



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

February 10, 1994

Docket Nos. 50-325
and 50-324

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

Dear Mr. Anderson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 169 TO FACILITY OPERATING LICENSE NO. DPR-71 AND AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-62 REGARDING RELOCATION OF THE FIRE PROTECTION REQUIREMENTS - BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 (TAC NOS. M79416 AND M79417)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 169 to Facility Operating License No. DPR-71 and Amendment No. 200 to Facility Operating License No. DPR-62 for Brunswick Steam Electric Plant (BSEP), Units 1 and 2. The amendments change the Technical Specifications (TS) in response to your submittal dated January 4, 1991, as supplemented on June 24, 1991, December 19, 1991, and October 15, 1993.

The amendments (a) replace the current fire protection license condition 2.B(6) in Facility Operating License Nos. DPR-71 and DPR-62 with the standard license condition given in NRC Generic Letter 86-10, "Implementation of Fire Protection Requirements," and (b) remove the fire protection requirements from the TS and relocate these requirements to the BSEP, Units 1 and 2, Updated Final Safety Analysis Report (UFSAR).

As stated in the enclosed Safety Evaluation, the NRC staff found that the current BSEP TS do not address surveillance requirements for the alternate shutdown equipment. The staff will continue to review the need for inclusion of the alternative safe shutdown equipment TS surveillance requirements into the UFSAR, consistent with Generic Letter 81-12, "Fire Protection Rule," independent of this license amendment.

NRC FILE CENTER COPY

9402180089 940210
PDR ADDCK 05000324
P PDR

DF01

Mr. R. A. Anderson

- 2 -

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,

A handwritten signature in black ink, appearing to read "Patrick D. Milano".

Patrick D. Milano, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 169 to
License No. DPR-71
2. Amendment No. 200 to
License No. DPR-62
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. R. A. Anderson
Carolina Power & Light Company

Brunswick Steam Electric Plant
Units 1 and 2

cc:

Mr. Mark S. Calvert
Associate General Counsel
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Karen E. Long
Assistant Attorney General
State of North Carolina
Post Office Box 629
Raleigh, North Carolina 27602

Mr. Donald Warren, Chairman
Brunswick County Board of Commissioners
Post Office Box 2571
Shallotte, North Carolina 28459

Mr. Robert P. Gruber
Executive Director
Public Staff - NCUC
Post Office Box 29520
Raleigh, North Carolina 27626-0520

Resident Inspector
U.S. Nuclear Regulatory Commission
Star Route 1, Post Office Box 208
Southport, North Carolina 28461

Mr. H. W. Habermeyer, Jr.
Vice President
Nuclear Services Department
Carolina Power & Light Company
Post Office Box 1551 - Mail OHS7
Raleigh, North Carolina 27602

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta St., N.W., Ste. 2900
Atlanta, Georgia 30323

Mr. Norman R. Holden, Mayor
City of Southport
212 Frink Drive
Southport, North Carolina 28461

Mr. Dayne H. Brown, Director
Division of Radiation Protection
N.C. Department of Environmental,
Commerce and Natural Resources
Post Office Box 27687
Raleigh, North Carolina 27611-7687

Mr. J. M. Brown
Plant Manager - Unit 1
Carolina Power & Light Company
Brunswick Steam Electric Plant
Post Office Box 10429
Southport, North Carolina 28461

Public Service Commission
State of South Carolina
Post Office Drawer 11649
Columbia, South Carolina 29211

Mr. C. C. Warren
Plant Manager - Unit 2
Brunswick Steam Electric Plant
Post Office Box 10429
Southport, North Carolina 28461

AMENDMENT NO. 169 TO FACILITY OPERATING LICENSE NO. DPR-71 - BRUNSWICK, UNIT 1
AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-62 - BRUNSWICK, UNIT 2

DISTRIBUTION:

Docket File
NRC/Local PDRs
PD II-1 Reading File
S. Varga
S. Singh Bajwa
P. Anderson
P. Milano
OGC
D. Hagan
G. Hill (4)
C. Grimes
C. McCracken
A. Singh
ACRS (10)
OPA
OC/LFDCB
E. Merschoff, R-II

cc: Brunswick Service List

170052

February 10, 1994

Mr. R. A. Anderson

- 2 -

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:
Patrick D. Milano, Senior Project Manager
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 169 to
License No. DPR-71
2. Amendment No. 200 to
License No. DPR-62
3. Safety Evaluation

cc w/enclosures:
See next page

OFFICE	LA: PD2-1	PM: PD2-1	C: SPLB	OGC	D: PD2-1
NAME	PAAnderson	PMilano/rs1	CMcCracken	J. Ferguson	SBajwa
DATE	01/19/94	01/21/94	01/21/94	01/21/94	01/30/94

Document Name: G:\BRUNSWIC\BR79416.AMD



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

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 169
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 January 4, 1991, and as supplemented on June 24, 1991, December 19, 1991, and October 15, 1993, 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 and changes to the Technical Specifications are made, as indicated in the attachment to this license amendment; and paragraphs 2.B(6) and 2.C(2) of Facility Operating License No. DPR-71 are hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 169, are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

The Facility Operating License DPR-71 is hereby amended by changing paragraph 2.B(6) as follows:*

- (6) Carolina Power and Light Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Report, dated November 22, 1977, as supplemented April 1979, June 11, 1980, December 30, 1986, December 6, 1989, and July 28, 1993 and February 10, 1994, respectively, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Acting Director
Project Directorate II-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to License No. DPR-71
Changes to the Technical
Specifications

Date of Issuance: February 10, 1994

* To reflect these changes, Page 3 of the Facility Operating License is enclosed for your convenience.

