

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

SUBJECT: ISSUANCE OF AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE
NO. NPF-2 AND AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO.
NPF-8 REGARDING LINE ITEM IMPROVEMENTS TO REDUCE SURVEILLANCE
REQUIREMENTS IN ACCORDANCE WITH GENERIC LETTER 93-05 - JOSEPH M.
FARLEY NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M91347 AND M91348)

Dear Mr. Morey:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 112 to Facility Operating License No. NPF-2 and Amendment No. 103 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 January 9, 1995.

The amendments change the TS to implement recommended changes from Generic Letter (GL) 93-05, "Line Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993. Specifically, the amendments implement TS changes corresponding to the following GL 93-05 line-item improvement issues and numbers: Control Rod Movement Test for Pressurized Water Reactors (4.2.1); Radiation Monitors (5.14); Surveillance of Boron Concentration in the Accumulator/Safety Injection/Core Flood Tank (7.1); Containment Spray System (8.1); Hydrogen Recombiner (8.5); and Special Test Exemptions (12).

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

Sincerely,

Byron L. Siegel, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348
and 50-364

Enclosures:

1. Amendment No. 112 to NPF-2
2. Amendment No. 103 to NPF-8
3. Safety Evaluation

cc w/enclosures:
See next page

Document Name: G:\FARLEY\FAR91347.AMD - *See previous concurrence

OFFICE	LA:PDII-1	PM:PDII-1	D:PDII-1	OGC	
NAME	PAnderson	BSiegel	WBateman	RBachmann*	
DATE	03/1/95	03/1/95	03/1/95	02/22/95	
COPY	Yes/No	Yes/No	Yes/No	Yes/No	

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

March 20, 1995

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

SUBJECT: ISSUANCE OF AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE
NO. NPF-2 AND AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO.
NPF-8 REGARDING LINE ITEM IMPROVEMENTS TO REDUCE SURVEILLANCE
REQUIREMENTS IN ACCORDANCE WITH GENERIC LETTER 93-05 - JOSEPH M.
FARLEY NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M91347 AND M91348)

Dear Mr. Morey:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 112 to Facility Operating License No. NPF-2 and Amendment No. 103 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 January 9, 1995.

The amendments change the TS to implement recommended changes from Generic Letter (GL) 93-05, "Line Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993. Specifically, the amendments implement TS changes corresponding to the following GL 93-05 line-item improvement issues and numbers: Control Rod Movement Test for Pressurized Water Reactors (4.2.1); Radiation Monitors (5.14); Surveillance of Boron Concentration in the Accumulator/Safety Injection/Core Flood Tank (7.1); Containment Spray System (8.1); Hydrogen Recombiner (8.5); and Special Test Exemptions (12).

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

Sincerely,

A handwritten signature in cursive script, reading "Byron L. Siegel".

Byron L. Siegel, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-348
and 50-364

Enclosures:

1. Amendment No. 112 to NPF-2
2. Amendment No. 103 to NPF-8
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. D. N. Morey
Southern Nuclear Operating
Company, Inc.

Joseph M. Farley Nuclear Plant

cc:

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Columbia, Alabama 36319

AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NO. NPF-2 - FARLEY, UNIT 1
AMENDMENT NO. 103 TO FACILITY OPERATING LICENSE NO. NPF-8 - FARLEY, UNIT 2

DISTRIBUTION:

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E. Merschoff, RII



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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

DOCKET NO. 50-348

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 112
License No. NPF-2

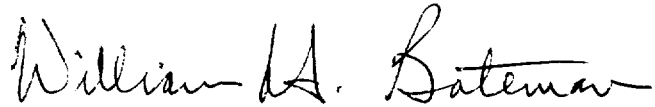
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated January 9, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the 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. 112, 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

A handwritten signature in cursive script that reads "William H. Bateman".

William H. Bateman, Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 20, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 112
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 1-15
3/4 3-41
3/4 5-2
3/4 6-11
3/4 6-20
3/4 10-1

Insert Pages

3/4 1-15
3/4 3-41
3/4 5-2
3/4 6-11
3/4 6-20
3/4 10-1

REACTIVITY CONTROL SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.
- c) A power distribution map is obtained from the movable incore detectors and $F_Q(Z)$ and $F_{\Delta H}^N$ are verified to be within their limits within 72 hours and
- d) The THERMAL POWER level is reduced to less than or equal to 75% of RATED THERMAL POWER within one hour and within the next 4 hours the high neutron flux trip setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER.

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The position of each full length rod shall be determined to be within the group demand limit by verifying the individual rod positions at least once per 12 hours except during time intervals when the Rod Position Deviation Monitor is inoperable, then verifying the group positions at least once per 4 hours.

