

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

October 15, 1998

SUBJECT: ISSUANCE OF AMENDMENTS - JOSEPH M. FARLEY NUCLEAR PLANT,
UNITS 1 AND 2 (TAC NOS. M98855 AND M98856)

Dear Mr. Morey:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 138 to Facility Operating License No. NPF-2 and Amendment No. 130 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 May 27, 1997.

The amendments change the Technical Specifications (TSs) to change the Applicable Modes for Source Range Nuclear Instrumentation (TS 3/4.3.1, "Reactor Trip System Instrumentation"), provide allowances for an exception to the requirements for the state of the power supplies for residual heat removal discharge to charging pump suction valves following Mode changes (TS 3/4.5.2, "ECCS Subsystems - $T_{avg} > 350^{\circ}\text{F}$ " and 3/4.5.3, "ECCS Subsystems - $T_{avg} < 350^{\circ}\text{F}$ ") and delete cycle-specific guidance concerning manual engineered safety feature functional input checks.

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:
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. 138 to NPF-2
2. Amendment No. 130 to NPF-8
3. Safety Evaluation

cc w/encls: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 15, 1998

Mr. D. N. Morey
Vice President - Farley Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
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The Nuclear Regulatory Commission has issued the enclosed Amendment No. 138 to Facility Operating License No. NPF-2 and Amendment No. 130 to Facility Operating License No. NPF-8 for the Joseph M. Farley Nuclear Plant, Units 1 and 2. The amendments change the Technical Specifications (TSs) in response to your submittal dated May 27, 1997.

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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 cursive script, reading "Jacob I. Zimmerman", is written over a horizontal line.

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. 138 to NPF-2
2. Amendment No. 130 to NPF-8
3. Safety Evaluation

cc w/encls: See next page

Joseph M. Farley Nuclear Plant

cc:

Mr. L. M. Stinson
General Manager -
Southern Nuclear Operating Company
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Houston County Commission
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Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
Atlanta Federal Center
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Atlanta, Georgia 30303

Resident Inspector
U.S. Nuclear Regulatory Commission
7388 N. State Highway 95
Columbia, Alabama 36319



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. 138
License No. NPF-2

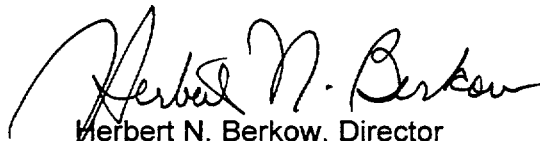
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated May 27, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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. 138 , 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 black ink, appearing to read "Herbert N. Berkow". The signature is fluid and cursive, with the first name "Herbert" being more prominent.

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: October 15, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 138

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

3/4 3-2
3/4 3-6
3/4 3-14
3/4 5-3
3/4 5-7

Insert

3/4 3-2
3/4 3-6
3/4 3-14
3/4 5-3
3/4 5-7

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

| <u>FUNCTIONAL UNIT</u> | <u>TOTAL NO. OF CHANNELS</u> | <u>CHANNELS TO TRIP</u> | <u>MINIMUM CHANNELS OPERABLE</u> | <u>APPLICABLE MODES</u> | <u>ACTION</u> |
|---|----------------------------------|-----------------------------|--|-----------------------------|---------------|
| 1. Manual Reactor Trip | 2 | 1 | 2 | 1, 2 3*, 4*, 5* | 12 13 |
| 2. Power Range, Neutron Flux | | | | | |
| A. High | 4 | 2 | 3 | 1, 2 | 2# |
| B. Low | 4 | 2 | 3 | 2 | 2# |
| 3. Power Range, Neutron Flux, High Positive Rate | 4 | 2 | 3 | 1, 2 | 2# |
| 4. Power Range, Neutron Flux, High Negative Rate | 4 | 2 | 3 | 1, 2 | 2# |
| 5. Intermediate Range, Neutron Flux | 2 | 1 | 2 | 1, 2, and * | 3#### |
| 6. Source Range, Neutron Flux | | | | | |
| A. Startup | 2 | 1 | 2 | 2##, and * | 4 |
| B. Shutdown | 2 | 0 | 1### | 3***, 4 and 5 | 5 |
| 7. Overtemperature ΔT | | | | | |
| Three Loop Operation | 3 | 2 | 2 | 1, 2 | 7# |
| Two Loop Operation | 3 | 1** | 2 | 1, 2 | 9 |
| 8. Overpower ΔT | | | | | |
| Three Loop Operation | 3 | 2 | 2 | 1, 2 | 7# |
| Two Loop Operation | 3 | 1** | 2 | 1, 2 | 9 |
| 9. Pressurizer Pressure-Low | 3 | 2 | 2 | 1 | 7# |
| 10. Pressurizer Pressure--High | 3 | 2 | 2 | 1, 2 | 7# |