ATTACHMENT TO LICENSE AMENDMENT NO. 169

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

Replace page 3 of Facility Operating License DPR-71 with the following page.
The revised areas are indicated by marginal lines.

Remove Page

3

Insert Page

3

Replace the following pages of the Appendix A Technical Specifications with
the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages

V
VIII
XII
3/4 3-69
3/4 3-70
3/4 3-71
3/4 7-17
3/4 7-18
3/4 7-19
3/4 7-20
3/4 7-21
3/4 7-22
3/4 7-23
3/4 7-24
3/4 7-25
3/4 7-26
3/4 7-27
3/4 7-28
B 3/4 3-4
B 3/4 7-4
B 3/4 7-5
6-2
6-5
6-9
6-22

Insert Pages

V
VIII
XII
3/4 3-69

3/4 7-17

3/4 7-28
B 3/4 3-4
B 3/4 7-4
B 3/4 7-5
6-2
6-5
6-9
6-22

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70 to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Brunswick Steam Electric Plant, Unit Nos. 1 and 2, and H. B. Robinson Steam Electric Plant, Unit No. 2.
- (6) Carolina Power and Light Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Report, dated November 22, 1977, as supplemented April 1979, June 11, 1980, December 30, 1986, December 6, 1989, July 28, 1993, and February 10, 1994, respectively, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. , are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION.....	3/4 3-1
3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION.....	3/4 3-10
3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION....	3/4 3-33
3/4.3.4 CONTROL ROD WITHDRAWAL BLOCK INSTRUMENTATION.....	3/4 3-47
3/4.3.5 MONITORING INSTRUMENTATION	
Seismic Monitoring Instrumentation.....	3/4 3-53
Remote Shutdown Monitoring Instrumentation.....	3/4 3-56
Accident Monitoring Instrumentation.....	3/4 3-59
Source Range Monitors.....	3/4 3-63
Control Room Emergency Ventilation System.....	3/4 3-64
Chloride Intrusion Monitors.....	3/4 3-65
Fire Detection Instrumentation (Deleted).....	3/4 3-69
Radioactive Liquid Effluent Monitoring Instrumentation.....	3/4 3-72
Radioactive Gaseous Effluent Monitoring Instrumentation....	3/4 3-78
3/4.3.6 ATWS RECIRCULATION PUMP TRIP (RPT) SYSTEM INSTRUMENTATION..	3/4 3-88
3/4.3.7 REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-92
<u>3/4.4 REACTOR COOLANT SYSTEM</u>	
3/4.4.1 RECIRCULATION SYSTEM	
Recirculation Loops.....	3/4 4-1
Jet Pumps.....	3/4 4-2
Idle Recirculation Loop Start-up.....	3/4 4-3
3/4.4.2 SAFETY/RELIEF VALVES.....	3/4 4-4
3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE	
Leakage Detection Systems.....	3/4 4-5
Operational Leakage.....	3/4 4-6

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS (Continued)</u>	
3/4.7.4 REACTOR CORE ISOLATION COOLING SYSTEM.....	3/4 7-7
3/4.7.5 SNUBBERS.....	3/4 7-9
3/4.7.6 SEALED SOURCE CONTAMINATION.....	3/4 7-15
3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted).....	3/4 7-17
3/4.7.8 FIRE BARRIER PENETRATIONS (Deleted).....	3/4 7-28
 <u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1 A.C. SOURCES	
Operation of One or Both Units.....	3/4 8-1
Shutdown of Both Units.....	3/4 8-5
3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS	
A.C. Distribution - Operation of One or Both Units.....	3/4 8-6
A.C. Distribution - Shutdown of Both Units.....	3/4 8-7
D.C. Distribution - Operating.....	3/4 8-8
D.C. Distribution - Operation of One or Both Units.....	3/4 8-12
D.C. Distribution - Shutdown.....	3/4 8-14
Reactor Protection System Electrical Power Monitoring.....	3/4 8-15
 <u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 REACTOR MODE SWITCH.....	3/4 9-1
3/4.9.2 INSTRUMENTATION.....	3/4 9-3

