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

February 3, 1993

Docket Nos. 50-325
and 50-324

Mr. R. A. Watson
Senior Vice President
Nuclear Generation
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Watson:

SUBJECT: ISSUANCE OF AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. DPR-71 AND AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DPR-62 REGARDING EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION - BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2 (TAC NOS. M85018 AND M85019)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 160 to Facility Operating License No. DPR-71 and Amendment No. 191 to Facility Operating License No. DPR-62 for Brunswick Steam Electric Plant, Units 1 and 2. The amendments change the Technical Specifications in response to your submittal dated November 16, 1992, as supplemented January 25, 1993.

The amendments allow a one-time only revision to the requirements of Section 3.3.3 of Technical Specification 3/4.3.3, Emergency Core Cooling System Actuation Instrumentation, when in Operational Condition 4 (Cold Shutdown) to support modifications to upgrade the seismic qualification of instrument racks H21-P009 (Unit 2 only) and H21-P010 (Unit 1 and Unit 2). The amendments will allow the minimum number of operable channels for one reactor steam dome pressure - low instrumentation trip system to be temporarily reduced from two (2) channels to one (1) channel. This will allow, on three separate occasions, during this present outage, one reactor steam dome pressure - low (injection permissive) channel to be placed in the condition (tripped) that will satisfy the logic for allowing injection by the associated emergency core cooling system for up to seven (7) days without invoking the associated Action statement requirements.

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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.160 to License No. DPR-71
2. Amendment No.191 to License No. DPR-62
3. Safety Evaluation

cc w/enclosures:
See next page

LA:PD21:DRPE	PE:PD21:DRPE	PM:PD21:DRPE	OGC	D:PD21:DRPE
PAnderson	CCarpenter:tmw	PDMilano		EGAdensam
01/28/93	01/25/93	01/25/93	02/2/93	02/3/93

Document Name: BRN85018.AMD

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

Brunswick Steam Electric Plant
Units 1 and 2

cc:

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AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. DPR-71 - BRUNSWICK, UNIT 1
AMENDMENT NO. 191 TO FACILITY OPERATING LICENSE NO. DPR-62 - BRUNSWICK, UNIT 2

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J. Wermiel 10-D-24
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OC/LFMB
L. Plisco, EDO 17-G-21
E. Merschoff, R-II

cc: Brunswick Service List

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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. 160
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 November 16, 1992, as supplemented January 25, 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 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. 160, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam

Elinor G. Adensam, 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 3, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 160

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

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

Remove Pages	Insert Pages
3/4 3-34	3/4 3-34
3/4 3-38	3/4 3-38

TABLE 3.3.3-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM[a]	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1. CORE SPRAY SYSTEM			
a. Reactor Vessel Water Level - Low, Level 3	2	1, 2, 3, 4, 5	30
b. Reactor Steam Dome Pressure - Low (Injection Permissive)	2[f]	1, 2, 3, 4, 5	31
c. Drywell Pressure - High	2	1, 2, 3	30
d. Time Delay Relay	1	1, 2, 3, 4, 5	31
e. Bus Power Monitor[d]	1/bus	1, 2, 3, 4, 5	32
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM			
a. Drywell Pressure - High	2	1, 2, 3	30
b. Reactor Vessel Water Level - Low, Level 3	2	1, 2, 3, 4[b], 5[b]	30
c. Reactor Vessel Shroud Level (Drywell Spray Permissive)	1	1, 2, 3, 4[b], 5[b]	31
d. Reactor Steam Dome Pressure - Low (Injection Permissive)			
1. RHR Pump Start and LPCI Injection Valve Actuation	2[f]	1, 2, 3, 4[b], 5[b]	31
2. Recirculation Loop Pump Discharge Valve Actuation	2[f]	1, 2, 3, 4[b], 5[b]	31
e. RHR Pump Start - Time Delay Relay	1	1, 2, 3, 4[b], 5[b]	31
f. Bus Power Monitor[d]	1/bus	1, 2, 3, 4[b], 5[b]	32

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

NOTES

(a) A channel may be placed in an inoperable status for up to two hours for required surveillance without placing the trip system in the tripped condition, provided at least one OPERABLE channel in the same trip system is monitoring the affected parameter.

(b) Not applicable when two core spray system subsystems are OPERABLE per Specification 3.5.3.1.

(c) Provides signal to HPCI pump suction valves only.

(d) Alarm only.

(e) Required when ESF equipment is required to be OPERABLE.

(f) On a one-time basis, prior to start-up from the outage that began on April 21, 1992, the Minimum Number OPERABLE Channels per Trip System for one reactor steam dome pressure - low (injection permissive) trip function may be reduced, for no longer than 7 days, from two (2) channels to one (1) channel without declaring the associated ECCS inoperable in accordance with ACTION 31. This will be done on one occasion for Unit 1 and two occasions for Unit 2. During these periods, the following actions shall be implemented:

(1) The inoperable channel shall be placed in the condition that will satisfy the logic for allowing injection by the associated ECCS with the reactor steam dome pressure below 410 psig ± 15 psig.

