

April 4, 1986

Dockets Nos.: 50-325/324

Mr. E. E. Utley
Senior Executive Vice President
Power Supply and Engineering & Construction
Carolina Power & Light Company
P. O. Box 1551
Raleigh, North Carolina 27602

Dear Mr. Utley:

By letter dated March 27, 1986, we transmitted to you Amendment Nos. 125 and 63 relating to surveillance requirements for the suppression pool cooling made of the Residual Heat Removal System.

The correct Amendment Numbers are 97 and 122. We are enclosing a complete corrected copy of the Amendments. We are sorry for any inconvenience this error may have created.

Sincerely,

Original signed by

Ernest Sylvester, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosure
As stated

cc w/enclosures:
See next page

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March 27, 1986

Docket Nos. 50-325/324

Mr. E. E. Utley
Senior Executive Vice President
Power Supply and Engineering & Construction
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Utley:

The Commission has issued the enclosed Amendment Nos. 125 and 63 to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your submittal of August 12, 1985.

The amendments change the Technical Specifications relating to the surveillance requirements for the suppression pool cooling mode of the Residual Heat Removal System.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Ernest D. Sylvester, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosures:

1. Amendment No. 125 to License No. DPR-71
2. Amendment No. 63 to License No. DPR-62
3. Safety Evaluation

cc w/enclosures:
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Mr. E. E. Utley
Carolina Power & Light Company

Brunswick Steam Electric Plant
Units 1 and 2

cc:

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Board of Commissioners
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Resident Inspector
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Regional Administrator, Region II
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Mr. Dayne H. Brown, Chief
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Post Office Box 12200
Raleigh, North Carolina 27605



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

CAROLINA POWER & LIGHT COMPANY
DOCKET NO. 50-325
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 97
License No. DPR-71

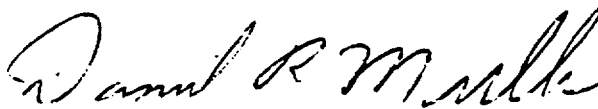
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 12, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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-71 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 97, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Daniel R. Muller", is written over the typed name.

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 27, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 97

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised area is indicated by a marginal line.

Page

3/4 6-11

CONTAINMENT SYSTEMS

SUPPRESSION POOL COOLING

LIMITING CONDITION FOR OPERATION

3.6.2.2 The suppression pool cooling mode of the residual heat removal (RHR) system shall be OPERABLE with two independent cooling loops, each loop consisting of two pumps and one heat exchanger.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one RHR suppression pool cooling loop inoperable, operation may continue and the provisions of Specification 3.0.4 are not applicable; restore the inoperable loop to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With both RHR suppression pool cooling loops inoperable, restore at least one loop to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.2 The suppression pool cooling mode of the RHR system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per 92 days by verifying that each RHR pump can be started from the control room and develops a flow of at least 7,700 gpm on recirculation flow through the RHR heat exchanger and the suppression pool.



UNITED STATES
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. 122
License No. DPR-62

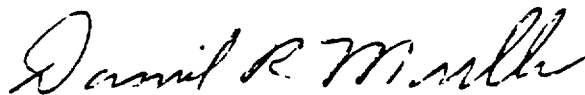
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 12, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 122, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 26, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 122

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised area is indicated by a marginal line.

Page

3/4 6-11

CONTAINMENT SYSTEMS

SUPPRESSION POOL COOLING

LIMITING CONDITION FOR OPERATION

3.6.2.2 The suppression pool cooling mode of the residual heat removal (RHR) system shall be OPERABLE with two independent cooling loops, each loop consisting of two pumps and one heat exchanger.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one RHR suppression pool cooling loop inoperable, operation may continue and the provisions of Specification 3.0.4 are not applicable; restore the inoperable loop to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With both RHR suppression pool cooling loops inoperable, restore at least one loop to OPERABLE status within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.2 The suppression pool cooling mode of the RHR system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. At least once per 92 days by verifying that each RHR pump can be started from the control room and develops a flow of at least 7,700 gpm on recirculation flow through the RHR heat exchanger and the suppression pool.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 97 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 122 TO FACILITY LICENSE NO. DPR-62
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324

1.0 INTRODUCTION

By letter dated August 12, 1985, the Carolina Power & Light Company (CP&L, the licensee) submitted proposed changes to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2.

The proposed changes modify the surveillance requirements in TS Section 3/4 6.2.2 related to the testing of the Residual Heat Removal (RHR) System in the suppression pool cooling mode.

2.0 DISCUSSION AND EVALUATION

The surveillance requirements for the suppression pool cooling mode of the RHR system, TS 4.6.2.2.b, currently require verification "that each RHR pump can be started from the control room and develops a flow of at least 10,300 gpm against a system head corresponding to a reactor pressure of greater than or equal to 20 psig on recirculation flow."

The current surveillance requirement is modeled after an In-Service Inspection requirement for a full-flow test. The system is tested during normal plant operation by taking suction from the suppression pool and returning the water to the pool through a test line. Each pump must develop a flow of 10,300 gpm to satisfy the test requirement. The RHR heat exchanger must be bypassed during this test as flow through the RHR heat exchanger is limited to 7,700 gpm to prevent damage to the heat exchanger tubing.

To more accurately verify the operability of the RHR pumps in the suppression pool cooling mode, the licensee has proposed to change the surveillance requirements to require flow through the RHR heat exchanger. The test flow path would then be from the torus, through the RHR heat exchanger, and then back to the torus as in actual operation. The proposed TS requires that each RHR pump produces a recirculation flow of at least 7,700 gpm through the RHR heat

exchanger to the suppression pool. RHR pump operability at higher flow rates would continue to be verified quarterly under existing TS 4.5.3.2b which requires a flow rate of 17,700 gpm per loop to be attained by two RHR pumps in the low pressure coolant injection (LPCI) mode of operation.

We have reviewed the licensee's application and agree that the proposed TS would provide a more accurate verification of the operability of the RHR Pumps in the suppression pool cooling mode of operation. The existing TS 4.5.3.2b provides an adequate test of the RHR pumps at the higher flow rates. Based on our review we find the proposed changes acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

The amendments involve changes in surveillance requirements. The 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. 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.

4.0 CONCLUSION

We have 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, and
(2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: A. Gilbert

Dated: March 27, 1986