

Docket No. 50-325

December 20, 1988

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See attached page

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:

SUBJECT: ISSUANCE OF AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE  
NO. DPR-71 - BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1, REGARDING  
CHLORIDE INTRUSION MONITOR TAG NUMBERS (TAC NO. 68725)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. to Facility Operating License No. DPR-71 for the Brunswick Steam Electric Plant, Unit 1. The amendment consists of changes to the Technical Specifications in response to your submittal dated June 27, 1988.

The amendment changes the Technical Specifications (TS) Tables 3.3.5.6-1, 3.3.5.6-2 and 4.3.5.6-1 to replace instrument tag number TS-CR-863 with TS-CIT-863-3. The change reflects an upgrading of instrumentation during a planned plant modification.

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

Sincerely,

original signed by E. Tourigny

Edmond G. Tourigny, Senior Project Manager  
Project Directorate II-1  
Division of Reactor Projects I/II

Enclosures:

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

cc w/enclosures:  
See next page

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FOR ADDOCK 05000325  
P PDC

*BEP 11/14/88*

*DF01 11*

*CPJW*

OFC	:LA:PD21:DRPR:PM:PD21:DRPR:PE:PD21:DRPR:D:PD21:DRPR	:	:
NAME	: PAnderson : ETourigny: ch: BBozafari : EAdensam	:	:
DATE	: 11/3/88 : 11/4/88 : 11/7/88 : 11/7/88	:	:

AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-71 - BRUNSWICK, UNIT 1

Docket File

NRC PDR

Local PDR

PDII-1 Reading

S. Varga (14E4)

G. Lainas

E. Adensam

P. Anderson

E. Tourigny

B. Mozafari

OGC

D. Hagan (MNBB 3302)

E. Jordan (MNBB 3302)

B. Grimes (9A2)

T. Barnhart (4) (P1-137)

W. Jones (P-130A)

E. Butcher (11F23)

C. McCracken (8H7)

ACRS (10)

GPA/PA

ARM/LFMB

cc: Licensee/Applicant Service List



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. 120  
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 June 27, 1988, 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. 120, are hereby incorporated in the license. Carolina Power & Light Company shall operate the facility in accordance with the Technical Specifications.

- 3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by E. Adensam  
 Elinor G. Adensam, Director  
 Project Directorate II-1  
 Division of Reactor Projects I/II

Attachment:  
 Changes to the Technical  
 Specifications

Date of Issuance: December 20, 1988

*BCB 11/4/88*      *FJM 11/17/88*

OFC	:LA:PD21:DRPR:PM:PD21:DRPR:PE:PD21:DRPR:	ECEB:DEST	:	<i>[Signature]</i>	:	D:PD21:DRPR	:
NAME	: PAnderson	: Etourigny:ch: B Mozafari	:	CMcCracken	:	R. Crickman	:
DATE	: 11/3/88	: 11/4/88	:	11/4/88	:	11/17/88	:

ATTACHMENT TO LICENSE AMENDMENT NO. 120

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

3/4 3-56

3/4 3-57

3/4 3-58

Insert Pages

3/4 3-56

3/4 3-57

3/4 3-58

TABLE 3.3.5.6-1

CHLORIDE INTRUSION MONITORS

<u>FUNCTIONAL UNIT AND INSTRUMENT NUMBER</u>	<u>MINIMUM NUMBER OPERABLE CHANNELS<sup>(a)</sup></u>
1. Chloride leak detectors in the condenser hotwell outlet headers (CO-CR24)	4
2. Chloride leak detector in the condensate pump discharge (CO-CIS-3075-1 or TS-CIT-863-3)	1
3. Chloride leak detector in the inlet to the condensate filter demineralizer (CFD-CIT-1)	1
4. Chloride leak detector in the inlet to the deep bed demineralizer (CDD-CIT-1)	1

- a. Chloride intrusion can be detected if any of the functional units have their required minimum number of channels OPERABLE.

