

March 13, 1986

Docket Nos. 50-325/324

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

Dear Mr. Utley:

The Commission has issued the enclosed Amendment Nos. 95 and 120 to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your submittal of August 20, 1985.

The amendments change the Technical Specifications for the Brunswick Steam Electric Plant, Units 1 and 2, Table 3.3.3-1, Emergency Core Cooling System (ECCS) Actuation Instrumentation, by adding a footnote to allow required surveillance without placing the trip system in the tripped condition.

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

Sincerely,

**Original signed by**

Marshall Grotenhuis, Project Manager  
BWR Project Directorate #2  
Division of BWR Licensing

Enclosures:

1. Amendment No. 95 to License No. DPR-71
2. Amendment No. 120 to License No. DPR-62
3. Safety Evaluation

cc w/enclosures:  
See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

March 13, 1986

Docket Nos. 50-325/324

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

Dear Mr. Utley:

The Commission has issued the enclosed Amendment Nos. 95 and 120 to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your submittal of August 20, 1985.

The amendments change the Technical Specification (TS) for the Brunswick Steam Electric Plant, Units 1 and 2, Table 3.3.3.-1, Emergency Core Cooling System (ECCS) Actuation Instrumentation, by adding a footnote to allow required surveillance without placing the trip system in the tripped condition.

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

Sincerely,

A handwritten signature in cursive script that reads "Marshall Grotenhuis".

Marshall Grotenhuis, Project Manager  
BWR Project Directorate #2  
Division of BWR Licensing

Enclosures:

1. Amendment No. 95 to  
License No. DPR-71
2. Amendment No. 120 to  
License No. DPR-62
3. Safety Evaluation

cc w/enclosures:  
See next page

Mr. E. E. Utley  
Carolina Power & Light Company

Brunswick Steam Electric Plant  
Units 1 and 2

cc:

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Carolina Power & Light Company  
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Department of Human Resources  
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Raleigh, North Carolina 27605



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

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95  
License No. DPR-71

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-71 is hereby amended to read as follows:

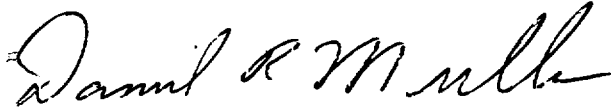
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 13, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 95

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.

Pages

3/4 3-31  
3/4 3-32  
3/4 3-32a  
3/4 3-33

TABLE 3.3.3-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<b>1. CORE SPRAY SYSTEM</b>			
a. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-4,B-4,C-4,D-4)	2	1, 2, 3, 4, 5	30
b. Reactor Steam Dome Pressure - Low (Injection Permissive) (B21-PT-NO21A,B,C,D) (B21-PTS-NO21A-2,B-2,C-2,D-2)	2	1, 2, 3, 4, 5	31
c. Drywell Pressure - High (E11-PT-NO11A,B,C,D) (E11-PTS-NO11A-2,B-2,C-2,D-2)	2	1, 2, 3	30
d. Time Delay Relay (E21-K16A,B)	1	1, 2, 3, 4, 5	31
e. Bus Power Monitor <sup>(d)</sup> (E21-K1A,B)	1/bus	1, 2, 3, 4, 5	32
<b>2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM</b>			
a. Drywell Pressure - High (E11-PT-NO11A,B,C,D) (E11-PTM-NO11A-1,B-1,C-1,D-1)	2	1, 2, 3	30
b. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-4,B-4,C-4,D-4)	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	30
c. Reactor Vessel Shroud Level (Drywell Spray Permissive) (B21-LT-NO36 and B21-LT-NO37) (B21-LTM-NO36-1 and B21-LTM-NO37-1)	1	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31
d. Reactor Steam Dome Pressure - Low (Injection Permissive) (B21-PT-NO21A,B,C,D) (B21-PTM-NO21A-1,B-1,C-1,D-1) (B21-PTS-NO21A-2,B-2,C-2,D-2)			
1. RHR Pump Start and LPCI Injection Valve Actuation	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31
2. Recirculation Loop Pump Discharge Valve Actuation	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM (Continued)</u>			
e. RHR Pump Start - Time Delay Relay (STR-1A1,2 and STR-1B1,2)	1	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31
f. Bus Power Monitor <sup>(d)</sup> (E11-K106A,B)	1/bus	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	32
<u>3. HIGH PRESSURE COOLANT INJECTION SYSTEM</u>			
a. Reactor Vessel Water Level - Low, Level 2 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-2,B-2,C-2,D-2)	2	1, 2, 3	30
b. Drywell Pressure - High (E11-PT-NO11A,B,C,D) (E11-PTS-NO11A-2,B-2,C-2,D-2)	2	1, 2, 3	30
c. Condensate Storage Tank Level - Low (E41-LS-N002, E41-LS-N003)	2 <sup>(c)</sup>	1, 2, 3	33
d. Suppression Chamber Water Level - High (E41-LSH-NO15A,B)	2 <sup>(c)</sup>	1, 2, 3	33
e. Bus Power Monitor <sup>(d)</sup> (E41-K55 and E41-K56)	1/bus	1, 2, 3	32
<u>4. AUTOMATIC DEPRESSURIZATION SYSTEM</u>			
a. ADS Inhibit Switch (B21-CS-S5A,B)	1	1, 2, 3	36
b. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-3,B-3,C-3,D-3)	2	1, 2, 3	30



