

50-3418



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 1, 1997

Mr. D. N. Morey
Vice President - Farley Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: ISSUANCE OF AMENDMENTS - JOSEPH M. FARLEY NUCLEAR PLANT,
UNITS 1 AND 2 (TAC NOS. M98011 AND M98012)

Dear Mr. Morey:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 127 to Facility Operating License No. NPF-2 and Amendment No. 121 to Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Units 1 and 2. The amendments change the Technical Specifications (TS) in response to your submittal dated February 24, 1997, as supplemented by letters dated March 13, April 11, 23, and 29, 1997.

By letter dated February 24, 1997, Southern Nuclear Operating Company (SNC), Inc., the licensee for the Joseph M. Farley Nuclear Plant (FNP), proposed an exigent amendment to the FNP Technical Specifications (TS) 3/4.7.7, "Control Room Emergency Filtration System (CREFS)," 3/4.7.8, "Penetration Room Filtration System (PRF)," and 3/4.9.14, "Containment Purge Exhaust Filter System (CPEF)." The proposed exigent TS amendment resulted from SNC requesting NRC enforcement discretion, by letter dated February 27, 1997, because it was determined that the TS surveillance requirements had not been adequately performed. The TS surveillances, which referenced Sections 5, 8, and 14 of ANSI N510-1980, "Testing of Nuclear Air-Cleaning Systems," were not completed in their entirety. Because SNC referenced the specific section of ANSI N510-1980 in its TS surveillance requirements, no exceptions to the ANSI N510-1980 testing procedures were allowed. By letter dated February 28, 1997, the NRC granted a Notice of Enforcement Discretion (NOED) for Farley Units 1 and 2. The NOED is in place until the amendment is implemented within 30 days of issuance. The staff attempted to process this amendment on an exigent basis in accordance with the NOED policy and 10 CFR 50.91(a)(6)(i)(A). However, due to technical issues during the review of the amendment, additional time was required beyond the normal 30-day public notice period. Therefore, this amendment is not being issued on an exigent basis.

The amendments change TS surveillance requirements that currently reference ANSI N510-1980 Sections 5, 8, and 14 to ASME N510-1989 without specific reference to the appropriate section.

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D. N. Morey

- 2 -

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Jacob I. Zimmerman", with a stylized flourish at the end.

Jacob I. Zimmerman, Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosures: 1. Amendment No. 127 to NPF-2
2. Amendment No. 121 to NPF-8
3. Safety Evaluation

cc w/encs: See next page

D. N. Morey

- 2 -

May 1, 1997

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

Sincerely,

ORIGINAL SIGNED BY:
H. Berkow /f/

Jacob I. Zimmerman, Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosures: 1. Amendment No. 127 to NPF-2
2. Amendment No. 121 to NPF-8
3. Safety Evaluation

cc w/encls: See next page

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J. Johnson, RII	P. Skinner, RII
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DOCUMENT NAME: G:\FARLEY\M98011.AMD

OFFICE	DRPE:PD11-2/PM	DRPE:PD11-2/LA	OGC	DRPE/PD22/D
NAME	J. ZIMMERMAN:cn	L. BERRY	S. HARRIS	H. BERKOW
DATE	5/1/97	5/1/97	5/1/97	5/1/97
COPY	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO

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Joseph M. Farley Nuclear Plant
Unit 1

cc:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

ALABAMA POWER COMPANY

DOCKET NO. 50-348

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 127
License No. NPF-2

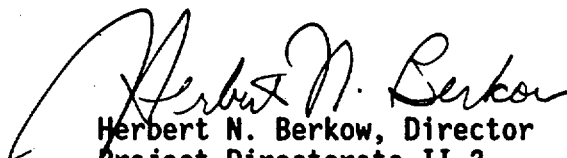
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated February 24, 1997, as supplemented by letters dated March 13, April 11, 23, and 29, 1997, complies with the standards and requirements 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 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. 127, are hereby incorporated in the license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 1, 1997

ATTACHMENT TO LICENSE AMENDMENT NO.127
TO FACILITY OPERATING LICENSE NO. NPF-2
DOCKET NO. 50-348

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages

3/4 7-17
3/4 7-17a
3/4 7-18
3/4 7-19
3/4 9-17

Insert Pages

3/4 7-17
3/4 7-17a
3/4 7-18
3/4 7-19
3/4 9-17

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 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 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 ASME N510-1989*.
 - (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 ASME N510-1989*.
- 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 efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

PLANT SYSTEMS
SURVEILLANCE REQUIREMENTS (Continued)

- d. 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. #
 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 pressurization system heater dissipates 7.5 ± 0.8 kw when tested in accordance with ASME N510-1989*.+
- 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 indicated in Note 1.
- 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 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%

Surveillance Requirement 4.7.7.1.d.2 does not apply in MODES 5 and 6.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

FNP will revise the maximum pressure drop for this surveillance requirement in a June 1997 technical specification submittal as committed in Southern Nuclear's letter dated April 23, 1997.