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS (Continued)</u>	
3/4.7.3 FLOOD PROTECTION.....	B 3/4 7-1h
3/4.7.4 REACTOR CORE ISOLATION COOLING SYSTEM.....	B 3/4 7-1h
3/4.7.5 SNUBBERS.....	B 3/4 7-2
3/4.7.6 SEALED SOURCE CONTAMINATION.....	B 3/4 7-3
3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted).....	B 3/4 7-4
3/4.7.8 FIRE BARRIER PENETRATIONS (Deleted).....	B 3/4 7-5
<u>3/4.8 ELECTRICAL POWER SYSTEMS.....</u>	<u>B/3/4 8-1</u>
<u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 REACTOR MODE SWITCH.....	B 3/4 9-1
3/4.9.2 INSTRUMENTATION.....	B 3/4 9-1
3/4.9.3 CONTROL ROD POSITION.....	B 3/4 9-1
3/4.9.4 DECAY TIME.....	B 3/4 9-1
3/4.9.5 COMMUNICATIONS.....	B 3/4 9-1
3/4.9.6 CRANE AND HOIST OPERABILITY.....	B 3/4 9-2
3/4.9.7 CRANE TRAVEL-SPENT FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9.8 WATER LEVEL-REACTOR VESSEL, and	
3/4.9.9 WATER LEVEL-REACTOR FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9.10 CONTROL ROD REMOVAL.....	B 3/4 9-2
<u>3/4.10 SPECIAL TEST EXCEPTIONS</u>	
3/4.10.1 PRIMARY CONTAINMENT INTEGRITY.....	B 3/4 10-1
3/4.10.2 ROD SEQUENCE CONTROL SYSTEM (DELETED).....	B 3/4 10-1
3/4.10.3 SHUTDOWN MARGIN DEMONSTRATIONS.....	B 3/4 10-1
3/4.10.4 RECIRCULATION LOOPS.....	B 3/4 10-1
3/4.10.5 PLANT SERVICE WATER.....	B 3/4 10-1

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION (DELETED)

LIMITING CONDITION FOR OPERATION

Pages 3/4 3-69 through 3/4 3-71 have been deleted.

(Next page is 3/4 3-72)

PLANT SYSTEMS

3/4.7.7 FIRE SUPPRESSION SYSTEMS (DELETED)

FIRE SUPPRESSION WATER SYSTEM (DELETED)

LIMITING CONDITION FOR OPERATION

Pages 3/4 7-17 through 3/4 7-27 have been deleted.

(Next page is 3/4 7-28)

PLANT SYSTEMS

3/4.7.8 FIRE BARRIER PENETRATIONS (DELETED)

LIMITING CONDITION FOR OPERATION

Page 3/4 7-28 has been deleted.

INSTRUMENTATION

BASES

MONITORING INSTRUMENTATION (Continued)

3/4.3.5.6 CHLORIDE INTRUSION MONITORS

The chloride intrusion monitors provide adequate warning of any leakage in the condenser or hotwell so that actions can be taken to mitigate the consequences of such intrusion in the reactor coolant system. With only a minimum number of instruments available, increased sampling frequency provides adequate information for the same purpose.

3/4.3.5.7 FIRE DETECTION INSTRUMENTATION (Deleted)

3/4.3.5.8 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent monitoring instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The purpose of tank level indicating devices is to assure the detection and control of leaks that, if not controlled, could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS. "Without delay" implies that the operator, upon determining the limiting condition for operation is being exceeded, takes the next appropriate action to comply with the specification.

The initial CHANNEL CALIBRATION for the instruments associated with footnote (b) to Table 4.3.5.8-1 shall be performed using National Bureau of Standards traceable sources which will verify that the detector operates properly over its intended energy range and measurement range. For instruments which were operational prior to this specification being implemented, previously established calibration procedures may be substituted for this requirement. Subsequent CHANNEL CALIBRATIONS will be performed using sources that have been related to the initial calibration in order to ensure that the detector is still operational, but the sources need not span the full ranges used in the initial CHANNEL CALIBRATION.

PLANT SYSTEMS

BASES (Continued)

SNUBBERS (Continued)

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

3/4.7.6 SEALED SOURCE CONTAMINATION

The limitation on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 79.39(c) limits for plutonium. This limitation will ensure that leakage from by-product, source, and special nuclear material sources will not exceed allowable intake values. Sealed sources are classified into three groups according to their damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources are continuously enclosed within a shielded mechanism, i.e., sealed sources with radiation monitoring or boron measuring devices, are considered to be stored and need not be tested unless they are removed from the shielding mechanism.

3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted)

PLANT SYSTEMS

BASES (Continued)

3/4.7.8 FIRE BARRIER PENETRATIONS (DELETED)

Page B 3/4 7-5 has been deleted.

ADMINISTRATIVE CONTROLS

FACILITY STAFF (Continued)

- d. The Operations Manager - Unit 2, Shift Supervisor, and Senior Control Operators shall hold a senior reactor operator license. The Control Operators shall hold a reactor operator license.
- e. The Manager - Operations shall hold or have held a senior reactor operators license for either the Brunswick Plant or a similar plant.^(a)
- f. An individual qualified to implement radiation protection procedures shall be onsite when fuel is in either reactor.*
- g. All CORE ALTERATIONS shall be directly supervised by either a Licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- h. (Deleted)
- i. Administrative procedures shall be developed and implemented to limit the working hours of facility staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. These procedures shall meet the working hour guidelines published by the Commission in Generic Letter No. 82-12.