TABLE 3.3-1 (Continued)

TABLE NOTATION

- * With the reactor trip system breakers in the closed position, the control rod drive system capable of rod withdrawal, and fuel in the reactor vessel.
- ** The channel(s) associated with the protective functions derived from the out of service Reactor Coolant Loop shall be placed in the tripped condition.
- *** Below the P-6 (Block of Source Range Reactor Trip) setpoint.
- # The provisions of Specification 3.0.4 are not applicable.
- ## High voltage to detector may be de-energized above P-6.
- ### Indication only.
- #### The provisions of Specification 3.0.3 are not applicable if THERMAL POWER level \geq 10% of RATED THERMAL POWER.

ACTION STATEMENTS

- ACTION 1 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement, be in HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.
- ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
 - a. The inoperable channel is placed in the tripped condition within 6 hours.
 - b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of the other channels per Specification 4.3.1.1.
 - c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux trip setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO from the remaining 3 detectors is monitored at least once per 12 hours per Specification 4.2.4.2.

TABLE 4.3-1 (Continued)

TABLE NOTATION

- * - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference is greater than 2 percent.
- (3) - Compare incore to excore axial flux difference every 31 EFPD. Recalibrate if the absolute difference is greater than or equal to 3 percent.
- (4) - Manual ESF functional input check every 18 months.
- (5) - Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below the P-6 (Block of Source Range Reactor Trip) setpoint. Upon reaching P-6 from MODE 2 the CHANNEL CHECK must be performed within 1 hour.
- (8) - Logic only, if not performed in previous 92 days.
- (9) - CHANNEL FUNCTIONAL TEST will consist of verifying that each channel indicates a turbine trip prior to latching the turbine and indicates no turbine trip prior to P-9.
- (10) - If not performed in the previous 31 days.
- (11) - Independently verify OPERABILITY of the undervoltage and shunt trip circuitry for the Manual Reactor Trip Function.
- (12) - Verify reactor trip breaker and reactor trip bypass breaker open upon actuation of each Main Control Board handswitch.
- (13) - Local manual shunt trip prior to placing breaker in service. Local manual undervoltage trip prior to placing breaker in service.
- (14) - Undervoltage trip via Reactor Protection System.
- (15) - Local manual shunt trip.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.2 ECCS SUBSYSTEMS - $T_{avg} > 350^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent Emergency Core Cooling System (ECCS) subsystems shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring suction to the containment sump during the recirculation phase of operation.*

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

* Upon entry into Mode 3 from Mode 4, the breaker or disconnect device to the valve operators for MOVs 8706A and 8706B may be locked open for up to 4 hours to allow for repositioning from Mode 4 requirements.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.3 ECCS SUBSYSTEMS - $T_{avg} < 350^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank upon being manually realigned and transferring suction to the containment sump during the recirculation phase of operation.*

APPLICABILITY: MODE 4.

ACTION:

- a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours if at least one RHR loop is OPERABLE.
- b. With no ECCS subsystem OPERABLE because of the inoperability of either the residual heat removal heat exchanger or residual heat removal pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System T_{avg} less than 350°F by use of alternate heat removal methods.
- c. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

* Upon entry into Mode 4 from Mode 3, the breaker or disconnect device to the valve operators for MOVs 8706A and 8706B may be closed for up to 4 hours to allow for repositioning from Mode 3 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. 130
License No. NPF-8

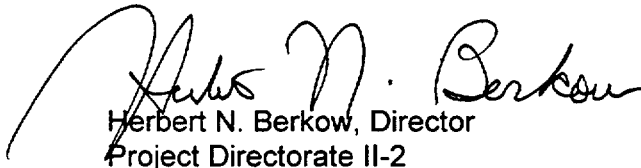
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern Nuclear Operating Company, Inc. (Southern Nuclear), dated May 27, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's 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. 130 , 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 dark ink, appearing to read "Herbert N. Berkow", is written over the printed name and title.