4.1.3.1.2 Each full length rod not fully inserted in the core shall be determined to be OPERABLE by movement of at least 10 steps in any one direction at least once per 92 days.

TABLE 4.3-3RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
1. AREA MONITORS				
a. Fuel Storage Pool Area (R-5)	S	R	Q	*
b. Containment Area (R-27A&B)	S	R	N/A	1, 2, 3, 4
2. PROCESS MONITORS				
a. Fuel Storage Pool Area Gaseous Activity - Ventilation System Isolation (R-25 A&B)	S	R	Q	**
b. Containment				
i. Gaseous Activity				
a) Purge and Exhaust Isolation (R-24 A&B)	S	R	Q	ALL MODES
b) RCS Leakage Detection (R-12)	S	R	Q	1, 2, 3 & 4
ii. Particulate Activity				
RCS Leakage Detection (R-11)	S	R	Q	1, 2, 3 & 4
c. Control Room Isolation	S	R	Q	1, 2, 3, 4 and during movement of irradiated fuel or movement of loads over irradiated fuel

* With fuel in the storage pool or building.

** With irradiated fuel in the storage pool.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the accumulator solution. This surveillance is not required when the volume increase makeup source is the RWST and the RWST has not been diluted since verifying that the RWST boron concentration is within the accumulator boron concentration limit.
- c. At least once per 31 days when the RCS pressure is above the P-11 setpoint by verifying that power to each isolation valve operator is disconnected by a locked open disconnect device.
- d. At least once per 18 months by verifying that each accumulator isolation valve opens automatically under each of the following conditions:
 - 1. When the RCS pressure (actual or simulated) exceeds the P-11 (Pressurizer Pressure Block of Safety Injection) setpoint,
 - 2. Upon receipt of a safety injection test signal.

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent containment spray systems shall be OPERABLE with each spray system capable of taking suction from the RWST and transferring suction to the containment sump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the inoperable spray system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

- 4.6.2.1 Each containment spray system shall be demonstrated OPERABLE:
- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - b. By verifying, that on recirculation flow, each pump develops a discharge pressure of greater than or equal to 210 psig when tested pursuant to Specification 4.0.5.
 - c. At least once per 18 months during shutdown, by:
 - 1. Verifying that each automatic valve in the flow path actuates to its correct position on a Phase B test signal.
 - 2. Verifying that each spray pump starts automatically on a Phase B test signal.
 - d. At least once per 10 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

CONTAINMENT SYSTEMS

ELECTRIC HYDROGEN RECOMBINERS - W

LIMITING CONDITION FOR OPERATION

3.6.4.2 Two independent containment hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.2 Each hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once each refueling interval by verifying during a recombiner system functional test that the minimum heater sheath temperature increases to greater than or equal to 700°F within 90 minutes. Upon reaching 700°F, increase the power setting to maximum power for two minutes and verify that the power meter reads greater than or equal to 60 KW.
- b. At least once each refueling interval by:
 1. Performing a CHANNEL CALIBRATION of all recombiner instrumentation and control circuits.
 2. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiners (i.e., loose wiring or structural connections, deposits of foreign materials, etc.)
 3. Verifying the integrity of all heater electrical circuits by performing a resistance to ground test following the above required functional test. The resistance to ground for any heater phase shall be greater than or equal to 10,000 ohms.

3/4.10 SPECIAL TEST EXCEPTIONS

3/4.10.1 SHUTDOWN MARGIN

LIMITING CONDITION FOR OPERATION

3.10.1 The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 may be suspended for measurement of control rod worth and shutdown margin provided the reactivity equivalent to at least the highest estimated control rod worth is available for trip insertion from OPERABLE control rod(s).

APPLICABILITY: MODE 2.

ACTION:

- a. With any full length control rod not fully inserted and with less than the above reactivity equivalent available for trip insertion, immediately initiate and continue boration at greater than or equal to 7000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.
- b. With all full length control rods fully inserted and the reactor subcritical by less than the above reactivity equivalent, immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.

SURVEILLANCE REQUIREMENTS

- 4.10.1.1 The position of each full length rod either partially or fully withdrawn shall be determined at least once per 2 hours.
- 4.10.1.2 Each full length rod not fully inserted shall be demonstrated capable of full insertion when tripped from at least the 50% withdrawn position within 7 days prior to reducing the SHUTDOWN MARGIN to less than the limits of Specification 3.1.1.1.