^(a) The requirement for the Manager - Operations to hold or have a held a senior reactor operator license is exempted for a period of 18 months starting from June 13, 1991.

* The requirement for an individual qualified to implement radiation protection procedures to be onsite when fuel is in either reactor may be exempted for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

6.2.3 PROJECT ASSESSMENT (PA)

FUNCTION

6.2.3.1 The PA Group Unit shall function to examine facility operating characteristics, NRC issues, industry advisories, and other sources which may indicate areas for improving facility safety.

RESPONSIBILITIES

6.2.3.2 The PA Group Unit shall be responsible for maintaining surveillance of facility activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.3 The PA Group Unit shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving facility safety to the Manager - Nuclear Assessment Department.

6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to the Shift Supervisor on matters pertaining to the engineering aspects assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATION

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions^(a), except for (1) the Manager - Environmental & Radiation Control who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant during transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Manager - Training (BSEP) and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

* Not responsible for sign-off function.

(a) The requirement for the Manager - Operations to hold or have held a senior reactor operator license is exempted for a period of 18 months starting from June 13, 1991.

ADMINISTRATIVE CONTROLS

ACTIVITIES

6.5.3.8 The PNSC activities shall include the following:

- a. Review of all procedures required by Specification 6.8 and changes thereto (and any other procedures and changes thereto), any of which constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- b. Review of all proposed tests or experiments that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- c. Review of all proposed modifications that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- d. Review of all proposed changes to the Technical Specifications or Operating License, prior to implementation.
- e. Review of reports on violations of Technical Specifications including reports covering evaluation and recommendations to prevent recurrence to the Manager - Brunswick Nuclear Project and to the Manager - Nuclear Assessment Department.
- f. Performance of special reviews, investigations (or analyses), and reports thereon as requested by the Manager - Nuclear Assessment Department.
- g. Review of all REPORTABLE EVENTS.
- h. Review of facility operations to detect potential nuclear safety hazards.
- i. Annual review of the Security Plan.
- j. Annual review of the Emergency Plan.
- k. Review of accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Manager - Brunswick Nuclear Project and the Manager - Nuclear Assessment Department.
- l. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.
- m. Review of the Fire Protection Program and implementing procedures and the submittal of recommended changes to the Nuclear Assessment Department.

ADMINISTRATIVE CONTROLS

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

- a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.5.1.
- b. Seismic event analysis, Specification 4.3.5.1.2.
- c. Accident Monitoring Instrumentation, Specification 3.3.5.3.
- d. (Deleted)
- e. Reactor coolant specific activity analysis, Specification 3.4.5.
- f. ECCS actuation, Specifications 3.5.3.1 and 3.5.3.2.
- g. (Deleted)
- h. (Deleted)
- i. Liquid Effluents Dose, Specification 3.11.1.2.
- j. Liquid Radwaste Treatment, Specification 3.11.1.3.
- k. Dose - Noble Gases, Specification 3.11.2.2.
- l. Dose - Iodine-131, Iodine-133, Tritium, and Radionuclides in Particulate Form, Specification 3.11.2.3.
- m. Gaseous Radwaste Treatment, Specification 3.11.2.4.
- n. Ventilation Exhaust Treatment, Specification 3.11.2.5.
- o. Total Dose, Specification 3.11.4.
- p. Monitoring Program, Specification 3.12.1.b.
- q. Primary Containment Structural Integrity, Specification 4.6.1.4.2.

CORE OPERATING LIMITS REPORT

6.9.3.1 Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, for the following:

- a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGR) for Specification 3.2.1 including core flow and core power adjustments.



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

CAROLINA POWER & LIGHT COMPANY, et al.

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.200
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 January 4, 1991, and as supplemented on June 24, 1991, December 19, 1991, and October 15, 1993, 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 and changes to the Technical Specifications are made, as indicated in the attachment to this license amendment; and paragraphs 2.B(3) and 2.C.(2) of Facility Operating License No. DPR-62 are hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.200, are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.


The Facility Operating License DPR-62 is hereby amended by changing paragraph 2.B(6) as follows:*

- (6) Carolina Power and Light Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Report, dated November 22, 1977, as supplemented April 1979, June 11, 1980, December 30, 1986, December 6, 1989, and July 28, 1993 and February 10, 1994, respectively, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Acting 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: February 10, 1994

* To reflect these changes, Page 3 of the Facility Operating License is enclosed for your convenience.

ATTACHMENT TO LICENSE AMENDMENT NO. 200

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

Replace page 3 of Facility Operating License DPR-71 with the following page.
The revised areas are indicated by marginal lines.

