

March 27, 1989

Docket No. 50-382

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Mr. J. G. Dewease  
Senior Vice President - Nuclear Operations  
Louisiana Power and Light Company  
317 Baronne Street, Mail Unit 17  
New Orleans, Louisiana 70112

Dear Mr. Dewease:

SUBJECT: ISSUANCE OF AMENDMENT NO. 54 TO FACILITY OPERATING LICENSE  
NPF-38 - WATERFORD STEAM ELECTRIC STATION, UNIT 3  
(TAC NO. 71447)

The Commission has issued the enclosed Amendment No. 54 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. The amendment consists of changes to the Technical Specifications (TSS) in response to your application dated December 6, 1988, as supplemented by letter dated January 5, 1989.

The amendment changes the Appendix A Technical Specifications by deleting requirements for overcurrent protection on disconnected motor-operated-valve actuator compartment-heater breakers from Table 3.8-1.

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

Sincerely,

/s/

David L. Wigginton, Project Manager  
Project Directorate - IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

**Enclosures:**

- 1. Amendment No. 54 to NPF-38
- 2. Safety Evaluation

cc w/enclosures:  
See next page

LTR NAME: W3 AMENDMENT TAC 71447

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PD4/PM *DR*  
DWigginton:sr  
03/15/88

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

March 27, 1989

Docket No. 50-382

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Senior Vice President - Nuclear Operations  
Louisiana Power and Light Company  
317 Baronne Street, Mail Unit 17  
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A copy of the Safety Evaluation supporting the amendment is also enclosed. Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script, appearing to read "D. Wigginton".

David L. Wigginton, Project Manager  
Project Directorate - IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 54 to NPF-38
2. Safety Evaluation

cc w/enclosures:  
See next page

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Louisiana Power & Light Company

Waterford 3

cc:

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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. 54  
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 December 6, 1988, as supplemented by letter dated January 5, 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.

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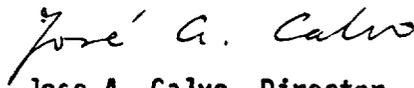
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-38 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 54, 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, 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: March 27, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 54

TO FACILITY OPERATING LICENSE NO. NPF-38

DOCKET NO. 50-382

Replace the following pages of the Appendix 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 pages are also provided to maintain document completeness.

Remove

3/4 8-47  
3/4 8-48  
3/4 8-49  
3/4 8-50

Insert

3/4 8-47  
3/4 8-48  
3/4 8-49  
3/4 8-50

Table 3.8-1 CONTAINMENT PENETRATION CONDUCTOR OVER-CURRENT PROTECTIVE DEVICES

OVER-CURRENT PROTECTIVE DEVICES					WITHIN EACH VOLTAGE LEVEL (ROMAN)				MODES FOR WHICH SURV IS REQUIR'D
BREAKER PROTECTION	DRAWING	IDENTIFYING NUMBER OR DESCRIPTION	TYPE	TIME CURRENT CHARACTERISTIC	FUNCT TEST 4.8.4.1 a.2	CHAN CALIB 4.8.4.1 a.1.a	INTEG FUNCT TEST 4.8.4.1.a.1.b	INSP & PREV MAINT 4.8.4.1.b	
<b>79 SOLENOID VALVE 1CH-E2505B (CVC-216B)</b>									
a Primary	289-148	Circuit 31	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-148A	Circuit 31	Fuse FRN		NA	NA	NA	NA	1, 2, 3, 4
<b>80 SOLENOID VALVE 7WM-E677 (SP-102B)*</b>									
a Primary	5817-6368	CB 2	Breaker CH	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	5817-6368	Circuit H4	Breaker QO	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
* 15a breakers on Skid #4 (5817-6368).									
<b>81 SOLENOID VALVES 2RC-2557A (RC-3184), 2RC-2559A (RC-1015), 2RC-2561A (RC-3186)</b>									
a Primary	289-212	Circuit 2	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-120A	F2	Fuse TRS		NA	NA	NA	NA	1, 2, 3, 4
<b>82 SOLENOID VALVES 2RC-2558B (RC-3183), 2RC-2560B (RC-1014), 2RC-2562B (RC-1017)</b>									
a Primary	289-213	Circuit 2	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-121A	F1	Fuse TRS		NA	NA	NA	NA	1, 2, 3, 4
<b>83 SPACE HEATER 1SI-V1505TK1A (SI-331A)</b>									
<b>THE SPACE HEATER WAS DISCONNECTED AT THE MCC AND PDP. BOTH THE BREAKER AND FUSE ARE SPARED.</b>									
<b>84 LIMIT SWITCH &amp; INDICATING LIGHTS 1SI-V1505TK1A (SI-331A)</b>									
a Primary	289-147	Circuit 6	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-147A	Circuit 6	Fuse FRN		NA	NA	NA	NA	1, 2, 3, 4