(2) Both channels in the other trip system shall be maintained OPERABLE.

(3) The reactor vessel head vent shall be maintained in the open position.

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. 191
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 November 16, 1992, as supplemented January 25, 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 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. 191, 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 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam

Elinor G. Adensam, 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 3, 1993

ATTACHMENT TO LICENSE AMENDMENT NO. 191

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

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

Remove Pages	Insert Pages
3/4 3-34	3/4 3-34
3/4 3-38	3/4 3-38

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

NOTES

(a) A channel may be placed in an inoperable status for up to two hours for required surveillance without placing the trip system in the tripped condition, provided at least one OPERABLE channel in the same trip system is monitoring the affected parameter.

(b) Not applicable when two core spray system subsystems are OPERABLE per Specification 3.5.3.1.

(c) Provides signal to HPCI pump suction valves only.

(d) Alarm only.

(e) Required when ESF equipment is required to be OPERABLE.

(f) On a one-time basis, prior to start-up from the outage that began on April 21, 1992, the Minimum Number OPERABLE Channels per Trip System for one reactor steam dome pressure - low (injection permissive) trip function may be reduced, for no longer than 7 days, from two (2) channels to one (1) channel without declaring the associated ECCS inoperable in accordance with ACTION 31. This will be done on one occasion for Unit 1 and two occasions for Unit 2. During these periods, the following actions shall be implemented:

(1) The inoperable channel shall be placed in the condition that will satisfy the logic for allowing injection by the associated ECCS with the reactor steam dome pressure below 410 psig ± 15 psig.

(2) Both channels in the other trip system shall be maintained OPERABLE.

(3) The reactor vessel head vent shall be maintained in the open position.

TABLE 3.3.3-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

TRIP FUNCTION	MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM[a]	APPLICABLE OPERATIONAL CONDITIONS	ACTION
1. CORE SPRAY SYSTEM			
a. Reactor Vessel Water Level - Low, Level 3	2	1, 2, 3, 4, 5	30
b. Reactor Steam Dome Pressure - Low (Injection Permissive)	2[d]	1, 2, 3, 4, 5	31
c. Drywell Pressure - High	2	1, 2, 3	30
d. Time Delay Relay	1	1, 2, 3, 4, 5	31
e. Bus Power Monitor[d]	1/bus	1, 2, 3, 4, 5	32
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM			
a. Drywell Pressure - High	2	1, 2, 3	30
b. Reactor Vessel Water Level - Low, Level 3	2	1, 2, 3, 4[b], 5[b]	30
c. Reactor Vessel Shroud Level (Drywell Spray Permissive)	1	1, 2, 3, 4[b], 5[b]	31
d. Reactor Steam Dome Pressure - Low (Injection Permissive)			
1. RHR Pump Start and LPCI Injection Valve Actuation	2[d]	1, 2, 3, 4[b], 5[b]	31
2. Recirculation Loop Pump Discharge Valve Actuation	2[d]	1, 2, 3, 4[b], 5[b]	31
e. RHR Pump Start - Time Delay Relay	1	1, 2, 3, 4[b], 5[b]	31
f. Bus Power Monitor[d]	1/bus	1, 2, 3, 4[b], 5[b]	32

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 160 TO FACILITY OPERATING LICENSE NO. DRP-71

AND AMENDMENT NO. 191 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 November 16, 1992, as supplemented January 25, 1993, Carolina Power & Light Company (CP&L or the licensee) submitted a request for changes to the Brunswick Steam Electric Plant, Units 1 and 2 (Brunswick), Technical Specifications (TS). The January 25, 1993, letter provided updated TS pages and did not change the initial submittal noticed in the Federal Register.

The requested changes would allow a one-time only revision to the requirements of Section 3.3.3 of Technical Specification 3/4.3.3, Emergency Core Cooling System Actuation Instrumentation, when in Operational Condition 4 (Cold Shutdown) to support modifications to upgrade the seismic qualification of instrument racks H21-P009 (Unit 2 only) and H21-P010 (Unit 1 and Unit 2). The amendments will allow the minimum number of operable channels for one reactor steam dome pressure - low instrumentation trip system to be temporarily reduced from two (2) channels to one (1) channel. This will allow, on three separate occasions during this present outage, one reactor steam dome pressure - low (injection permissive) channel to be placed in the condition (tripped) that will satisfy the logic for allowing injection by the associated emergency core cooling system (ECCS) for up to seven (7) days without invoking the associated Action statement requirements.

The applicable action is to declare the associated ECCS inoperable. The licensee proposed implementation of the following compensatory actions during the interim period when the one-time revised TS is enforced.

1. The inoperable channel shall be placed in the condition that will satisfy the logic for allowing injection by the associated ECCS with the reactor steam dome pressure below 410 psig $\pm$ 15 psig.