Remove Page

3

Insert Page

3

Replace the following pages of the Appendix A Technical Specifications with
the enclosed pages. The revised areas are indicated by marginal lines.

Remove Pages

V
VIII
XII
3/4 3-69
3/4 3-70
3/4 3-71
3/4 7-17
3/4 7-18
3/4 7-19
3/4 7-20
3/4 7-21
3/4 7-22
3/4 7-23
3/4 7-24
3/4 7-25
3/4 7-26
3/4 7-27
3/4 7-28
B 3/4 3-4
B 3/4 7-4
B 3/4 7-5
6-2
6-5
6-9
6-22

Insert Pages

V
VIII
XII
3/4 3-69

3/4 7-17

3/4 7-28
B 3/4 3-4
B 3/4 7-4
B 3/4 7-5
6-2
6-5
6-9
6-22

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source, and special nuclear materials without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Part 30 and 70 to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Brunswick Steam Electric Plant, Unit Nos. 1 and 2, and H. B. Robinson Steam Electric Plant, Unit No. 2.
- (6) Carolina Power and Light Company shall implement and maintain in effect all provision of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Report dated November 22, 1977, as supplemented April 1979, June 11, 1980, December 30, 1986, December 6, 1989, July 28, 1993 and February 10, 1994 respectively, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

the licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2436 megawatts (thermal).

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.3 INSTRUMENTATION</u>	
3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION.....	3/4 3-1
3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION.....	3/4 3-10
3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION....	3/4 3-33
3/4.3.4 CONTROL ROD WITHDRAWAL BLOCK INSTRUMENTATION.....	3/4 3-47
3/4.3.5 MONITORING INSTRUMENTATION	
Seismic Monitoring Instrumentation.....	3/4 3-53
Remote Shutdown Monitoring Instrumentation.....	3/4 3-56
Accident Monitoring Instrumentation.....	3/4 3-59
Source Range Monitors.....	3/4 3-63
Control Room Emergency Ventilation System.....	3/4 3-64
Chloride Intrusion Monitors.....	3/4 3-65
Fire Detection Instrumentation (Deleted).....	3/4 3-69
Radioactive Liquid Effluent Monitoring Instrumentation.....	3/4 3-72
Radioactive Gaseous Effluent Monitoring Instrumentation....	3/4 3-78
3/4.3.6 RECIRCULATION PUMP TRIP ACTUATION INSTRUMENTATION	
ATWS Recirculation Pump Trip (RPT) System Instrumentation..	3/4 3-88
End-of-Cycle Recirculation Pump Trip System Instrumentation.....	3/4 3-93
3/4.3.7 REACTOR CORE ISOLATION COOLING SYSTEM ACTUATION INSTRUMENTATION.....	3/4 3-99
<u>3/4.4 REACTOR COOLANT SYSTEM</u>	
3/4.4.1 RECIRCULATION SYSTEM	
Recirculation Loops.....	3/4 4-1
Jet Pumps.....	3/4 4-2
Idle Recirculation Loop Start-up.....	3/4 4-3
3/4.4.2 SAFETY/RELIEF VALVES.....	3/4 4-4
3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE	
Leakage Detection Systems.....	3/4 4-5
Operational Leakage.....	3/4 4-6

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS (Continued)</u>	
3/4.7.4 REACTOR CORE ISOLATION COOLING SYSTEM.....	3/4 7-7
3/4.7.5 SNUBBERS.....	3/4 7-9
3/4.7.6 SEALED SOURCE CONTAMINATION.....	3/4 7-15
3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted).....	3/4 7-17
3/4.7.8 FIRE BARRIER PENETRATIONS (Deleted).....	3/4 7-28
 <u>3/4.8 ELECTRICAL POWER SYSTEMS</u>	
3/4.8.1 A.C. SOURCES	
Operation of One or Both Units.....	3/4 8-1
Shutdown of Both Units.....	3/4 8-5
3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS	
A.C. Distribution - Operation of One or Both Units.....	3/4 8-6
A.C. Distribution - Shutdown of Both Units.....	3/4 8-7
D.C. Distribution - Operating.....	3/4 8-8
D.C. Distribution - Operation of One or Both Units.....	3/4 8-12
D.C. Distribution - Shutdown.....	3/4 8-14
Reactor Protection System Electrical Power Monitoring.....	3/4 8-15
 <u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 REACTOR MODE SWITCH.....	3/4 9-1
3/4.9.2 INSTRUMENTATION.....	3/4 9-3

