

July 31, 1987

*JCR 014*

Docket No. 50-382

Mr. J. G. Dewease  
Senior Vice President - Nuclear Operations  
Louisiana Power and Light Company  
317 Baronne Street, Mail Unit 17  
New Orleans, Louisiana 70160

Dear Mr. Dewease:

SUBJECT: ISSUANCE OF AMENDMENT NO. 21 TO FACILITY OPERATING LICENSE  
NPF-38 - WATERFORD STEAM ELECTRIC STATION, UNIT 3  
(TAC NO. 64890)

The Commission has issued the enclosed Amendment No. 21 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. The amendment consists of changes to the Technical Specifications in response to your application dated February 23, 1987.

The amendment changes the Appendix A Technical Specifications by revising the channel calibration frequency for the chlorine detection system from at least once every 18 months to at least once every 31 days.

A copy of the Safety Evaluation supporting the amendment is also enclosed. Notice of Issuance will be included in the Commission's next Bi-weekly Federal Register notice.

Sincerely,

*15*

James H. Wilson, Project Manager  
Project Directorate - IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 21 to NPF-38
2. Safety Evaluation

cc w/enclosures:  
See next page

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Louisiana Power & Light Company

Waterford 3

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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. 21  
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 February 23, 1987, 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.

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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. 21, 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

*Jose A. Calvo*

Jose A. Calvo, 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: July 31, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 21  
TO FACILITY OPERATING LICENSE NO. NPF-38  
DOCKET NO. 50-382

Replace the following page of the Appendix A Technical Specifications with the attached page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

<u>Remove</u>	<u>Insert</u>
3/4 3-47	3/4 3-47

## INSTRUMENTATION

### CHEMICAL DETECTION SYSTEMS

#### CHLORINE DETECTION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.3.3.7.1 Two independent chlorine detection systems, with their alarm/trip setpoints adjusted to actuate at a chlorine concentration of less than or equal to 3 ppm, shall be OPERABLE.

APPLICABILITY: All MODES.

#### ACTION:

- a. With one chlorine detection system inoperable, restore the inoperable detection system to OPERABLE status within 7 days or within the next 6 hours initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.
- b. With no chlorine detection system OPERABLE, within 1 hour initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.
- c. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.7.1 Each chlorine detection system shall be demonstrated OPERABLE by performance of a CHANNEL CHECK at least once per 12 hours and a CHANNEL CALIBRATION at least once per 31 days.

## INSTRUMENTATION

### CHEMICAL DETECTION SYSTEMS

#### AMMONIA DETECTION SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.3.3.7.2 Two independent ammonia detection systems, with their alarm/trip setpoints adjusted to actuate at an ammonia concentration of less than or equal to 50 ppm, shall be OPERABLE.

APPLICABILITY: All MODES.

#### ACTION:

- a. With one ammonia detection system inoperable, restore the inoperable detection system to OPERABLE status within 7 days or within the next 6 hours initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.
- b. With no ammonia detection system OPERABLE, within 1 hour initiate and maintain operation of the control room ventilation system in the recirculation mode of operation.
- c. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.3.3.7.2 Each ammonia detection system shall be demonstrated OPERABLE by 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.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 21 TO

FACILITY OPERATING LICENSE NO. NPF-38

LOUISIANA POWER AND LIGHT COMPANY

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1.0 INTRODUCTION

By application dated February 23, 1987, Louisiana Power and Light Company (LP&L or the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-38) for Waterford Steam Electric Station, Unit 3. The proposed changes would revise the calibration frequency for the chlorine detection system from at least once every 18 months to at least once every 31 days and delete the requirement for a separate channel functional test every 31 days.

2.0 DISCUSSION

Technical Specification 4.3.3.7.1, "Chlorine Detection System", specifies surveillance requirements to ensure operability of the chlorine detection system. Because the chlorine detection system originally installed at Waterford 3 and used during the first cycle has proved to be unreliable, LP&L has implemented a station modification to install a new, more reliable chlorine detection system to replace the original one. The new system is of a different design and, therefore, has a different channel calibration requirement. The proposed change to Technical Specification 4.3.3.7.1 would require a channel calibration at least once per 31 days, rather than at least once per 18 months, in accordance with the manufacturer's recommendation based on test experience. Also, because the definitions in Technical Specification 1.4 require that a channel functional test be included in a channel calibration, the requirement to perform a separate channel functional test every 31 days is redundant, and therefore is to be deleted.

3.0 EVALUATION

The channel calibration frequency requirement is based on the manufacturer's recommendation and testing experience. The proposed frequency of at least once every 31 days is intended to assure at least the same level of reliability and accuracy as for the previously installed



chlorine detection system. Because the proposed changes involve surveillance requirements intended to assure operability of equipment designed to provide at least the same level of protection of control room personnel, there will be no increase in the probability or consequences of any accident previously evaluated, nor do they create any new failure or accident paths and the possibility of a new or different kind of accident from any accident previously evaluated cannot be created. Because the manufacturer's recommended 31-day channel calibration frequency establishes the calibration and functionality of the system at least as often as the present Technical Specification does, these proposed changes will not involve a significant reduction in a margin of safety.

The staff concludes that the proposed change in calibration frequency from at least once every 18 months to at least once every 31 days and deletion of the redundant requirement for a separate channel functional test is acceptable.

#### 4.0 CONTACT WITH STATE OFFICIAL

The NRC staff has advised the Administrator, Nuclear Energy Division, Office of Environmental Affairs, State of Louisiana of the proposed determination of no significant hazards consideration. No comments were received.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in installation or use of a facility component located within the restricted area. The staff has determined that the amendment involves no significant increase in the amounts 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. Accordingly, the amendment meets 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 this amendment.

#### 6.0 CONCLUSION

Based upon its evaluation of the proposed changes to the Waterford 3 Technical Specifications, the staff has concluded that: there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public. The staff, therefore, concludes that the proposed changes are acceptable, and are hereby incorporated into the Waterford 3 Technical Specifications.

Dated: July 31, 1987

Principal Contributor: J. Wilson