+ Mechanical heater surveillance testing per ASME N510-1989 will be performed no later than completion of the Unit 1 15th refueling outage scheduled for the fall of 1998.

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 ASME N510-1989*.
 - (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.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

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 ASME N510-1989*.
- 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 ASME N510-1989*.+
- 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%.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

FNP will revise the maximum pressure drop for this surveillance requirement in a June 1997 technical specification submittal as committed in Southern Nuclear's letter dated April 23, 1997.

+ Mechanical heater surveillance testing per ASME N510-1989 will be performed no later than completion of the Unit 1 15th refueling outage scheduled for the fall of 1998.

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 ASME N510-1989*.
 - (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.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

ALABAMA POWER COMPANY

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 121
License No. NPF-8

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated February 24, 1997, as supplemented by letters dated March 13, April 11, 23, and 29, 1997, 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 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. 121, are hereby incorporated in the license. Southern Nuclear shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 1, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 121

TO FACILITY OPERATING LICENSE NO. NPF-8

DOCKET NO. 50-364

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Remove

3/4 7-17
3/4 7-17a
3/4 7-18
3/4 7-19
3/4 9-17

Insert

3/4 7-17
3/4 7-17a
3/4 7-18
3/4 7-19
3/4 9-17

PLANT SYSTEMS
SURVEILLANCE REQUIREMENTS (Continued)

- 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 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 ASME N510-1989*.
 - (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 ASME N510-1989*.
- 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 efficiencies criteria given in Note 2 when tested with methyl iodide at 80°C and 70% relative humidity.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- d. 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.#
 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 pressurization system heater dissipates 7.5 ± 0.8 kw when tested in accordance with ASME N510-1989*.+
- 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 indicated in Note 1.
- 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 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%

Surveillance Requirement 4.7.7.1.d.2 does not apply in MODES 5 and 6.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

FNP will revise the maximum pressure drop for this surveillance requirement in a June 1997 technical specification submittal as committed in Southern Nuclear's letter dated April 23, 1997.

+ Mechanical heater surveillance testing per ASME N510-1989 will be performed no later than completion of the Unit 2 12th refueling outage scheduled for the spring of 1998.

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 ASME N510-1989*.
 - (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.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

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 ASME N510-1989*.
- 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 ASME N510-1989*.+
- 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%.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.

FNP will revise the maximum pressure drop for this surveillance requirement in a June 1997 technical specification submittal as committed in Southern Nuclear's letter dated April 23, 1997.

+ Mechanical heater surveillance testing per ASME N510-1989 will be performed no later than completion of the Unit 2 12th refueling outage scheduled for the spring of 1998.

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 ASME N510-1989*.
 - (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.

* The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements.



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

**SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 127 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 121 TO FACILITY OPERATING LICENSE NO. NPF-8**

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated February 24, 1997, as supplemented by letters dated March 13, April 11, 23, and 29, 1997, the Southern Nuclear Operating Company, Inc. (SNC) et al., submitted a request for changes to the Joseph M. Farley Nuclear Plant, Units 1 and 2, Technical Specifications (TS). The requested changes revise surveillance requirements for TS 3/4.7.7, "Control Room Emergency Filtration System (CREFS)," 3/4.7.8, "Penetration Room Filtration System (PRF)," and 3/4.9.14, "Containment Purge Exhaust Filter System (CPEF)." The proposed exigent TS amendment resulted from SNC requesting NRC enforcement discretion, by letter dated February 27, 1997, because it was determined that the TS surveillance requirements had not been adequately performed. The TS surveillances, which referenced Sections 5, 8, and 14 of ANSI N510-1980, "Testing of Nuclear Air-Cleaning Systems," were not completed in their entirety. Because SNC referenced the specific section of ANSI N510-1980 in its TS surveillance requirements, no exceptions to the ANSI N510-1980 testing procedures were allowed. By letter dated February 28, 1997, NRC granted a Notice of Enforcement Discretion (NOED) for Farley Units 1 and 2 because this action involves minimal or no safety impact and has no adverse radiological impact on public health and safety. The NOED is in place until the amendment is implemented within 30 days of issuance. The staff attempted to process this amendment on an exigent basis in accordance with the NOED policy and 10 CFR 50.91(a)(6)(i)(A). However, due to technical issues during the review of the amendment, additional time was required beyond the normal 30-day public notice period. Therefore, this amendment is not being issued on an exigent basis. The March 13, April 11, 23, and April 29, 1997, letters provided clarifying information that did not change the February 24, 1997, application and the initial proposed no significant hazards consideration determination.