INDEX

BASES

<u>SECTION</u>	<u>PAGE</u>
<u>3/4.7 PLANT SYSTEMS (Continued)</u>	
3/4.7.3 FLOOD PROTECTION.....	B 3/4 7-1h
3/4.7.4 REACTOR CORE ISOLATION COOLING SYSTEM.....	B 3/4 7-1h
3/4.7.5 SNUBBERS.....	B 3/4 7-2
3/4.7.6 SEALED SOURCE CONTAMINATION.....	B 3/4 7-4
3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted).....	B 3/4 7-4
3/4.7.8 FIRE BARRIER PENETRATIONS (Deleted).....	B 3/4 7-5
 <u>3/4.8 ELECTRICAL POWER SYSTEMS.....</u>	 B/3/4 8-1
 <u>3/4.9 REFUELING OPERATIONS</u>	
3/4.9.1 REACTOR MODE SWITCH.....	B 3/4 9-1
3/4.9.2 INSTRUMENTATION.....	B 3/4 9-1
3/4.9.3 CONTROL ROD POSITION.....	B 3/4 9-1
3/4.9.4 DECAY TIME.....	B 3/4 9-1
3/4.9.5 COMMUNICATIONS.....	B 3/4 9-1
3/4.9.6 CRANE AND HOIST OPERABILITY.....	B 3/4 9-2
3/4.9.7 CRANE TRAVEL-SPENT FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9.8 WATER LEVEL-REACTOR VESSEL, and	
3/4.9.9 WATER LEVEL-REACTOR FUEL STORAGE POOL.....	B 3/4 9-2
3/4.9.10 CONTROL ROD REMOVAL.....	B 3/4 9-2
 <u>3/4.10 SPECIAL TEST EXCEPTIONS</u>	
3/4.10.1 PRIMARY CONTAINMENT INTEGRITY.....	B 3/4 10-1
3/4.10.2 ROD SEQUENCE CONTROL SYSTEM (DELETED).....	B 3/4 10-1
3/4.10.3 SHUTDOWN MARGIN DEMONSTRATIONS.....	B 3/4 10-1
3/4.10.4 RECIRCULATION LOOPS.....	B 3/4 10-1
3/4.10.5 PLANT SERVICE WATER.....	B 3/4 10-1

INSTRUMENTATION

FIRE DETECTION INSTRUMENTATION (DELETED)

LIMITING CONDITION FOR OPERATION

Pages 3/4 3-69 through 3/4 3-71 have been deleted

(Next page is 3/4 3-72)

PLANT SYSTEMS

3/4.7.7 FIRE SUPPRESSION SYSTEMS (DELETED)

FIRE SUPPRESSION WATER SYSTEM (DELETED)

LIMITING CONDITION FOR OPERATION

Pages 3/4 7-17 through 3/4 7-27 have been deleted.

(Next page is 3/4 7-28)

PLANT SYSTEMS

3/4.7.8 FIRE BARRIER PENETRATIONS (DELETED)

LIMITING CONDITION FOR OPERATION

Page 3/4 7-28 has been deleted.

INSTRUMENTATION

BASES

MONITORING INSTRUMENTATION (Continued)

3/4.3.5.6 CHLORIDE INTRUSION MONITORS

The chloride intrusion monitors provide adequate warning of any leakage in the condenser or hotwell so that actions can be taken to mitigate the consequences of such intrusion in the reactor coolant system. With only a minimum number of instruments available, increased sampling frequency provides adequate information for the same purpose.

3/4.3.5.7 FIRE DETECTION INSTRUMENTATION (Deleted)

3/4.3.5.8 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent monitoring instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50. The purpose of tank level indicating devices is to assure the detection and control of leaks that, if not controlled, could potentially result in the transport of radioactive materials to UNRESTRICTED AREAS. "Without delay" implies that the operator, upon determining the limiting condition for operation is being exceeded, takes the next appropriate action to comply with the specification.

The initial CHANNEL CALIBRATION for the instruments associated with footnote (b) to Table 4.3.5.8-1 shall be performed using National Bureau of Standards traceable sources which will verify that the detector operates properly over its intended energy range and measurement range. For instruments which were operational prior to this specification being implemented, previously established calibration procedures may be substituted for this requirement.

PLANT SYSTEMS

BASES (Continued)

SNUBBERS (Continued)

The service life of a snubber is established via manufacturer input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc.). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life.

3/4.7.6 SEALED SOURCE CONTAMINATION

The limitation on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 79.39(c) limits for plutonium. This limitation will ensure that leakage from by-product, source, and special nuclear material sources will not exceed allowable intake values. Sealed sources are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism, i.e., sealed sources with radiation monitoring or boron measuring devices, are considered to be stored and need not be tested unless they are removed from the shielding mechanism.

3/4.7.7 FIRE SUPPRESSION SYSTEMS (Deleted)

PLANT SYSTEMS

BASES (Continued)

3/4.7.8 FIRE BARRIER PENETRATIONS (DELETED)

Page B 3/4 7-5 has been deleted.

ADMINISTRATIVE CONTROLS

FACILITY STAFF (Continued)

- d. The Operations Manager - Unit 2, Shift Supervisor, and Senior Control Operators shall hold a senior reactor operator license. The Control Operators shall hold a reactor operator license.
- e. The Manager - Operations shall hold or have held a senior reactor operators license for either the Brunswick Plant or a similar plant.^(a)
- f. An individual qualified to implement radiation protection procedures shall be onsite when fuel is in either reactor.*
- g. All CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- h. (Deleted)
- i. Administrative procedures shall be developed and implemented to limit the working hours of facility staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. These procedures shall meet the working hour guidelines published by the Commission in Generic Letter No. 82-12.