(BSEP-1-65)

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>AUTOMATIC DEPRESSURIZATION SYSTEM (Continued)</u>			
c. Reactor Vessel Water Level - Low, Level 1 (B21-LT-NO42A,B) (B21-LTM-NO42A-1,B-1)	1	1, 2, 3	30
d. ADS Timer (B21-TDPU-K5A,B)	1	1, 2, 3	31
e. Core Spray Pump Discharge Pressure - High (Permissive) (E21-PS-NO08A,B and E21-PS-NO09A,B)	2	1, 2, 3	31
f. RHR (LPCI MODE) Pump Discharge Pressure - High (Permissive) (E11-PS-NO16A,B,C,D and E11-PS-NO20A,B,C,D)	2/pump	1, 2, 3	31
g. Bus Power Monitor <sup>(d)</sup> (B21-K1A,B)	1/bus	1, 2, 3	32

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>5. LOSS OF POWER</u>					
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage) Relay Type IAV53K, Device Number 27/59E	1/bus	1/bus	1/bus	1,2,3,4 <sup>(e)</sup> ,5 <sup>(e)</sup>	34
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage) Device Number 27/DV	3/bus	2/bus	2/bus	1,2,3,4 <sup>(e)</sup> ,5 <sup>(e)</sup>	35

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATIONACTION

- ACTION 30 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement:
- a. For one trip system, place at least one inoperable channel in the tripped condition within one hour or declare the associated ECCS inoperable.
  - b. For both trip systems, declare the associated ECCS inoperable.
- ACTION 31 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, declare the associated ECCS inoperable.
- ACTION 32 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, verify bus power availability at least once per 12 hours or declare the associated ECCS inoperable.
- ACTION 33 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place at least one inoperable channel in the tripped condition within one hour or declare the HPCS system inoperable.
- ACTION 34 - With the number of OPERABLE channels less than the Total Number of Channels, declare the associated emergency diesel generator inoperable and take the ACTION required by Specification 3.8.1.1 or 3.8.1.2, as appropriate.
- ACTION 35 - With the number of OPERABLE channels one less than the Total Number of Channels, place the inoperable channel in the tripped condition within 1 hour; operation may then continue until performance of the next required CHANNEL FUNCTIONAL TEST.
- ACTION 36 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, restore the inoperable channel to OPERABLE status within 8 hours or declare the associated ECCS inoperable.

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 conditions, 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.



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

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 120  
License No. DPR-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-62 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 120, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, reading "Daniel R. Muller". The signature is written in a cursive style with a large, stylized 'M'.

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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 13, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 120

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.

