visual inspection of the penetration room filtration system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 95% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
 3. Verifying a system flow rate of 5000 cfm \pm 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 95% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
- d. At least once per 18 months by:
1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks of less than 6 inches Water Gauge while operating the system at a flow rate of 5000 cfm \pm 10%.
 2. Verifying that the system starts on a Phase B Isolation test signal.
 3. Verifying that the heaters dissipate 25 \pm 2.5 kw when tested in accordance with Section 14 of ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980 while operating the system at a flow rate of 5000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the system at a flow rate of 5000 cfm \pm 10%.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater than or equal to 99.5% filter efficiency while operating the main purge system and using the following test procedures:
 - (a) A visual inspection of the containment purge exhaust filter system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 90% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
 - b. After every 12 months of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 90% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
 - c. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the main purge system.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- d. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980.
- e. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the main purge system.



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

ALABAMA POWER COMPANY

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 37
License No. NPF-8

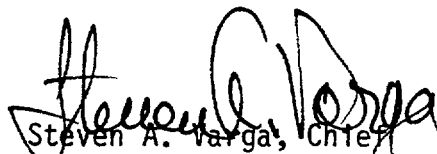
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Alabama Power Company (the licensee) dated March 4, 1983, supplemented March 1, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-8 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 37, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 22, 1984

ATTACHMENT TO LICENSE AMENDMENT NO.37
AMENDMENT NO.37 FACILITY OPERATING LICENSE NO. NPF-8
DOCKET NO. 50-364

Revised Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
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PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent control room emergency air cleanup systems shall be OPERABLE.

APPLICABILITY: ALL MODES.

ACTION:

MODES 1, 2, 3 and 4:

With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6 (during irradiated fuel movement, or movement of loads over irradiated fuel):

- a. With one control room emergency air cleanup system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode.
- b. With both control room emergency air cleanup systems inoperable, suspend all operations involving the movement of irradiated fuel or movement of loads over irradiated fuel.
- c. The provisions of Specification 3.0.3 are not applicable in MODE 6.

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 120°F.
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the pressurization and recirculation system HEPA filters and charcoal adsorbers and verifying that the system has operated for at least 10 hours with the heaters on during the past 31 days.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release that could have contaminated the charcoal adsorbers or HEPA filters in any ventilation zone communicating with the system by:

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater than or equal to 99.5% filter efficiency while operating the system at a flow rate indicated in Note 1 and using the following test procedures:
 - (a) A visual inspection of the control room emergency air cleanup system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.
3. Verifying a system flow rate as indicated in Note 1 during system operation when tested in accordance with Section 8 of ANSI N510-1980.
- d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.
- e. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate indicated in Note 1.
 2. Verifying that the filter train starts on a Safety Injection Actuation test signal.#

Surveillance Requirement 4.7.7.e.2 does not apply in MODES 5 and 6.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

3. Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/8 inch water gauge relative to the outside atmosphere during system operation.
4. Verifying that the heaters dissipate 7.5 ± 0.8 kw when tested in accordance with Section 14 of ANSI N510-1980.
- f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980 while operating the system at a flow rate indicated in Note 1.
- g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the system at a flow rate indicated in Note 1.

Note 1.

a. Control Room Recirculation Filter Unit	2000 cfm \pm 10%
b. Control Room Filter Unit	1000 cfm \pm 10%
c. Control Room Pressurization Filter Unit	300 cfm \pm 10%

Note 2.

a. Control Room Recirculation Filter Unit	\geq 99%
b. Control Room Filter Unit	\geq 99%
c. Control Room Pressurization	\geq 99.825%

PLANT SYSTEMS

3/4.7.8 PENETRATION ROOM FILTRATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.8 Two independent penetration room filtration systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one penetration room filtration system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.8 Each penetration room filtration system shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, the flow through the HEPA filters and charcoal adsorbers and verifying that the system has operated for at least 10 hours with the heaters on during the past 31 days.
- b. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release that could have contaminated the charcoal adsorbers or HEPA filters in any ventilation zone communicating with the system by:
 1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater or equal to 99.5% filter efficiency while operating the system at a flow rate of 5000 cfm \pm 10 percent and using the following test procedures:
 - (a) A visual inspection of the penetration room filtration system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 95% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
3. Verifying a system flow rate of 5000 cfm \pm 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980.
- c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criteria of greater than or equal to 95% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
- d. At least once per 18 months by:
 1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks of less than 6 inches Water Gauge while operating the system at a flow rate of 5000 cfm \pm 10%.
 2. Verifying that the system starts on a Phase B Isolation test signal.
 3. Verifying that the heaters dissipate 25 \pm 2.5 kw when tested in accordance with Section 14 of ANSI N510-1980.
- e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980 while operating the system at a flow rate of 5000 cfm \pm 10%.
- f. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the system at a flow rate of 5000 cfm \pm 10%.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