2.0 BACKGROUND

By letter dated March 13, 1997, SNC issued a supplement to the proposed TS amendment that included Final Safety Analysis Report (FSAR) tables that provided technical justification for the exceptions taken to the testing requirements of ASME N510-1989. In response to the NRC staff concerns, SNC issued a second supplement, by letter dated April 11, 1997, clarifying exceptions taken to the testing requirements of ASME N510-1989. As a result of an April 17, 1997 telephone conference, SNC issued a third supplement, by letter dated April 23, 1997, revising the proposed TS pages associated with the pressure drop across the combined HEPA filters and charcoal adsorber banks and the heater performance testing.

The current FNP TS surveillance requirements for Units 1 and 2 reference specific sections of ANSI N510-1980 for performing visual inspections (Section 5), verifying system airflow capacity and distribution (Section 8), and verifying air heater performance (Section 14) for the CREFS, PRF, and CPEF, respectively. SNC's interpretation was that only applicable portions of the sections of ANSI N510-1980 referenced in the TS were required to be performed. However, the staff's position is that when the TS surveillance requirements reference a specific section of the testing standard, that requires the licensee to meet all the requirements specified in that section of the standard during its performance of the surveillances and does not afford the licensee the latitude to select some individual inspections and tests and omit those inspections and tests that involve major challenges to the licensee.

SNC stated that one issue, which contributed to its misinterpretation, was that the specific sections within ANSI N510-1980 do not clearly differentiate between testing required for initial acceptance testing and testing required for periodic surveillances. SNC determined which portions of the sections were acceptance tests and which portions were surveillance tests even though ANSI N510-1980 was not specific. In addition, another issue, which led to the misinterpretation, was that some characteristics of the CREFS, PRF, and CPEF designs do not allow for complete application of ANSI N510-1980 without major system modification or repair. Consequently, SNC concluded that it did not need to perform those portions, which required disassembly or breaching of pressure boundaries. Therefore, to resolve this situation, SNC proposed a TS amendment to change the TS surveillance requirements that currently reference ANSI N510-1980 Sections 5, 8, and 14 to ASME N510-1989 without specific reference to the appropriate section. SNC also proposed to add a footnote to the TS wherever ASME N510-1989 is referenced in the TS surveillance requirement, which would state: "The FNP Final Safety Analysis Report identifies the relevant surveillance testing requirements." These proposed revisions will affect TS Surveillance Requirements 4.7.7.1.b.1.(a), 4.7.7.1.b.3, 4.7.7.1.d.1, 4.7.7.1.d.4, 4.7.8.b.1.(a), 4.7.8.b.3, 4.7.8.d.1, 4.7.8.d.3, and 4.9.14.a.1.(a) for FNP Units 1 and 2.

3.0 EVALUATION

The staff has evaluated the proposed TS changes and endorses SNC's adoption of ASME N510-1989 for performing visual inspections, verifying system airflow capacity and distribution, and verifying air heater performance for the CREFS, PRF, and CPEF because the staff considers ASME N510-1989 to be a better test standard than the ANSI N510-1980. For example, ASME N510-1989 clarified the problems ANSI N510-1980 had with differentiating between required testing for initial acceptance testing and for periodic surveillances. The staff has previously endorsed ASME N510-1989 in Inspection Procedure 84750 of the NRC Inspection Manual and NUREG-1431, "Improved Standard Technical Specifications for Westinghouse Plants." However, the staff's acceptance of SNC's adoption of ASME N510-1989 is based on SNC's commitment, in a letter dated March 13, 1997, to submit a TS amendment by June 1997, for the CREFS, PRF, and CPEF that will incorporate ASME N510-1989 for the remaining TS surveillance requirements that specify ANSI N510-1980. The staff evaluated the proposed tables in the FSAR for FNP Units 1 and 2, which were provided by SNC in its March 13, 1997, letter. SNC proposed to provide a footnote in the TS that would reference these tables for identifying the relevant surveillance testing requirements. However, the staff identified two notes that SNC proposed in Tables 9.4-15 through 9.4-18 that the staff determined to be unacceptable. They include notes in Section 8.6.1 and Section 14.5.2.

