

November 2, 1995

Mr. W. R. Campbell, Vice President  
Carolina Power & Light Company  
Brunswick Steam Electric Plant  
Post Office Box 10429  
Southport, North Carolina 28461

SUBJECT: ISSUANCE OF AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-71 AND AMENDMENT NO. 210 TO FACILITY OPERATING LICENSE NO. DPR-62 REGARDING - BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 (TAC NOS. M90816 AND M90817)

Dear Mr. Campbell:

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 179 to Facility Operating License No. DPR-71 and Amendment No. 210 to Facility Operating License No. DPR-62 for Brunswick Steam Electric Plant, Units 1 and 2. The amendments change the Technical Specifications (TS) in response to your submittal dated October 25, 1994, as supplemented by letter dated September 11, 1995.

The amendments relocate the remaining Environmental Technical Specifications to other licensee-controlled documents and delete the 30-day reporting requirement for inoperable meteorological instrumentation. The supplemental information provided by the September 11, 1995, letter did not change the original no significant hazards determination.

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

Sincerely,  
Original signed by:

David C. Trimble, Jr., Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325 and 50-324

Enclosures:

1. Amendment No. 179 to License No. DPR-71
2. Amendment No. 210 to License No. DPR-62
3. Safety Evaluation

cc w/enclosures: See next page

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Mr. W. R. Campbell  
Carolina Power & Light Company

Brunswick Steam Electric Plant  
Units 1 and 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 179  
License No. DPR-71

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by Carolina Power & Light Company (the licensee), dated October 25, 1994, as supplemented by letter dated September 11, 1995, 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. 179, are hereby incorporated in the license. Carolina Power & Light Company 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

*Barnt C. Buckley for*

David B. Matthews, Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 2, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 179

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

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

Remove Page

All Appendix B pages

Insert Page

Appendix B cover page

APPENDIX B  
TO FACILITY OPERATING LICENSE DPR-71  
FOR THE  
BRUNSWICK STEAM ELECTRIC PLANT  
UNITS 1 AND 2  
CAROLINA POWER AND LIGHT COMPANY  
DOCKET NOS. 50-324 AND 50-325

APPENDIX B, ENVIRONMENTAL TECHNICAL SPECIFICATIONS HAS BEEN DELETED.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 210  
License No. DPR-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by Carolina Power & Light Company (the licensee), dated October 25, 1994, as supplemented by letter dated September 11, 1995, 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. 210, are hereby incorporated in the license. Carolina Power & Light Company 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

*David B. Matthews*

David B. Matthews, Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 2, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 210

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

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

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All Appendix B pages

Appendix B cover page

APPENDIX B  
TO FACILITY OPERATING LICENSE DPR-62  
FOR THE  
BRUNSWICK STEAM ELECTRIC PLANT  
UNITS 1 AND 2  
CAROLINA POWER AND LIGHT COMPANY  
DOCKET NOS. 50-324 AND 50-325

APPENDIX B, ENVIRONMENTAL TECHNICAL SPECIFICATIONS HAS BEEN DELETED.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-71  
AND AMENDMENT NO. 210 TO FACILITY OPERATING 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 October 25, 1994, as supplemented by letter dated September 11, 1995, the Carolina Power & Light Company (the licensee) submitted a request for changes to the Brunswick Steam Electric Plant (BSEP), Units 1 and 2, Technical Specifications (TS). The requested changes would relocate the remaining Environmental Technical Specifications (ETS) to other licensee-controlled documents and delete the 30-day reporting requirement for inoperable meteorological instrumentation.

The information provided in the September 11, 1995, letter did not affect the no significant hazards consideration published in 59 FR 63113.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 Fed. Reg. 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies §182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary

to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.<sup>1</sup> As a result, existing TS requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents.

### 3.0 EVALUATION

#### 3.1 Discharge Water Level

The licensee proposed to relocate the ETS requirements of sections 2.3 and 3.3 to the Updated Final Safety Analysis Report (UFSAR). These specifications stated that water level in the discharge canal shall normally be maintained between +3.5 feet msl and +5.5 feet msl at the discharge weir. In addition, water level in the discharge canal near the plant shall be monitored daily.

The licensee stated that the ETS requirements were redundant to those established in the UFSAR section 2.4.8.3.3. and that the limits were established to minimize the impact of the discharge canal on the local groundwater supply. The licensee also stated that the National Pollutant Discharge Elimination System (NPDES) permit issued by the North Carolina Department of Natural Resources and Community Development specifies the limitations and monitoring requirements for the discharge canal.

The UFSAR and the Final Environmental Statement (FES) were reviewed by the staff. In a letter dated September 11, 1995, after questions from the staff,

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<sup>1</sup>The Commission recently adopted amendments to 10 CFR 50.36, pursuant to which the rule was revised to codify and incorporate these criteria. See Final Rule, "Technical Specifications," 60 Fed. Reg. 36953 (July 19, 1995). The Commission indicated that reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump trip systems are to be included in the TS under Criterion 4, although it recognized that other structures, systems and components could also meet this criterion. 60 Fed. Reg. at 36956.

the licensee stated that UFSAR section 2.4.8.3.3 would be revised to reflect the discharge canal limitations. The revision will include maintaining the normal discharge canal level band of 4.5+/-1 ft msl at the discharge weir and requiring daily monitoring of discharge canal. Future changes to the UFSAR requirements may be made under the provisions of 10 CFR 50.59.

