



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

LOUISIANA POWER AND LIGHT COMPANY

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 59  
License No. NPF-38

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Louisiana Power and Light Company (the licensee) dated October 5, 1989 as supplemented by letters dated October 23 and November 1, 1989, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, 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-38 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 59, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick G. Hedgon, Director  
Project Directorate IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 14, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 59  
TO FACILITY OPERATING LICENSE NO. NPF-38  
DOCKET NO. 50-382

Replace the following pages of the Apperidix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf page is also provided to maintain document completeness.

Remove

3/4 1-15  
3/4 1-16

Insert

3/4 1-15  
3/4 1-16

## REACTIVITY CONTROL SYSTEMS

### BORON DILUTION

#### LIMITING CONDITION FOR OPERATION

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3.1.2.9 Boron concentration shall be verified consistent with SHUTDOWN MARGIN requirements of Specifications 3.1.1.1, 3.1.1.2, and 3.9.1. Boron dilution events shall be precluded by either "a" or "b" below.

- a. 1. Two boron dilution alarms (startup channel high neutron flux) shall be OPERABLE with the alarms set in accordance with Specification 4.1.2.9.5

and

2. i. If the plant is in MODE 4, then remove power to at least one charging pump.  
ii. If the plant is in MODE 5 with  $k_{eff} \leq 0.97$ , then remove power to at least one charging pump.  
iii. If the plant is in MODE 5 with  $k_{eff} > 0.97$ , then remove power to at least two charging pumps.  
iv. If the plant is in MODE 6, then remove power to at least two charging pumps.

OR

- b. 1. The primary makeup water flow path to the reactor coolant system shall be isolated

and

2. Do not operate the plant in the configurations prohibited by Tables 3.1-1 through 3.1-5 for the current MODE.

APPLICABILITY: MODES 3\*, 4, 5, and 6.

\*While any shutdown CEA is less than 145 inches withdrawn.

ACTION:

- a. With the boron concentration not consistent with required SHUTDOWN MARGIN, initiate emergency boration.  
b. With one boron dilution alarm inoperable and the primary makeup water flow path to the reactor coolant system not isolated, determine reactor coolant system boron concentration within one hour and at least at the monitoring frequency specified in Tables 3.1-1 through 3.1-5.  
c. With both boron dilution alarms inoperable and the primary makeup water flow path to the reactor coolant system not isolated, determine the reactor coolant system boron concentration by two independent means within one hour and at least at the monitoring frequency specified in Tables 3.1-1 through 3.1-5; otherwise, immediately suspend all operations involving positive reactivity changes or CORE ALTERATIONS (if applicable).

## REACTIVITY CONTROL SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

#### ACTION: (Continued)

- d. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.1.2.9.1 The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 from MODE 2.

4.1.2.9.2 Each required boron dilution alarm shall be demonstrated OPERABLE by the performance of a CHANNEL CHECK at least once per 12 hours, a CHANNEL FUNCTIONAL TEST at least once per 31 days, and a CHANNEL CALIBRATION at least once per 18 months.

4.1.2.9.3 If the primary makeup water flow path to the Reactor Coolant System is isolated to fulfill 3.1.2.9.b, the required primary makeup water flow path to the Reactor Coolant System shall be verified to be isolated by either locked closed manual valves, deactivated automatic valves secured in the isolation position, or by power being removed from all charging pumps, at least once per 24 hours.

4.1.2.9.4 The requirements of Specification 3.1.2.9.a.2 or 3.1.2.9.b.2 shall be verified at least once per 24 hours.

4.1.2.9.5 Each required boron dilution alarm setpoint shall be adjusted to less than or equal to twice (2x) the existing neutron flux (cps) at the following frequencies:

- a. At least once per 5 hours if the reactor has been shut down less than 25 hours;
- b. At least once per 24 hours if the reactor has been shut down greater than or equal to 25 hours but less than 7 days;
- c. At least once per 7 days if the reactor has been shut down greater than or equal to 7 days.

## REACTIVITY CONTROL SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

#### ACTION: (Continued)

- d. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

### SURVEILLANCE REQUIREMENTS

4.1.2.9.1 The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 from MODE 2.

4.1.2.9.2 Each required boron dilution alarm shall be demonstrated OPERABLE by the performance of a CHANNEL CHECK at least once per 12 hours, a CHANNEL FUNCTIONAL TEST at least once per 31 days, and a CHANNEL CALIBRATION at least once per 18 months.

4.1.2.9.3 If the primary makeup water flow path to the Reactor Coolant System is isolated to fulfill 3.1.2.9.b, the required primary makeup water flow path to the Reactor Coolant System shall be verified to be isolated by either locked closed manual valves, deactivated automatic valves secured in the isolation position, or by power being removed from all charging pumps, at least once per 24 hours.

4.1.2.9.4 The requirements of Specification 3.1.2.9.a.2 or 3.1.2.9.b.2 shall be verified at least once per 24 hours.

4.1.2.9.5 Each required boron dilution alarm setpoint shall be adjusted to less than or equal to twice (2x) the existing neutron flux (cps) at the following frequencies:

- a. At least once per 5 hours if the reactor has been shut down less than 25 hours;
- b. At least once per 24 hours if the reactor has been shut down greater than or equal to 25 hours but less than 7 days;
- c. At least once per 7 days if the reactor has been shut down greater than or equal to 7 days.