Note (2) in Section 8.6.1 of the tables states that "The surveillance flowrate will not be used for the maximum housing component pressure drop test. Maximum housing component pressure drop airflow is based on system functional requirements." The staff determined that performing this acceptance test using the system air flowrate specified in the TS surveillance requirements is necessary. The purpose of the test is to assure that the system is capable of supplying the TS-required air flow even when the filters are dirty.

However, SNC stated in a March 3, 1997, telephone conference that the CREFS, PRF, and CPEF cannot maintain the TS system flowrate at the pressure drop across the combined high-efficiency particulate air (HEPA) filters and charcoal adsorber banks specified in Surveillance Requirements 4.7.7.1.d.1 and 4.7.8.d.1. Therefore, the staff determined that the pressure drop identified in Surveillance Requirements 4.7.7.1.d.1 and 4.7.8.d.1 needed to be revised to correspond to the filter pressure drop that ensures compliance with the TS system flowrate. In a letter dated April 23, 1997, SNC committed to revise the maximum pressure drop for Surveillance Requirements 4.7.7.1.d.1 and 4.7.8.d.1 to correspond to the filter pressure drop that ensures compliance with the minimum flow rates identified in the applicable TS in a June 1997 TS submittal. SNC proposed to incorporate this commitment as a footnote in the FNP TS. Based on this commitment, in the April 23, 1997, letter, and the incorporation of this commitment in the TS, the staff has determined that this issue is resolved.

The note in Section 14.5.2 of the tables states that the power-on mechanical heater test will not be conducted because the "[d]esign does not facilitate accurate temperature measurements" and that "[h]eater performance will be verified [only by the power-on electrical heater test] in [Section] 14.5.1." The staff determined that the power-on mechanical test is necessary to demonstrate that the heaters are performing their intended safety function of assuring that the air reaching the charcoal is less than 70 percent relative humidity. By itself, the power-on electrical test does not guarantee that the air passing over the charcoal adsorbers is at the required temperature and relative humidity, it only assures that the heater is receiving the proper voltage and current. The staff requires licensees to perform redundant heater performance tests because the staff allows a relaxation (relative humidity of 70 percent and a safety factor of 5) in the laboratory testing of the charcoal for plants with heaters.

In its letter dated April 23, 1997, SNC committed to perform the mechanical heater surveillance testing in accordance with ASME N510-1989 no later than completion of the 15th refueling outage scheduled for the fall of 1998 for Unit 1 and the 12th refueling outage scheduled for spring of 1998 for Unit 2. In addition, SNC committed to implement this testing by December 1997 if no modifications are required. SNC proposed to incorporate this commitment as a footnote in the FNP TS. The staff identified a discrepancy between these commitments and the FSAR tables in the March 13, 1997, letter. As a result, the licensee revised Section 14.5.2 of FSAR Tables 9.4-16 and 9.4-18, in its letter dated April 29, 1997. The revision removed the note and stated that the mechanical heater test will be performed as routine surveillance and following modification or repair. Based on this commitment in the April 23, 1997, letter and the incorporation of this commitment in the TS, the staff has determined that this issue is resolved.

The staff has concluded that the TS amendments are acceptable based on the licensee's commitments and incorporation of these commitments in the license amendments as previously discussed. The staff has determined that SNC does not have to perform all of the acceptance tests identified in ASME N510-1989 at this time because the licensee stated, in its letter dated April 11, 1997, that they have performed all of the Regulatory Guide 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants," required in-place testing on the systems as part of the original acceptance testing. However, the staff expects that after the licensee performs any major system modification or repair that the licensee must perform all of the acceptance tests of the ASME N510-1989 standard that the licensee identified in Tables 9.4-15 through 9.4-19 of the FSAR for FNP Units 1 and 2. In addition, because the FSAR states that the pressure drop across the HEPA and charcoal filters of these systems are instrumented to signal and alarm in the control room, the staff expects the licensee to change the signal and alarm set points to correspond to the new pressure drops of Surveillance Requirements 4.7.7.1.d.1 and 4.7.8.d.1.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of Alabama official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (62 FR 10294 dated March 6, 1997). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 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 the amendments.

6.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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