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

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

DOCKET NO. 50-364

JOSEPH M. FARLEY NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 103
License No. NPF-8

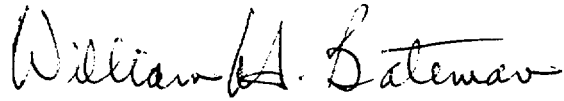
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated January 9, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the 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. 103, 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



William H. Bateman, Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 20, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 103
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 Pages

3/4 1-15
3/4 3-41
3/4 5-2
3/4 6-11
3/4 6-20
3/4 10-1

Insert Pages

3/4 1-15
3/4 3-41
3/4 5-2
3/4 6-11
3/4 6-20
3/4 10-1

REACTIVITY CONTROL SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

- b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.
- c) A power distribution map is obtained from the movable incore detectors and $F_Q(Z)$ and $F_{\Delta H}^N$ are verified to be within their limits within 72 hours and
- d) The THERMAL POWER level is reduced to less than or equal to 75% of RATED THERMAL POWER within one hour and within the next 4 hours the high neutron flux trip setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER.

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The position of each full length rod shall be determined to be within the group demand limit by verifying the individual rod positions at least once per 12 hours except during time intervals when the Rod Position Deviation Monitor is inoperable, then verifying the group positions at least once per 4 hours.

4.1.3.1.2 Each full length rod not fully inserted in the core shall be determined to be OPERABLE by movement of at least 10 steps in any one direction at least once per 92 days.

TABLE 4.3-3

RADIATION MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>MODES IN WHICH SURVEILLANCE REQUIRED</u>
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b. Containment Area (R-27A&B)	S	R	N/A	1, 2, 3, 4
2. PROCESS MONITORS				
a. Fuel Storage Pool Area Gaseous Activity - Ventilation System Isolation (R-25 A&B)	S	R	Q	**
b. Containment				
i. Gaseous Activity				
a) Purge and Exhaust Isolation (R-24 A&B)	S	R	Q	ALL MODES
b) RCS Leakage Detection (R-12)	S	R	Q	1, 2, 3 & 4
ii. Particulate Activity				
RCS Leakage Detection (R-11)	S	R	Q	1, 2, 3 & 4
c. Control Room Isolation	S	R	Q	1, 2, 3, 4 and during movement of irradiated fuel or movement of loads over irradiated fuel

* With fuel in the storage pool or building.

** With irradiated fuel in the storage pool.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the accumulator solution. This surveillance is not required when the volume increase makeup source is the RWST and the RWST has not been diluted since verifying that the RWST boron concentration is within the accumulator boron concentration limit.
- c. At least once per 31 days when the RCS pressure is above the P-11 setpoint by verifying that power to each isolation valve operator is disconnected by a locked open disconnect device.
- d. At least once per 18 months by verifying that each accumulator isolation valve opens automatically under each of the following conditions:
 - 1. When the RCS pressure (actual or simulated) exceeds the P-11 (Pressurizer Pressure Block of Safety Injection) setpoint,
 - 2. Upon receipt of a safety injection test signal.

CONTAINMENT SYSTEMS

3/4 6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent containment spray systems shall be OPERABLE with each spray system capable of taking suction from the RWST and transferring suction to the containment sump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours; restore the inoperable spray system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

- 4.6.2.1 Each containment spray system shall be demonstrated OPERABLE:
- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
 - b. By verifying, that on recirculation flow, each pump develops a discharge pressure of greater than or equal to 210 psig when tested pursuant to Specification 4.0.5.
 - c. At least once per 18 months during shutdown, by:
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a Phase B test signal.
 2. Verifying that each spray pump starts automatically on a Phase B test signal.
 - d. At least once per 10 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

CONTAINMENT SYSTEMS

ELECTRIC HYDROGEN RECOMBINERS - W

LIMITING CONDITION FOR OPERATION

3.6.4.2 Two independent containment hydrogen recombiner systems shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen recombiner system inoperable, restore the inoperable system to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.2 Each hydrogen recombiner system shall be demonstrated OPERABLE:

- a. At least once each refueling interval by verifying during a recombiner system functional test that the minimum heater sheath temperature increases to greater than or equal to 700°F within 90 minutes. Upon reaching 700°F, increase the power setting to maximum power for two minutes and verify that the power meter reads greater than or equal to 60 KW.
- b. At least once each refueling interval by:
 1. Performing a CHANNEL CALIBRATION of all recombiner instrumentation and control circuits.
 2. Verifying through a visual examination that there is no evidence of abnormal conditions within the recombiners (i.e., loose wiring or structural connections, deposits of foreign materials, etc.)
 3. Verifying the integrity of all heater electrical circuits by performing a resistance to ground test following the above required functional test. The resistance to ground for any heater phase shall be greater than or equal to 10,000 ohms.

3/4.10 SPECIAL TEST EXCEPTIONS

3/4.10.1 SHUTDOWN MARGIN

LIMITING CONDITION FOR OPERATION

3.10.1 The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 may be suspended for measurement of control rod worth and shutdown margin provided the reactivity equivalent to at least the highest estimated control rod worth is available for trip insertion from OPERABLE control rod(s).