2. Both channels in the other trip system shall be maintained OPERABLE.

3. The reactor vessel head vent shall be maintained in the open position.

2.0 EVALUATION

An automatic ECCS actuation for high drywell pressure requires a permissive by a coincident low reactor steam dome pressure. The steam dome pressure low permissive is a one-out-of-two taken twice logic provided by four independent

pressure transmitters. These transmitters require modification to restore their seismic qualification to the current licensing basis requirements. To incorporate the required modifications, CP&L proposed taking these transmitters out of service one at a time. By telephone, CP&L stated that the modifications should take 5 days to complete, but that CP&L is requesting a 7 day allowed outage time to provide a contingency for unexpected problems in performing the modifications. Brunswick TS 3.3.3 requires a minimum of two operable channels per trip system during operating Modes 1 through 5. With less than two operable reactor steam dome pressure channels per trip system, the applicable action (Action 31 in Table 3.3.3-1) requires the associated ECCS be declared inoperable. To avoid the ECCS inoperability, CP&L stated that the inoperable channel (one transmitter taken out for modification) will be placed in the condition that will satisfy the logic for allowing injection by the associated ECCS. By telephone, CP&L clarified that the stated condition is meant to be that the inoperable channel will be placed in trip, thus satisfying the logic for allowing injection by the associated ECCS with the reactor steam dome pressure below 410 psig $\pm$ 15 psig. This conservative action will allow the safety equipment to be available upon demand to perform its intended safety function of actuating emergency core cooling in the event of a valid demand. Further, this action is in accordance with the General Electric Standard Technical Specification which requires placing the inoperable channel in the tripped condition within 1 hour or declaring the associated ECCS inoperable; and, thus, is acceptable.

The other compensatory action is to maintain the reactor vessel head vent in the open position under the plant operating procedure. This is to avoid any pressure increase above the shutoff head of the ECCS pumps due to an inadvertent actuation of ECCS or vessel inventory heat up which may cause damage to the pumps. Opening of the reactor vessel head vent during cold shutdown has been previously evaluated and is not a concern with regard to the fission product release outside containment and, thus, is acceptable.

Based on the above evaluation, the staff concludes that the proposed one-time changes to TS 3.3.3 will provide an acceptable level of assurance that the intended safety function of the ECCS instrumentation system will be available upon demand, and are thus acceptable.

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 amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 52.35, an environmental assessment and finding of no significant impact have been prepared and published in the Federal Register on February 2, 1993 (58 FR 6813). Accordingly, based upon the environmental assessment, the staff has determined that the issuance of the amendments will not have a significant effect on the quality of the human environment.

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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: I. Ahmed

Date: February 3, 1993

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

CAROLINA POWER & LIGHT COMPANY

DOCKET NOS. 50-325 AND 50-324

NOTICE OF ISSUANCE OF AMENDMENT TO

FACILITY OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. 160 to Facility Operating License No. DPR-71 and Amendment No. 191 Facility Operating License No. DPR-62 issued to Carolina Power & Light Company (the licensee), which revised the Technical Specification (TS) for operation of the Brunswick Steam Electric Plant, Units 1 and 2, located in Brunswick County, North Carolina. The amendment is effective as of the date of issuance and shall be implemented within 30 days of issuance.

The amendments allow a one-time only revision to the requirements of TS 3/4.3.3., Emergency Core Cooling System Actuation Instrumentation, when in Operational Condition 4 (Cold Shutdown) to support modifications to upgrade the seismic qualification of instrument racks H21-P009 (Unit 2 only) and H21-P010 (Unit 1 and Unit 2). The amendments allow the minimum number of operable channels for one reactor steam dome pressure - low instrumentation trip system to be temporarily reduced from two (2) channels to one (1) channel.

The application for the amendments, dated November 16, 1992, as supplemented January 25, 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. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on December 18, 1992 (57 FR 60250). The January 25, 1993, letter provided updated TS pages and did not change the initial submittal noticed in the FEDERAL REGISTER. No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment related to the action and has determined not to prepare an environmental impact statement. Based upon the environmental assessment, the Commission has concluded that the issuance of this amendment will not have a significant effect on the quality of the human environment (58 FR 6813).

For further details with respect to the action see (1) the application for amendment dated November 16, 1992, as supplemented January 25, 1993, (2) Amendment No. 160 to license No DPR-71 and Amendment No. 191 to License No. DPR-62, (3) the Commission's related Safety Evaluation, and (4) the Commission's Environmental Assessment. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street NW., Washington, DC 20555 and at the local public document room located at University of North Carolina at Wilmington, William Madison Randall Library, 601 S. College Road, Wilmington, North Carolina 28403-3297. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Document Control Desk.

Dated at Rockville, Maryland this 3rd day of February 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

/S/

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

***See Previous Concurrence**

LA:PD21:DRPE	PE:PD21:DRPE	PM:PD21:DRPE	OGC*	D:PD21:DRPE
PAnderson	CECarpenter	PMilano	MYoung	EAdensam
2/3 /93	2/3 /93	2/3 /93	2/2/93	2/3 /93