1. Verifying that the cleanup system satisfies the in-place testing acceptance criteria of greater than or equal to 99.5% filter efficiency while operating the main purge system and using the following test procedures.
 - (a) A visual inspection of the containment purge exhaust filter system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980.
 - (b) An in-place DOP test for the HEPA filters shall be performed in accordance with Section 10 of ANSI N510-1980.
 - (c) A charcoal adsorber section leak test with a gaseous halogenated hydrocarbon refrigerant shall be performed in accordance with Section 12 of ANSI N510-1980.
2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 90% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
 - b. After every 12 months of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Section 13 of ANSI N510-1980 meets the laboratory testing criterion of greater than or equal to 90% efficiency when tested with methyl iodide at 80°C and 70% relative humidity.
 - c. At least once per 18 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the main purge system.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- d. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.5% of the DOP when they are tested in-place in accordance with Section 10 of ANSI N510-1980.
- e. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.5% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with Section 12 of ANSI N510-1980 while operating the main purge system.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 46 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NO. NPF-8
ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-348 AND 50-364

Introduction

By letter dated March 4, 1983, Alabama Power Company (APCo) proposed changes to the Technical Specifications relating to charcoal filters. The NRC staff did not consider that APCo had sufficiently justified the requested changes. During the course of several telecon discussions in June, July and August 1983, we advised APCo of our concerns relating to the testing criteria being proposed.

Subsequently, by letter dated March 1, 1984, in response to the NRC staff concerns, APCo provided modifications to the original proposal along with a more detailed bases for the purposed changes. Our discussion and evaluation follows.

Discussion

Certain banks of charcoal filters are used to absorb the airborne radioactivity following a postulated loss-of-coolant-accident (LOCA). The Control Room Emergency Air Filtration System and the Penetration Room Air Filtration System both contain charcoal filter banks to assure that the radiation exposures to personnel would remain within guidelines of 10 CFR 50, Appendix A, General Design Criteria 19. Also, the containment purge exhaust filter assures that any airborne radioactivity resulting from a postulated fuel handling accident during refueling would be absorbed prior to reaching the environment. Technical Specification surveillance requirements are necessary to assure that licensees use Commission approved testing methods and criteria for testing the charcoal filter radioactivity absorber's efficiency.

Evaluation

The originally issued Technical Specifications for the Farley Nuclear Plant referenced the analysis techniques and acceptance criteria of Regulatory Guide (RG) 1.52, Revision 2, March 1978. These references may have led to misinterpretations of test methods and efficiency requirements as evidenced in Licensee Event Report 83-006, an event which occurred on February 15, 1983. For these reasons APCo proposed changes to the Technical

Specifications by letter dated March 4, 1983, supplemented March 1, 1984, which we have evaluated. Briefly stated the changes would:

- (1) lower the HEPA and charcoal filter system surveillance leak test acceptance requirement from 99.95% (RG 1.97) to 99.5% removal efficiency,
- (2) specify specific laboratory charcoal testing methyl iodide removal efficiencies that are consistent for iodine removal credit allowed by the staff and specified in the Final Safety Evaluation Report, and
- (3) specify the latest NRC staff approved testing methods to be used for performing HEPA and charcoal filter leak testing and also charcoal filter laboratory methyl iodide testing.

Our review indicates that the overall iodine removal efficiency, as shown in the enclosed Table is above the iodine removal credit considered in the NRC staff Safety Evaluation when the license was granted. Therefore, new Technical Specifications as proposed in the March 1, 1984, APCo letter are acceptable on this basis.

Safety Summary

On the basis of our review we conclude that these Technical Specification changes would result in no significant increase in accident-related site boundary doses from doses determined in the earlier analysis reported in the Farley, Unit Nos. 1 and 2, Safety Evaluation when the plants were licensed.

Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area. The staff has determined that the amendment involves no significant increase in the amounts of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupation radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: June 22, 1984

Principal Contributors:

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TABLE

ATTACHMENT

OVERALL ESF FILTER SYSTEM
IODINE REMOVAL EFFICIENCY

<u>Filter System</u>	<u>Tech Spec Leak Test Efficiency</u>	<u>Tech Spec Methyl Iodide Test Efficiency</u>	<u>Overall Iodine removal Efficiency*</u>	<u>Iodine Removal Credit Allowed by Staff for Organic and Elemental Iodine</u>
<u>Control Room</u>				
Inlet (with heaters)	$\geq 99.5\%$	$\geq 99.825\%$	$\geq 99.32\%$	99%
Recirculation	$\geq 99.5\%$	$\geq 99.0\%$	$\geq 98.50\%$	95%
<u>Penetration Room (Fuel Handling Accident and LOCA) (no heaters)</u>	$\geq 99.5\%$	$\geq 95.0\%$	$\geq 94.42\%$	90% for Elemental and 70% for Organic
<u>Containment Purge Exhaust (Fuel Handling Accident Inside Containment) (no heaters)</u>	$\geq 99.5\%$	$\geq 90.0\%$	$\geq 89.55\%$	90% for Elemental and 70% for Organic (Unit 1) 30% Organic (Unit 2)

*Calculated removal efficiency for Organic Iodine; Elemental iodine should be greater.