APPLICABILITY: MODE 2.

ACTION:

- a. With any full length control rod not fully inserted and with less than the above reactivity equivalent available for trip insertion, immediately initiate and continue boration at greater than or equal to 7000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.
- b. With all full length control rods fully inserted and the reactor subcritical by less than the above reactivity equivalent, immediately initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7000 ppm boron or its equivalent until the SHUTDOWN MARGIN required by Specification 3.1.1.1 is restored.

SURVEILLANCE REQUIREMENTS

- 4.10.1.1 The position of each full length rod either partially or fully withdrawn shall be determined at least once per 2 hours.
- 4.10.1.2 Each full length rod not fully inserted shall be demonstrated capable of full insertion when tripped from at least the 50% withdrawn position within 7 days prior to reducing the SHUTDOWN MARGIN to less than the limits of Specification 3.1.1.1.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 112 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 103 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 January 9, 1995, the Southern Nuclear Operating Company, Inc. (the licensee), submitted a request for changes to the Joseph M. Farley Nuclear Plant, Units 1 and 2 (Farley), Technical Specifications (TS). The requested changes implement recommended changes from Generic Letter (GL) 93-05, "Line Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993. Specifically, the amendments implement TS changes corresponding to the following GL 93-05 line-item improvement issues and numbers: Control Rod Movement Test for Pressurized Water Reactors (4.2.1); Radiation Monitors (5.14); Surveillance of Boron Concentration in the Accumulator/Safety Injection/Core Flood Tank (7.1); Containment Spray System (8.1); Hydrogen Recombiner (8.5); and Special Test Exemptions (12).

2.0 BACKGROUND

In NUREG-1366, "Improvements to Technical Surveillance Requirements," dated December 1992, the TS line-item improvements were identified by the NRC staff. The TS improvements were based on an NRC study of surveillance requirements (SR) and included information provided by licensee personnel that plan, manage and perform surveillances. The study included insights from a quantitative risk assessment of SR based on the standard TS for Westinghouse plants and the TS for the Edwin I. Hatch Nuclear Plant, Unit 2. The staff examined operational data from licensee event reports, the nuclear plant reliability data system (NPRDS), and other sources to assess the effect of TS SR on plant operation. The NRC staff evaluated the effect of longer surveillance intervals to reduce the possibility for plant transients, wear on equipment, personnel radiation exposure, and the burden on personnel resources. Finally, the NRC staff considered surveillance activities for which the safety benefits are small and not justified when compared to the effects of these activities on the safety of personnel and the plant. The NRC staff issued guidance on the proposed TS changes to all holders of operating licenses or construction permits for nuclear power reactors in GL 93-05.

3.0 EVALUATION

The licensee proposed to revise the TS SR for Farley as described below.

1. TS 4.1.3.1.2 - Change the frequency of the full length control rod operability test from every 31 days to quarterly.
2. TS Table 4.3.3 - Change the frequency of the channel functional test of the radiation monitors from monthly to quarterly.
3. TS 4.5.1.2.b - Remove the surveillance requirement for verification of the boron concentration in the accumulator after a volume increase of 1 percent or more provided makeup is from the refueling water storage tank (RWST), the concentration of boron in the RWST is within the accumulator boron concentration limit, and the RWST has not been diluted since the last RWST sample was verified to be within specification.
4. TS 4.6.2.1.d - Extend the surveillance interval of the containment spray nozzles from 5 years to 10 years.
5. TS 4.6.4.2 - Change the surveillance test interval for the hydrogen recombiner functional test from once every 6 months to once each refueling outage.
6. TS 4.10.1.2 - Elimination of one control rod drop test if the rod drop test has been performed no more than 7 days (instead of the 24 hours currently in the TS) before reducing shutdown margin.

The licensee has stated that the proposed TS modifications are consistent with the guidance provided in GL 93-05 and with the Farley design and operating experience. The guidance in GL 93-05 is based on the NRC staff findings and recommendations stated in NUREG-1366 which recognized the importance of testing to periodically verify that systems, structures, and components are available to perform their safety functions. This NUREG report also identified that testing is especially critical to reveal degradation and failures that occur while equipment is in standby mode and that while most testing at power is important, safety can be improved, equipment degradation decreased, and an unnecessary burden on personnel resources eliminated by reducing the amount of testing that the TS require during power operation. Based on the fact that the specific changes proposed conform to the line-item improvement guidance contained in GL 93-05, the NRC staff concludes that the proposed TS changes do not adversely affect plant safety and will result in a net benefit to the safe operation of the facility and, therefore, are acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes the Surveillance Requirements. The NRC staff has determined that the amendments involves 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 (60 FR 8756). 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.

5.0 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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