^(a) The requirement for the Manager - Operations to hold or have held a senior reactor operator license is exempted for a period of 18 months starting from June 13, 1991.

* The requirement for an individual qualified to implement radiation protection procedures to be onsite when fuel is in either reactor may be exempted for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

ADMINISTRATIVE CONTROLS

6.2.3 PROJECT ASSESSMENT (PA)

FUNCTION

6.2.3.1 The PA Group Unit shall function to examine facility operating characteristics, NRC issues, industry advisories, and other sources which may indicate areas for improving facility safety.

RESPONSIBILITIES

6.2.3.2 The PA Group Unit shall be responsible for maintaining surveillance of facility activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.3 The PA Group Unit shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving facility safety to the Manager - Nuclear Assessment Department.

6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to the Shift Supervisor on matters pertaining to the engineering aspects assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATION

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions^(a), except for (1) the Manager - Environmental & Radiation Control who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant during transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Manager - Training (BSEP) and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

* Not responsible for sign-off function.

(a) The requirement for the Manager - Operations to hold or have held a senior reactor operator license is exempted for a period of 18 months starting from June 13, 1991.

ADMINISTRATIVE CONTROLS

ACTIVITIES

6.5.3.8 The PNSC activities shall include the following:

- a. Review of all procedures required by Specification 6.8 and changes thereto (and any other procedures and changes thereto), any of which constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- b. Review of all proposed tests or experiments that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- c. Review of all proposed modifications that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- d. Review of all proposed changes to the Technical Specifications or Operating License, prior to implementation.
- e. Review of reports on violations of Technical Specifications including reports covering evaluation and recommendations to prevent recurrence to the Manager - Brunswick Nuclear Project and to the Manager - Nuclear Assessment Department.
- f. Performance of special reviews, investigations (or analyses), and reports thereon as requested by the Manager - Nuclear Assessment Department.
- g. Review of all REPORTABLE EVENTS.
- h. Review of facility operations to detect potential nuclear safety hazards.
- i. Annual review of the Security Plan.
- j. Annual review of the Emergency Plan.
- k. Review of accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Manager - Brunswick Nuclear Project and the Manager - Nuclear Assessment Department.
- l. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.
- m. Review of the Fire Protection Program and implementing procedures and the submittal of recommended changes to the Nuclear Assessment Department.

ADMINISTRATIVE CONTROLS

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

- a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.5.1.
- b. Seismic event analysis, Specification 4.3.5.1.2.
- c. Accident Monitoring Instrumentation, Specification 3.3.5.3.
- d. (Deleted) |
- e. Reactor coolant specific activity analysis, Specification 3.4.5.
- f. ECCS actuation, Specifications 3.5.3.1 and 3.5.3.2.
- g. (Deleted) |
- h. (Deleted) |
- i. Liquid Effluents Dose, Specification 3.11.1.2.
- j. Liquid Radwaste Treatment, Specification 3.11.1.3.
- k. Dose - Noble Gases, Specification 3.11.2.2.
- l. Dose - Iodine-131, Iodine-133, Tritium, and Radionuclides in Particulate Form, Specification 3.11.2.3.
- m. Gaseous Radwaste Treatment, Specification 3.11.2.4.
- n. Ventilation Exhaust Treatment, Specification 3.11.2.5.
- o. Total Dose, Specification 3.11.4.
- p. Monitoring Program, Specification 3.12.1.b.
- q. Primary Containment Structural Integrity, Specification 4.6.1.4.2.

CORE OPERATING LIMITS REPORT

6.9.3.1 Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, for the following:

- a. The AVERAGE PLANAR LINEAR HEAT GENERATION RATES (APLHGR) for Specification 3.2.1 including core flow and core power adjustments.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-71
AND AMENDMENT NO. _____ 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 January 4, 1991, as supplemented on June 24, 1991, December 19, 1991, and October 15, 1993, 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 BSEP, Units 1 and 2, fire protection requirements from the TS to the BSEP Updated Final Safety Analysis Report (UFSAR) fire protection program. This change is in accordance with the guidance provided in Generic Letter (GL) 86-10, "Implementation of Fire Protection Requirements," April 24, 1986, and GL 88-12, "Removal of Fire Protection Requirements from Technical Specifications," August 2, 1988. The following evaluation is based on the staff's review of the licensee's submittals and the supporting materials provided with the letters. The October 15, 1993, letter provided clarifying information that did not change either the initial or the February 5, 1992, proposed no significant hazards consideration determinations.