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: October 15, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 130

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 3-2
3/4 3-6
3/4 3-14
3/4 5-3
3/4 5-7

Insert

3/4 3-2
3/4 3-6
3/4 3-14
3/4 5-3
3/4 5-7

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

| <u>FUNCTIONAL UNIT</u> | <u>TOTAL NO. OF CHANNELS</u> | <u>CHANNELS TO TRIP</u> | <u>MINIMUM CHANNELS OPERABLE</u> | <u>APPLICABLE MODES</u> | <u>ACTION</u> |
|---|----------------------------------|-----------------------------|--|-----------------------------|---------------|
| 1. Manual Reactor Trip | 2 | 1 | 2 | 1, 2 3*, 4*, 5* | 12 13 |
| 2. Power Range, Neutron Flux | | | | | |
| A. High | 4 | 2 | 3 | 1, 2 | 2# |
| B. Low | 4 | 2 | 3 | 2 | 2# |
| 3. Power Range, Neutron Flux, High Positive Rate | 4 | 2 | 3 | 1, 2 | 2# |
| 4. Power Range, Neutron Flux, High Negative Rate | 4 | 2 | 3 | 1, 2 | 2# |
| 5. Intermediate Range, Neutron Flux | 2 | 1 | 2 | 1, 2 and * | 3#### |
| 6. Source Range, Neutron Flux | | | | | |
| A. Startup | 2 | 1 | 2 | 2##, and * | 4 |
| B. Shutdown | 2 | 0 | 1### | 3***, 4 and 5 | 5 |
| 7. Overtemperature ΔT | | | | | |
| Three Loop Operation | 3 | 2 | 2 | 1, 2 | 7# |
| Two Loop Operation | 3 | 1** | 2 | 1, 2 | 9 |
| 8. Overpower ΔT | | | | | |
| Three Loop Operation | 3 | 2 | 2 | 1, 2 | 7# |
| Two Loop Operation | 3 | 1** | 2 | 1, 2 | 9 |
| 9. Pressurizer Pressure-Low | 3 | 2 | 2 | 1 | 7# |
| 10. Pressurizer Pressure--High | 3 | 2 | 2 | 1, 2 | 7# |

FARLEY-UNIT 2

3/4 3-2

AMENDMENT NO. 130

TABLE 3.3-1 (Continued)

TABLE NOTATION

- * With the reactor trip system breakers in the closed position, the control rod drive system capable of rod withdrawal, and fuel in the reactor vessel.
- ** The channel(s) associated with the protective functions derived from the out of service Reactor Coolant Loop shall be placed in the tripped condition.
- *** Below the P-6 (Block of Source Range Reactor Trip) setpoint.
- # The provisions of Specification 3.0.4 are not applicable.
- ## High voltage to detector may be de-energized above P-6.
- ### Indication only.
- #### The provisions of Specification 3.0.3 are not applicable if THERMAL POWER level \geq 10% of RATED THERMAL POWER.

ACTION STATEMENTS

- ACTION 1 - With the number of OPERABLE channels one less than required by the Minimum Channels OPERABLE requirement, be in HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1.
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 - b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of the other channels per Specification 4.3.1.1.
 - c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux trip setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO from the remaining 3 detectors is monitored at least once per 12 hours per Specification 4.2.4.2.

TABLE 4.3-1 (Continued)

TABLE NOTATION

- * - With the reactor trip system breakers closed and the control rod drive system capable of rod withdrawal.
- (1) - If not performed in previous 7 days.
- (2) - Heat balance only, above 15% of RATED THERMAL POWER. Adjust channel if absolute difference is greater than 2 percent.
- (3) - Compare incore to excore axial flux difference every 31 EFPD. Recalibrate if the absolute difference is greater than or equal to 3 percent.
- (4) - Manual ESF functional input check every 18 months.
- (5) - Each train or logic channel shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (6) - Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (7) - Below the P-6 (Block of Source Range Reactor Trip) setpoint. Upon reaching P-6 from MODE 2 the CHANNEL CHECK must be performed within 1 hour.
- (8) - Logic only, if not performed in previous 92 days.
- (9) - CHANNEL FUNCTIONAL TEST will consist of verifying that each channel indicates a turbine trip prior to latching the turbine and indicates no turbine trip prior to P-9.
- (10) - If not performed in the previous 31 days.
- (11) - Independently verify OPERABILITY of the undervoltage and shunt trip circuitry for the Manual Reactor Trip Function.
- (12) - Verify reactor trip breaker and reactor trip bypass breaker open upon actuation of each Main Control Board handswitch.
- (13) - Local manual shunt trip prior to placing breaker in service. Local manual undervoltage trip prior to placing breaker in service.
- (14) - Undervoltage trip via Reactor Protection System.
- (15) - Local manual shunt trip.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.2 ECCS SUBSYSTEMS - $T_{avg} > 350^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent Emergency Core Cooling System (ECCS) subsystems shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring suction to the containment sump during the recirculation phase of operation.*

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

* Upon entry into Mode 3 from Mode 4, the breaker or disconnect device to the valve operators for MOVs 8706A and 8706B may be locked open for up to 4 hours to allow for repositioning from Mode 4 requirements.

