



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20545

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 117  
License No. DPR-71

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee) dated March 15, 1986 and December 17, 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 1;
  - 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. DPR-71 is hereby amended to read as follows:

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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 117, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Elinor G. Adensam, Director  
Project Directorate II-1  
Division of Reactor Projects I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 4, 1988

LA:PD21:DRPR  
PAnderson  
2/2/88

EMF/DRPR  
CCheng  
3/3/88

PM:PD21:DRPR  
ESylvester  
3/9/88

OGC-B  
3/4/88  
5/13/88

D:PD21:DRPR  
EAdensam  
4/14/88

ATTACHMENT TO LICENSE AMENDMENT NO. 117

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

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 4-13

3/4 4-17

Insert Pages

3/4 4-13

3/4 4-17

## REACTOR COOLANT SYSTEM

### 3/4.4.6 PRESSURE/TEMPERATURE LIMITS

## REACTOR COOLANT SYSTEM

### LIMITING CONDITION FOR OPERATION

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3.4.6.1 The reactor vessel shell temperature and reactor vessel pressure shall be limited in accordance with the limit lines shown on (1) Figure 3.4.6.1-1 for heatup by non-nuclear means, cooldown following a nuclear shutdown, and low power PHYSICS TESTS; (2) Figure 3.4.6.1-2 for operations with a critical core other than low power PHYSICS TESTS or when the reactor vessel is vented; and (3) Figure 3.4.6.1-3 for inservice hydrostatic or leak testing, with:

- a. A maximum heatup of 100°F in any one-hour period, and
- b. A maximum cooldown of 100°F in any one-hour period.

APPLICABILITY: At all times.

#### ACTION:

With any of the above limits exceeded, restore the temperature and/or pressure to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the fracture toughness properties of the reactor coolant system; determine that the system remains acceptable for continued operations or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

### SURVEILLANCE REQUIREMENTS

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4.4.6.1.1 The reactor vessel shell temperature and reactor vessel pressure shall be determined to be within the limits at least once per 30 minutes during system heatup, cooldown, and inservice leak and hydrostatic testing operations.

4.4.6.1.2 The reactor vessel shell temperature and reactor vessel pressure shall be determined to be to the right of the criticality limit line of Figure 3.4.6.1-2 within 15 minutes prior to the withdrawal of control rods to bring the reactor to criticality.

4.4.6.1.3 The reactor material irradiation surveillance specimens shall be removed and examined to determine changes in material properties at the intervals shown in Table 4.4.6.1.3-1. The results of these examinations shall be used to update Figures 3.4.6.1-1, 3.4.6.1-2, and 3.4.6.1-3. The cumulative effective full power years shall be determined at least once per 18 months.

TABLE 4.4.6.1.3-1

REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM CAPSULE WITHDRAWAL SCHEDULE

<u>CAPSULE NUMBER</u>	<u>VESSEL LOCATTON</u>	<u>WITHDRAWAL TIME<sup>(a)</sup> (EFPY)</u>
3	300*	8
2	120*	(b)
1	30*	(b)

- (a) The specimen shall be withdrawn during refueling outage immediately preceding or following the specified withdrawal time.
- (b) The schedule for removal of the second and third capsule shall be proposed after the results of the first capsule have been evaluated.



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NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 147  
License No. DPR-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee) dated March 15, 1986 and December 17, 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.
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. DPR-62 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 147, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

- 3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

Elinor G. Adensam, Director  
Project Directorate II-1  
Division of Reactor Projects I/II

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 4, 1988

L^: PD21: DRPR  
PAnderson  
2/27/88

EM: PD21: DRPR  
CCheng  
3/3/88

PM: PD21: DRPR  
ESylvester  
3/9/88

OGC-B  
3/21/88

D: PD21: DRPR  
EAdensam  
4/14/88

ATTACHMENT TO LICENSE AMENDMENT NO. 147

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

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 4-13

3/4 4-17

Insert Pages

3/4 4-13

3/4 4-17



TABLE 4.4.6.1.3-1

REACTOR VESSEL MATERIAL SURVEILLANCE PROGRAM CAPSULE WITHDRAWAL SCHEDULE

<u>CAPSULE NUMBER</u>	<u>VESSEL LOCATION</u>	<u>WITHDRAWAL TIME<sup>(a)</sup> (EFPY)</u>
3	300°	10
2	120°	(b)
1	30°	(b)

- (a) The specimen shall be withdrawn during refueling outage immediately preceding or following the specified withdrawal time.
- (b) The schedule for removal of the second and third capsule shall be proposed after the results of the first capsule have been evaluated.

## REACTOR COOLANT SYSTEM

### 3/4.4.6 PRESSURE/TEMPERATURE LIMITS

## REACTOR COOLANT SYSTEM

### LIMITING CONDITION FOR OPERATION

3.4.6.1 The reactor vessel shell temperature and reactor vessel pressure shall be limited in accordance with the limit lines shown on (1) Figure 3.4.6.1-1 for heatup by non-nuclear means, cooldown following a nuclear shutdown, and low power PHYSICS TESTS; (2) Figure 3.4.6.1-2 for operations with a critical core other than low power PHYSICS TESTS or when the reactor vessel is vented; and (3) Figure 3.4.6.1-3 for inservice hydrostatic or leak testing, with:

- a. A maximum heatup of 100°F in any one-hour period, and
- b. A maximum cooldown of 100°F in any one-hour period.

APPLICABILITY: At all times.

#### ACTION:

With any of the above limits exceeded, restore the temperature and/or pressure to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the fracture toughness properties of the reactor coolant system; determine that the system remains acceptable for continued operations, or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

### SURVEILLANCE REQUIREMENTS

4.4.6.1.1 The reactor vessel shell temperature and reactor vessel pressure shall be determined to be within the limits at least once per 30 minutes during system heatup, cooldown, and inservice leak and hydrostatic testing operations.

4.4.6.1.2 The reactor vessel shell temperature and reactor vessel pressure shall be determined to be to the right of the criticality limit line of Figure 3.4.6.1-2 within 15 minutes prior to the withdrawal of control rods to bring the reactor to criticality.

4.4.6.1.3 The reactor material irradiation surveillance specimens shall be removed and examined to determine changes in material properties at the intervals shown in Table 4.4.6.1.3-1. The results of these examinations shall be used to update Figures 3.4.6.1-1, 3.4.6.1-2, and 3.4.6.1.3. The cumulative effective full power years shall be determined at least once per 18 months.