The water level specified is not related to any Design Basis Accident or Transient analysis but serves to minimize the effects of upwelling of freshwater and downwelling of salt water in the area of the discharge canal. This level is based on extensive studies performed for the licensee and serves to minimize the impact on freshwater supplies.

The staff determined that the inclusion of the discharge canal water level described above is an operational detail related to the licensee's safety analyses which are adequately controlled by the requirements of 10 CFR 50.59. Therefore, the continued processing of license amendments related to revisions of these requirements, where the revisions to those requirements do not involve an unresolved safety question, would afford no significant benefit with regard to protecting the public health and safety.

Therefore, we find this change acceptable since the details of the program do not need to be controlled by TS, sufficient regulatory controls exist with respect to the UFSAR, and changes to the requirements are controlled by means acceptable to the staff (10 CFR 50.59). The staff also notes that the licensee previously committed to inform the NRC of changes to or violations of the NPDES permit.

### 3.2 Meteorological Requirements

The licensee proposed to relocate the meteorological monitoring requirements of ETS sections 2.4 and 3.4 to the UFSAR and delete the 30-day reporting requirements.

These ETS sections require instrumentation capable of measuring wind speed and wind direction, temperature differences between elevations, and dew point. A 30-day report was required for specified equipment unavailability.

The licensee stated that the meteorological monitoring program is delineated in UFSAR section 2.3.3 and the existing program meets the requirements of Appendix E to 10 CFR 50. In a letter dated September 11, 1995, after questions from the staff, the licensee stated that the UFSAR would be revised to reflect the meteorological monitoring instrumentation requirements currently in the ETS, with the exception of the 30-day reports regarding inoperable meteorological instrumentation.

The meteorological monitoring instrumentation is used to measure environmental parameters (wind direction, speed, and air temperature differences) which may affect the distribution of radioactive effluents following a release of radioactive material. In 10 CFR 50.47, "Emergency Plans," and 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," the Commission requires power plant licensees to provide reasonable assurance that adequate protective measures can and will be

taken in the event of a radiological emergency. Timely access to accurate local meteorological data is important for estimating potential radiation doses to the public and for determining appropriate protective measures. In 10 CFR 50.36a(a)(2), the Commission requires nuclear power plant licensees to submit annual reports specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents and such other information as may be required by the NRC to estimate maximum potential annual radiation doses to the public. A knowledge of meteorological conditions in the vicinity of the reactor is important in providing a basis for estimating annual radiation doses resulting from radioactive materials released in airborne effluents. Accordingly, the meteorological monitoring instrumentation serves a useful function in estimating radiation doses to the public from either routine or accidental releases of radioactive materials to the atmosphere. The licensee has proposed to relocate these provisions to the UFSAR such that future changes to the operation and surveillance of the meteorological monitoring instrumentation could be changed under 10 CFR 50.59.

The meteorological monitoring instrumentation does not serve a primary protective function so as to warrant inclusion in the TS in accordance with the criteria of the final policy statement. The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design basis accident and transient analyses or that the plant will be operated to preclude transients or accidents. Likewise, the meteorological instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria.

Accordingly, the staff has concluded that the requirements for meteorological monitoring instrumentation do not meet the 10 CFR 50.36 criteria for inclusion in the TS. The staff determined that the inclusion of the meteorological monitoring program described above is an operational detail related to the licensee's safety analyses which are adequately controlled by the requirements of 10 CFR 50.59. Therefore, the continued processing of license amendments related to revisions of the meteorological program, where the revisions to those requirements do not involve an unresolved safety question, would afford no significant benefit with regard to protecting the public health and safety.

The staff finds that deleting the 30-day reports is acceptable based on the existence of adequate reporting requirements in such regulations as 10 CFR 50.72 and 50.73. For example, 10 CFR 50.72(b)(2)(vi) requires NRC notification for any event or situation related to the protection of the environment for which a news release is planned or notification to other government agencies will be made.

#### 4.0 CONCLUSIONS

The staff reviewed the proposed changes and determined that the removal of these details does not eliminate the requirements for the licensee to ensure that the system, structure, or component is capable of performing its safety function. Although this information is removed from the TS and incorporated into the UFSAR, the licensee must continue to evaluate any plant modifications that affect any of these components in accordance with 10 CFR 50.59.

Based on this review, the staff concluded that 10 CFR 50.36 does not require this information to be retained in the TS. Requirements related to operability, applicability, and surveillance requirements, including performance of testing to ensure operability, are retained due to their importance in mitigating the consequences of an accident. However, the staff determined that the inclusion of this information is an operational detail related to the licensee's safety analysis, which is adequately controlled by the requirements of 10 CFR 50.59. Therefore, the continued processing of license amendments related to revisions of the ETS would afford no significant benefit with regard to protecting the public health and safety.

The staff has concluded, therefore, that removal of this information is acceptable because (1) inclusion in the TS is not specifically required by 10 CFR 50.36 or other regulations, (2) the information has been incorporated into an administratively controlled document, and (3) changes are adequately controlled by 10 CFR 50.59.

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of North Carolina official was notified of the proposed issuance of the amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

These amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements and changes in surveillance requirements. The NRC 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 (59 FR 63113). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (10). 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.

Principal Contributor: R. Croteau

Date: November 2, 1995

AMENDMENT NO. 179 TO FACILITY OPERATING LICENSE NO. DPR-71 - BRUNSWICK, UNIT 1  
AMENDMENT NO. 210 TO FACILITY OPERATING LICENSE NO. DPR-62 - BRUNSWICK, UNIT 2

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