Table 3.8-1 CONTAINMENT PENETRATION CONDUCTOR OVER-CURRENT PROTECTIVE DEVICES

OVER-CURRENT PROTECTIVE DEVICES					WITHIN	EACH VOLTAGE LEVEL (ROMAN)			MODES
BREAKER PROTECTION	DRAWING	IDENTIFYING NUMBER OR DESCRIPTION	TYPE	TIME CURRENT CHARACTERISTIC	FUNCT TEST 4.8.4.1 a.2	CHAN CALIB 4.8.4.1 a.1.a	INTEG FUNCT TEST 4.8.4.1.a.1.b	INSP & PREV MAINT 4.8.4.1.b	FOR WHICH SURV IS REQUIR'D
<b>85 SPACE HEATER 1SI-V1507TK2A (SI-332A)</b>									
<i>THE SPACE HEATER WAS DISCONNECTED AT THE MCC AND PDP. BOTH THE BREAKER AND FUSE ARE SPARED.</i>									
<b>86 LIMIT SWITCH &amp; INDICATING LIGHTS 1SI-V1507TK2A (SI-332A)</b>									
a Primary	289-147	Circuit 8	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-147A	Circuit 8	Fuse FRN		NA	NA	NA		1, 2, 3, 4
<b>87 RCP 1A SPEED SENSOR</b>									
a Primary	289-126	Circuit 5	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-126A	F6	Fuse ATM		NA	NA	NA		1, 2, 3, 4
<b>88 RCP 2A SPEED SENSOR</b>									
a Primary	289-126	Circuit 7	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-126A	F5	Fuse ATM		NA	NA	NA		1, 2, 3, 4
<b>89 RADIATION REMOVAL UNIT E-13 (3A) THERMISTOR</b>									
a Primary	289-133	Circuit 24	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-133A	F6	Fuse TRS		NA	NA	NA		1, 2, 3, 4
<b>90 CONTAINMENT COOLING UNIT CONDENSING POT FLOW DETECTOR</b>									
a Primary	289-149	Circuit 3	Breaker TEB	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	424-829	F1	Fuse ATM		NA	NA	NA		1, 2, 3, 4

Table 3.8-1 CONTAINMENT PENETRATION CONDUCTOR OVER-CURRENT PROTECTIVE DEVICES

OVER-CURRENT PROTECTIVE DEVICES					WITHIN EACH VOLTAGE LEVEL (ROMAN)				MODES FOR WHICH SURV IS REQUIR'D
BREAKER PROTECTION]	DRAWING NUMBER	IDENTIFYING NUMBER OR DESCRIPTION	TYPE	TIME CURRENT CHARACTERISTIC	FUNCT TEST 4.8.4.1 a.2	CHAN CALIB 4.8.4.1 a.1.a	INTEG FUNCT TEST 4.8.4.1.a.1.b	INSP & PREV MAINT 4.8.4.1.b	
<b>91 PRESSURIZER SPRAY VALVES 1RC-F1501A (RC-301A) &amp; 1RC-F1502B (RC-301B)</b>									
a Primary	289-150	Circuit 4	Breaker TEB	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	424-296	F1	Fuse ATM		NA	NA	NA	NA	1, 2, 3, 4
<b>92 MOVALBLE INCORE DETECTOR DRIVE MACHINE #1 CONTROL</b>									
a Primary	289-126	Circuit 32	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	424-158	Fuse	FRN		NA	NA	NA	NA	1, 2, 3, 4
<b>93 MOVALBLE INCORE DETECTOR SWITCHING DEVICE</b>									
a Primary	289-136	Circuit 7	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	424-158	Fuse	ABU		NA	NA	NA	NA	1, 2, 3, 4
<b>94 REFUELING MACHINE CONTROL</b>									
a Primary	5817-4241	Fuse	TRS		NA	NA	NA	NA	1, 2, 3, 4
b Backup	5817-4241	Fuse	KTN/KTNR		NA	NA	NA	NA	1, 2, 3, 4
<b>95 SPACE HEATER 1SI-V1506TK1B (SI-331B)</b>									
<i>THE SPACE HEATER WAS DISCONNECTED AT THE MCC AND PDP. BOTH THE BREAKER AND FUSE ARE SPARED.</i>									
<b>96 LIMIT SWITCH &amp; INDICATING LIGHTS 1SI-V1506TK1B (SI-331B)</b>									
a Primary	289-148	Circuit 6	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-148A	Circuit 6	Fuse FRN		NA	NA	NA	NA	1, 2, 3, 4