Pages

3/4 3-31  
3/4 3-32  
3/4 3-32a  
3/4 3-33

TABLE 3.3.3-1

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<b>1. CORE SPRAY SYSTEM</b>			
a. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-4,B-4,C-4,D-4)	2	1, 2, 3, 4, 5	30
b. Reactor Steam Dome Pressure - Low (Injection Permissive) (B21-PT-NO21A,B,C,D) (B21-PTS-NO21A-2,B-2,C-2,D-2)	2	1, 2, 3, 4, 5	31
c. Drywell Pressure - High (E11-PT-NO11A,B,C,D) (E11-PTS-NO11A-2,B-2,C-2,D-2)	2	1, 2, 3	30
d. Time Delay Relay (E21-K16A,B)	1	1, 2, 3, 4, 5	31
e. Bus Power Monitor <sup>(d)</sup> (E21-K1A,B)	1/bus	1, 2, 3, 4, 5	32
<b>2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM</b>			
a. Drywell Pressure - High (E11-PT-NO11A,B,C,D) (E11-PTM-NO11A-1,B-1,C-1,D-1)	2	1, 2, 3	30
b. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-4,B-4,C-4,D-4)	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	30
c. Reactor Vessel Shroud Level (Drywell Spray Permissive) (B21-LT-NO36 and B21-LT-NO37) (B21-LTM-NO36-1 and B21-LTM-NO37-1)	1	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31
d. Reactor Steam Dome Pressure - Low (Injection Permissive) (B21-PT-NO21A,B,C,D) (B21-PTM-NO21A-1,B-1,C-1,D-1) (B21-PTS-NO21A-2,B-2,C-2,D-2)			
1. RHR Pump Start and LPCI Injection Valve Actuation	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31
2. Recirculation Loop Pump Discharge Valve Actuation	2	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	31

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM (Continued)</u>			
e. RHR Pump Start - Time Delay Relay (STR-2A1,2 and STR-2B1,2)	1	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup> , 31	
f. Bus Power Monitor <sup>(d)</sup> (E11-K106A,B)	1/bus	1, 2, 3, 4 <sup>(b)</sup> , 5 <sup>(b)</sup>	32
<u>3. HIGH PRESSURE COOLANT INJECTION SYSTEM</u>			
a. Reactor Vessel Water Level - Low, Level 2 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-2,B-2,C-2,D-2)	2	1, 2, 3	30
b. Drywell Pressure - High (E11-PT-N011A,B,C,D) (E11-PTS-N011A-2,B-2,C-2,D-2)	2	1, 2, 3	30
c. Condensate Storage Tank Level - Low (E41-LS-N002, E41-LS-N003)	2 <sup>(c)</sup>	1, 2, 3	33
d. Suppression Chamber Water Level - High (E41-LSH-N015A,B)	2 <sup>(c)</sup>	1, 2, 3	33
e. Bus Power Monitor <sup>(d)</sup> (E41-K55 and E41-K56)	1/bus	1, 2, 3	32
<u>4. AUTOMATIC DEPRESSURIZATION SYSTEM</u>			
a. Drywell Pressure - High, coincident with (E11-PT-N010A,B,C,D) (E11-PTM-N010A-1,B-1,C-1,D-1)	2	1, 2, 3	30
b. Reactor Vessel Water Level - Low, Level 3 (B21-LT-NO31A,B,C,D) (B21-LTS-NO31A-3,B-3,C-3,D-3)	2	1, 2, 3	30

TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

<u>TRIP FUNCTION AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS PER TRIP SYSTEM<sup>(a)</sup></u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>AUTOMATIC DEPRESSURIZATION SYSTEM (Continued)</u>			
c. Reactor Vessel Water Level - Low, Level 1 (B21-LT-NO42A,B) (B21-LTM-NO42A-1,B-1)	1	1, 2, 3	30
d. ADS Timer (B21-TDPU-K5A,B)	1	1, 2, 3	31
e. Core Spray Pump Discharge Pressure - High (Permissive) (E21-PS-N008A,B and E21-PS-N009A,B)	2	1, 2, 3	31
f. RHR (LPCI MODE) Pump Discharge Pressure - High (Permissive) (E11-PS-N016A,B,C,D and E11-PS-N020A,B,C,D)	2/pump	1, 2, 3	31
g. Bus Power Monitor <sup>(d)</sup> (B21-K1A,B)	1/bus	1, 2, 3	32