EMERGENCY CORE COOLING SYSTEMS

3/4.5.3 ECCS SUBSYSTEMS - $T_{avg} < 350^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank upon being manually realigned and transferring suction to the containment sump during the recirculation phase of operation.*

APPLICABILITY: MODE 4.

ACTION:

- a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours if at least one RHR loop is OPERABLE.
- b. With no ECCS subsystem OPERABLE because of the inoperability of either the residual heat removal heat exchanger or residual heat removal pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System T_{avg} less than 350°F by use of alternate heat removal methods.
- c. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

* Upon entry into Mode 4 from Mode 3, the breaker or disconnect device to the valve operators for MOVs 8706A and 8706B may be closed for up to 4 hours to allow for repositioning from Mode 3 requirements.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. NPF-2
AND AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NO. NPF-8
SOUTHERN NUCLEAR OPERATING COMPANY, INC., ET AL.
JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated May 27, 1997, the Southern Nuclear Operating Company, Inc. (SNC, the licensee) et al., submitted a request for changes to the Joseph M. Farley Nuclear Plant (FNP), Units 1 and 2, Technical Specifications (TSs). The requested changes revise the TSs Applicable Modes for Source Range (SR) Nuclear Instrumentation (NI) (TS 3/4.3.1, "Reactor Trip System Instrumentation"), provide allowances for an exception to the requirements for the state of the power supplies for residual heat removal (RHR) discharge to charging pump suction valves following Mode changes (TS 3/4.5.2, "ECCS Subsystems - $T_{avg} > 350^{\circ}\text{F}$ " and 3/4.5.3, "ECCS Subsystems - $T_{avg} < 350^{\circ}\text{F}$ "), and delete cycle-specific guidance concerning manual engineered safety feature functional input checks.

2.0 EVALUATION

Current FNP TS 3/4.3.1 requires that the SR NI provide visual indication in operational Modes 3, 4, and 5. In Mode 3, with the plant power level above Permissive P-6, the SR NI is deenergized. A design feature of the plant is to automatically reenergize the SR NI when the power level is below Permissive P-6 (approximately 10^{-10} amps on the Intermediate Range Neutron Detector).

By procedure, FNP operators verify that the SR NI automatically reenergizes below Permissive P-6. The channel check for the source range detector cannot be performed with the power level above Permissive P-6 while the SR NIs are deenergized. Therefore, a revision to the existing TS note to allow time to perform the channel check after the automatic reenergization of the SR NI below Permissive P-6 is needed. The proposed revision incorporates such a change to the TSs. To be consistent with the existing TS action statement for an inoperable SR NI, SNC selected the time limit of 1 hour to perform the SR NI channel check. The staff considers this change acceptable since it is consistent with the current FNP TSs.

In Modes 1, 2, and 3, TS 3/4.5.2 requires that two independent emergency core cooling system subsystems be operable, with each subsystem comprised of an operable flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring

suction to the containment sump during the recirculation phase of operation. In order to allow transfer to the recirculation phase, the TSs require that the RHR discharge to charging pump suction valves be closed with power supplied to the valves to allow realignment. In Mode 4, TS 3/4.5.3 requires that the RHR discharge to charging pump suction valves be open with power removed from the valves to prevent possible overpressurization of the charging pump suction line piping.

In order to satisfy TS Surveillance Requirement 4.5.3.2, which specifies that the RHR discharge to charging pump suction valves be open with the power removed prior to entry into Mode 4 from Mode 3, the requirements of TS 3.5.2 would be violated. This conflict exists because the current TSs do not allow time between Modes 3 and 4 to open the valves and remove power from the valves, or to close the valves and restore power to the valves during the transition from Mode 4 to Mode 3. The proposed TS change adds notes to TS 3/4.5.2 and TS 3/4.5.3 allowing 4 hours after transitioning between Modes 3 and 4 to allow repositioning of the valves and to restore or remove power to the valve operators as required. This change corrects an inconsistency in the current FNP TSs, and is consistent with allowances provided in the Westinghouse Standard Technical Specifications, NUREG-1431, Revision 1, dated April 7, 1995, to address similar situations and is, therefore, acceptable.

In other administrative TS changes, the licensee proposed to delete the cycle-specific guidance concerning manual engineered safety feature functional input checks. Because the cycle-specific surveillance has been completed in Operating Cycle 14, the TS guidance is no longer needed nor applicable. The staff considers this editorial change acceptable.

3.0 STAFF CONCLUSION

The staff has reviewed the licensee's proposed TS changes to resolve compliance issues related to the SR NI and RHR discharge to charging pump suction valves. Based on its review, the staff concludes that the proposed TS changes are acceptable.

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 a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 33134, June 18, 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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