Table 3.8-1 CONTAINMENT PENETRATION CONDUCTOR OVER-CURRENT PROTECTIVE DEVICES

OVER-CURRENT PROTECTIVE DEVICES					WITHIN EACH VOLTAGE LEVEL (ROMAN)				MODES FOR WHICH SURV IS REQUIR'D
BREAKER PROTECTION	DRAWING	IDENTIFYING NUMBER OR DESCRIPTION	TYPE	TIME CURRENT CHARACTERISTIC	FUNCT TEST	CHAN CALIB	INTEG FUNCT TEST	INSP & PREV MAINT	
					4.8.4.1	4.8.4.1	4.8.4.1.a.1.b	4.8.4.1.b	
<b>97 SPACE HEATER 1SI-V1608TK2B (SI-332B)</b>									
<b><i>THE SPACE HEATER WAS DISCONNECTED AT THE MCC AND PDP. BOTH THE BREAKER AND FUSE ARE SPARED.</i></b>									
<b>98 LIMIT SWITCH &amp; INDICATING LIGHTS 1SI-V1608TK2B (SI-332B)</b>									
a Primary	289-148	Circuit 8	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-148A	Circuit 8	Fuse FRN		NA	NA	NA	NA	1, 2, 3, 4
<b>99 RCP 1B SPEED SENSOR</b>									
a Primary	289-127	Circuit 5	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-127A	F6	Fuse ATM		NA	NA	NA	NA	1, 2, 3, 4
<b>100 RCP 2B SPEED SENSOR</b>									
a Primary	289-127	Circuit 7	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-127A	F5	Fuse ATM		NA	NA	NA	NA	1, 2, 3, 4
<b>101 RADIATION REMOVAL UNIT E-13 (3B) THERMISTOR</b>									
a Primary	289-134	Circuit 24	Breaker EE	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-134A	F1	Fuse ATM		NA	NA	NA	NA	1, 2, 3, 4
<b>102 CONTAINMENT AIR LOCKS DOOR POSITION INDICATOR</b>									
a Primary	289-147	Circuit 33	Breaker CD	Note VI.2	10% of Type per R	NA	NA	≤ every 60 M	1, 2, 3, 4
b Backup	289-147A	Circuit 33	Fuse FRN		NA	NA	NA	NA	1, 2, 3, 4



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 54 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

Information Notice 86-71 identified burning of internal wires located in the operator limit switch compartment of motor-operated-valves. These wires were located near or in contact with the installed limit switch compartment electric heater element or heater bracket. Ebasco's specifications require heaters in both the motor and limit/torque switch and terminal block compartments. The heaters are useful during long term storage of the equipment during construction of the plant or when exposed to uncontrolled environments after installation or during long periods of shutdown. By letter dated December 6, 1988, Louisiana Power and Light Company requested a revision to Technical Specification Table 3.8-1 to delete the surveillance requirements for motor operated valve actuator compartment heater circuit breakers.

2.0 EVALUATION

Louisiana Power and Light Company has proposed changes to Technical Specifications Table 3.8-1 to delete the surveillance requirements for space heaters located in the actuator compartment of four safety injection tank isolation valves; SI-331A, SI-331B, SI-332A, and SI-332B. The motor operated valve actuators used for Class 1E applications are environmentally qualified. The licensee states that the motor space heaters are not seismically qualified as they are not considered essential for the actuators safety function. The motor heaters might fail in the short circuit mode, possibly resulting in the deenergizing of the control circuit. The licensee's December 6, 1988 letter indicated that power was disconnected at the space heaters locally leaving the wires energized. The staff raised a concern centered on a live-circuit coursing through the electrical containment penetration and, thereby, compromising its integrity through failure of the live circuits. In a letter dated January 5, 1989, the licensee provided the clarification that the disconnect was actually at the power source negating our concerns with regard to live-circuit failures. Accordingly, the licensee has proposed changes to Technical Specifications to delete motor operated valve actuator compartment heater circuit breakers from Table 3.8-1.

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We have reviewed the licensee's submittal and have found that Limitorque motor operators come with internal compartment heaters to maintain operator reliability during long storage times and infrequent maintenance while in storage. The heaters play no functional role in Limitorque actuator operation. The change of disconnecting the actuator heater circuits at the distribution panel and of deleting the surveillance requirements for actuator compartment heaters circuit breakers from Table 3.8-1 has no safety significance and is, therefore, acceptable.

The licensee's letter dated January 5, 1989 provided a clarification of the point at which power was removed from the circuits. It does not represent a change from the proposed license amendment or no significant hazards consideration as noticed in the Federal Register on January 11, 1989. The clarification does remove a concern on circuit failures and is a positive safety enhancement for valve operation.

### 3.0 SUMMARY

We have reviewed the licensee's submittal and have concluded that the proposed circuit disconnections and the change in Technical Specification Table 3.8-1 to delete the surveillance requirements for actuator compartment heaters have no safety significance in the performance of the actuator and is, therefore, 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 as defined in 10 CFR Part 20. 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. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. 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: March 27, 1989

Principal Contributor: N. Trehan