TABLE 3.3.5.6-2

CHLORIDE INTRUSION MONITORS SETPOINTS

<u>FUNCTIONAL UNIT AND INSTRUMENT NUMBER</u>	<u>ALARM SETPOINT</u>	<u>ALLOWABLE LIMIT</u>
1. Chloride leak detectors in the condenser hotwell outlet headers (CO-CR24)	$\leq 1.0 \mu\text{hos/cm}$	$\leq 2.0 \mu\text{hos/cm}$
2. Chloride leak detector in the condensate pump discharge		
a. Wide range monitor (CO-CIS-3075-1)	$\leq 2.0 \mu\text{hos/cm}$	$\leq 10 \mu\text{hos/cm}$
b. Narrow range monitor (TS-CIT-863-3)	$\leq 0.3 \mu\text{hos/cm}$	$\leq 0.5 \mu\text{hos/cm}$
3. Chloride leak detector in the inlet to the filter demineralizer (CFD-CIT-1)	$\leq 0.3 \mu\text{hos/cm}$	$\leq 0.5 \mu\text{hos/cm}$
4. Chloride leak detector in the inlet to the deep bed demineralizer (CDD-CIT-1)	$\leq 0.3 \mu\text{hos/cm}$	$\leq 0.5 \mu\text{hos/cm}$

TABLE 4.3.5.6-1

CHLORIDE INTRUSION MONITORS SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT AND INSTRUMENT NUMBER</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>
1. Chloride leak detector in the condenser hotwell outlet headers (CO-CR24)	D	M	R
2. Chloride leak detector in the condensate pump discharge (CO-CIS-3075-1 or TS-CIT-863-3)	D	M	SA
3. Chloride leak detector in the inlet to the condensate filter demineralizer (CFD-CIT-1)	D	M	SA
4. Chloride leak detector in the inlet to the deep bed demineralizer (CDD-CIT-1)	D	M	SA

BRUNSWICK - UNIT 1

3/4 3-58

Amendment No. 27, 120



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-71

CAROLINA POWER & LIGHT COMPANY, et al.

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

DOCKET NO. 50-325

1.0 INTRODUCTION

By letter dated June 27, 1988, the Carolina Power & Light Company (the licensee) submitted a request for changes to the Technical Specifications (TS) for Brunswick Steam Electric Plant, Unit 1. The proposed changes would replace instrument tag numbers TS-CR-863 with TS-CIT-863-3 in Tables 3.3.5.6-1, 3.3.5.6-2 and 4.3.5.6-1. The change is being requested to reflect a plant modification which upgrades the instrumentation.

2.0 EVALUATION

In the June 27, 1988 submittal, the licensee proposed changing certain instrument tag numbers as listed in Item 2 of TS Tables 3.3.5.6-1, 3.3.5.6-2 and 4.3.5.6-1. Item 2 in each of the above tables represents the chloride leak detector in the condensate pump discharge, which provides indication of chloride intrusion in the condensate system. The purpose of these chloride intrusion monitors is to preclude long-term piping degradation in the condensate system.

The licensee plans a plant modification which upgrades the instrumentation. TS-CR-863 represents a conductivity recorder and two analyzers, one which measures feedwater conductivity and one which measures condensate conductivity. The replacement, TS-CIT-863-3, is an upgraded conductivity cell and analyzer, capable of detection and compensation for temperature transients which may occur in the sample being analyzed. The new conductivity analyzer will provide a direct and continuous reading without relying on a recorder. The new analyzer will also provide an output to a recorder for trending purposes.

The function provided by the instrumentation being replaced would not be altered with the new instrumentation. The capabilities of the chloride intrusion instrumentation are enhanced by the ability to detect and compensate for temperature transients in analyzed samples. The chloride limits established in TS 3/4.4.4 and the setpoints of TS Table 3.3.5.6-2 are unchanged. The change does not affect the TS requirement that at least one channel of the chloride leak detection instrumentation in the condensate pump discharge be operable.

Therefore, based on the discussion above, the NRC staff finds the change to be acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATIONS

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR Part 20 and changes to surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released off site, and that there should be no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration, and there has been no public comment on such finding. Accordingly, this amendment meets 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 amendment.

### 4.0 CONCLUSION

The Commission made a proposed determination that this amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 46139 ) on November 16, 1988 , and consulted with the State of North Carolina. No public comments or requests for hearing were received, and the State of North Carolina did not have any comments.

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and 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: B. Mozafari, Project Directorate II-1

Dated: December 20, 1988