2.0 EVALUATION

The TS changes proposed by CP&L are as follows:

1. Delete TS 3.3.5.7 (Fire Detection Instrumentation), TS 3.7.7.1 (Fire Suppression Water System), TS 3.7.7.2, (Spray and/or Sprinkler Systems), TS 3.7.7.3, (High Pressure Carbon Dioxide), TS 3.7.7.4 (Fire Hose Stations), TS 3.7.7.5, (Foam Systems), and TS 3.7.8, (Fire Barrier Penetrations) and their associated bases and incorporate into the Updated Final Safety Analysis Report (UFSAR).
2. Delete TS 6.2.2.g for site fire brigade staffing and incorporate into the UFSAR.
3. Delete TS 6.4.2 requirements related to the fire brigade training program and incorporate into the UFSAR.

4. Add TS 6.5.3.8(m) to include the review of the fire protection program and implementing procedures as an additional responsibility of the Plant Nuclear Safety Committee (PNSC).
5. Delete TS 6.9.2.d related to the requirement for special reports for fire detection instrumentation.
6. Delete TS 6.9.2.g related to the requirement for special reports for fire suppression systems.
7. Delete TS 6.9.2.h related to the requirement for special reports for fire barrier penetrations.

The licensee also proposed to replace the current fire protection licensee condition with the standard license condition provided in GL 86-10. The standard fire protection license condition as applied to BSEP would be as follows:

Carolina Power and Light Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SERs dated November 22, 1977, April 1979, June 11, 1980, December 30, 1986, December 6, 1989, July 28, 1993, and January , 1994, respectively, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

The NRC staff reviewed the license amendment request for BSEP against the guidance provided in GLs 86-10 and 88-12. Generic Letter 86-10 requested that the licensee incorporate the NRC-approved fire protection program into its Final Safety Analysis Report (FSAR) for the facility and specified a standard fire protection license condition. Generic Letter 88-12 addressed the elements a licensee should include in a license amendment request to remove fire protection requirements from TS. These elements are (1) the NRC-approved fire protection program must be incorporated into the FSAR, (2) the Limiting Conditions of Operations and the Surveillance Requirements associated with fire detection systems, fire suppression systems, fire barriers, and the administrative controls that address fire brigade staffing would be deleted from the TS (the existing administrative controls related to fire protection audits would be retained in the TS), (3) all operational conditions, remedial actions, and test requirements presently included in the TS for these systems, as well as the fire brigade staffing requirements, shall be incorporated into the fire protection program, (4) the standard fire protection license condition specified in GL 86-10 must be included in the facility operating license, (5) the unit review group (Onsite Review Group) shall be given responsibility for the review of the fire protection program and implementing procedures and for the submittal of recommended changes to the company nuclear review and audit group (Off-Site or Corporate Review Group), and (6) the fire

protection program implementation shall be added to the list of elements for which written procedures shall be established, implemented, and maintained.

CP&L incorporated the NRC-approved fire protection program for BSEP into the BSEP UFSAR on June 1, 1987, as amended May 31, 1991. The licensee has, therefore, satisfied element 1 of GL 88-12.

The licensee will incorporate the current TS operability and surveillance requirements for the fire detection systems, fire suppression systems, and fire rated assemblies into the BSEP UFSAR. The licensee will also incorporate the TS requirements related to fire brigade training and staffing into the UFSAR. Therefore, the licensee has satisfied elements 1, 2, and 3 of GL 88-12.

The licensee proposed the standard fire protection license condition specified in GL 86-10 for BSEP Units 1 and 2. The licensee has, therefore, satisfied element 4 of GL 88-12.

To satisfy elements 5 and 6 of GL 88-12, the licensee will add TS 6.5.3.8.(m) to include the review of the fire protection program and implementing procedures as an additional responsibility of the PNSC. Element 6 of GL 88-12 specified that the licensee add fire protection program implementation to the list of elements for which written procedures shall be established, implemented, and maintained. BSEP TS 6.8.1(f) currently addresses the fire protection program; therefore, no changes are required. The licensee has, therefore, satisfied elements 5 and 6 of GL 88-12.

The licensee also proposed to delete TS 6.9.2.d, 6.9.2.g, and 6.9.2.h related to the requirement of special reports of fire detection instrumentation, fire suppression systems and fire barrier penetration. The TS for the detection instrumentation, fire suppression systems and fire barrier penetration will be deleted by this amendment. Therefore, these reporting requirements will no longer be applicable to the BSEP TS. The deletion of TS 6.9.2.d, 6.9.2.g and 6.9.2.h is, therefore, acceptable.

NRC staff guidance regarding TS for alternate shutdown equipment was discussed with the licensee during a telephone conference of July 9, 1992. The licensee informed the staff that the BSEP TS do not include TS for alternative shutdown equipment as specified in GL 81-12. The staff informed the licensee that it would pursue the licensee's implementation of alternative safe shutdown equipment TS, consistent with GL 81-12, independent of this license amendment.

The staff finds that the proposed TS amendment for BSEP is generally in accordance with the NRC staff guidance provided in GLs 86-10 and 88-12 and is, therefore, satisfactory.

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

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (56 FR 11722 and 57 FR 4485). 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.

5.0 CONCLUSION

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.

Principal Contributor: A. Singh

Date: February 10, 1994