



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

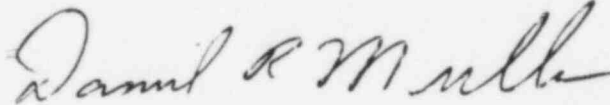
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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:

(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 cursive script, reading "Daniel R. Muller".

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^(a)</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
<u>1. CORE SPRAY SYSTEM</u>			
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 ^(d) (E21-K1A,B)	1/bus	1, 2, 3, 4, 5	32
<u>2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM</u>			
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 ^(b) , 5 ^(b)	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 ^(b) , 5 ^(b)	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 ^(b) , 5 ^(b)	31
2. Recirculation Loop Pump Discharge Valve Actuation	2	1, 2, 3, 4 ^(b) , 5 ^(b)	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^(a)</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 ^(b) , 5 ^(b)	31
f. Bus Power Monitor ^(d) (E11-K106A,B)	1/bus	1, 2, 3, 4 ^(b) , 5 ^(b)	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 ^(c)	1, 2, 3	33
d. Suppression Chamber Water Level - High (E41-LSH-N015A,B)	2 ^(c)	1, 2, 3	33
e. Bus Power Monitor ^(d) (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^(a)</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-NC08A,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 ^(d) (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>
5. <u>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 ^(e) ,5 ^(e)	34
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage) Device Number 27/DV	3/bus	2/bus	2/bus	1,2,3,4 ^(e) ,5 ^(e)	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

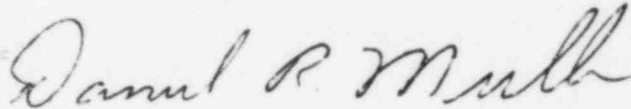
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated August 20, 1985, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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 cursive script, reading "Daniel R. Muller".

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^(a)</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. CORE SPRAY SYSTEM			
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 ^(d) (E21-K1A,B)	1/bus	1, 2, 3, 4, 5	32
2. LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM			
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 ^(b) , 5 ^(b)	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 ^(b) , 5 ^(b)	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 ^(b) , 5 ^(b)	31
2. Recirculation Loop Pump Discharge Valve Actuation	2	1, 2, 3, 4 ^(b) , 5 ^(b)	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^(a)</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 ^(b) , 5 ^(b) , 31	
f. Bus Power Monitor ^(d) (E11-K106A,B)	1/bus	1, 2, 3, 4 ^(b) , 5 ^(b)	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 ^(c)	1, 2, 3	33
d. Suppression Chamber Water Level - High (E41-LSH-N015A,B)	2 ^(c)	1, 2, 3	33
e. Bus Power Monitor ^(d) (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-NO10A,B,C,D) (E11-PTM-NO10A-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^(a)</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 ^(d) (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 ^(e) ,5 ^(e)	34
b. 4.16 kv Emergency Bus Undervoltage (Degraded Voltage) Device Number 27/DV	3/bus	2/bus	2/bus	1,2,3,4 ^(e) ,5 ^(e)	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.