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>5. LOSS OF POWER</u>					
a. 4.16 kv Emergency Bus Undervoltage (Loss of Voltage) Relay Type IAV53K, Device Number 27/59E	1/bus	1/bus	1/bus	1,2,3,4 <sup>(e)</sup> ,5 <sup>(e)</sup>	34
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage) Device Number 27/DV	3/bus	2/bus	2/bus	1,2,3,4 <sup>(e)</sup> ,5 <sup>(e)</sup>	35



TABLE 3.3.3-1 (Continued)

EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATIONACTION

- ACTION 30 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement:
- a. For one trip system, place at least one inoperable channel in the tripped condition within one hour or declare the associated ECCS inoperable.
  - b. For both trip systems, declare the associated ECCS inoperable.
- ACTION 31 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, declare the associated ECCS inoperable.
- ACTION 32 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, verify bus power availability at least once per 12 hours or declare the associated ECCS inoperable.
- ACTION 33 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement, place at least one inoperable channel in the tripped condition within one hour or declare the HPCS system inoperable.
- ACTION 34 - With the number of OPERABLE channels less than the Total Number of Channels, declare the associated emergency diesel generator inoperable and take the ACTION required by Specification 3.8.1.1 or 3.8.1.2, as appropriate.
- ACTION 35 - With the number of OPERABLE channels one less than the Total Number of Channels, place the inoperable channel in the tripped condition within 1 hour; operation may then continue until performance of the next required CHANNEL FUNCTIONAL TEST.

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.



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

March 13, 1986

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 95 TO FACILITY LICENSE NO. DPR-71 AND  
AMENDMENT NO. 120 TO FACILITY LICENSE NO. DPR-62  
CAROLINA POWER & LIGHT COMPANY  
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2  
DOCKET NOS. 50-325 AND 50-324

1.0 INTRODUCTION

By letter dated August 20, 1985, the Carolina Power & Light Company (CP&L, the licensee) requested a change to the limiting conditions for operation (LCOs) for Brunswick Steam Electric Plant, Units 1 and 2 as set forth in the Technical Specifications (TS) of Facility Operating License Nos. DPR-71 and DPR-62.

The amendments revise the Technical Specifications (TS) for the Brunswick Steam Electric Plant, Units 1 and 2, Table 3.3.3-1, Emergency Core Cooling System (ECCS) Actuation Instrumentation, by adding a footnote to allow required surveillance without placing the trip system in the tripped condition.

2.0 EVALUATION

Currently, when performing required surveillance on the ECCS Actuation Instrumentation, the TS require that the inoperable channel be placed in the tripped condition and/or that the associated ECCS be declared inoperable. This requirement places an unnecessary restriction on plant operation during instrument testing. The proposed TS adds a footnote to Table 3.3.3-1, ECCS actuation instrumentation, to allow placing a channel 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. This change reflects the guidance provided in NUREG-0123, the Standard Technical Specifications (STS). In addition, this capability is already allowed by the current TS for instrumentation of the Reactor Protection System (TS 3/4.4.1), Isolation Actuation (TS 3/4.3.2), Control Rod Withdrawal Block (TS 3/4.3.4), and Reactor Core Isolation Cooling System (TS 3/4.3.7). The proposed TS also reformat the table notations in Table 3.3.3-1; does not effect the operation of the plant and is acceptable.

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We have reviewed the proposed amendments and find the changes are acceptable. Based on our review we find that allowing for testing of a channel as specified by the proposed TS does not prevent the instrumentation from performing its design function. The proposed TS provide the limiting conditions for operation necessary to preserve the ability of the system to perform its intended function even during periods when instrument channels may be out of service because of maintenance. Therefore, when necessary, one channel may be made inoperable for brief intervals to conduct surveillance. In addition, we find that the proposed change will not significantly affect the ability of the system to meet its design functions of initiating actions to mitigate the consequences of accidents. This changed requirement for the ECCS actuation instrumentation is consistent with the requirements in the current Technical Specification that involve the Reactor Protection System, Isolation Actuation, Control Rod Withdrawal Block and Reactor Core Isolation Cooling System.

### 3.0 ENVIRONMENTAL CONSIDERATIONS

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

### 4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: March 13, 1986