

May 15, 1987

Docket No. 50-325

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: Containment Atmospheric Dilution System (TAC No. 64337)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 107 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 of December 16, 1986.

The amendment changes the Technical Specifications by revising the designation of valve 1-CAC-V172 from drywell purge exhaust isolation valve to suppression chamber purge exhaust isolation valve.

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

Sincerely,



Ernest D. Sylvester, Project Manager  
BWR Project Directorate #2  
Division of BWR Licensing

Enclosures:

1. Amendment No. 107 to License No. DPR-71
2. Safety Evaluation

cc w/enclosures:  
See next page

LA: PM 21: DRPR  
PAnderson  
05/17/87

PM: PD21: DRPR *ES*  
ESylvester  
05/17/87

*ff* D: PD21: DRPR  
*fo* EAdensam  
05/17/87

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

Brunswick Steam Electric Plant  
Units 1 and 2

cc:

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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. 107  
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 December 16, 1986, 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.107, 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 and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 15, 1987

LA:PD21:DRPR  
PAnderson  
05/1/87

PM:PD21:DRPR  
ESylvester *ES*  
05/7/87

OGG *OGG*  
05/11/87

D:PD21:DRPR  
for EAdensam  
05/7/87

ATTACHMENT TO LICENSE AMENDMENT NO. 107

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

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

Remove Page

3/4 6-16a

Insert Page

3/4 6-16a

TABLE 3.6.3-1 (Continued)PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION</u>	<u>VALVE GROUP<sup>1/</sup></u>	<u>ISOLATION TIME (Seconds)</u>
Drywell CAD Inlet Valve CAC-V161	6	15
Suppression Chamber CAD Inlet Valve CAC-V162	6	15
Drywell CAD Inlet Valve CAC-V163	6	15
Suppression Chamber Purge Exhaust Isolation Valve CAC-V172	6	15

1. See Specification 3.3.2, Table 3.3.2-1 for isolation signal that operates each valve group.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NO. DPR-71

CAROLINA POWER & LIGHT COMPANY

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

DOCKET NO. 50-325

1.0 INTRODUCTION

The primary means of containment post-accident purging, as well as normal operational purging, is through a 2-inch drywell bypass line. This bypass line directs the discharge around the large 18-inch purge isolation valves to the Standby Gas Treatment System (SBGTS). By letter dated December 16, 1986, the licensee proposed to remove the inboard 2-inch isolation valve along with two test connection isolation valves from the drywell bypass line and place them in an identical isolation arrangement on the 20-inch purge line located on the suppression chamber. Additionally, the remaining 2-inch drywell bypass line with the outer isolation valve would be rerouted to tie into the 18-inch purge line between the main isolation 18-inch valves rather than prior to the inboard valve. Both of the affected penetrations are part of the Containment Atmosphere Dilution (CAD) System. The licensee also proposes to retain all controls of the moved isolation valves, as well as its containment isolation signal override capability. This override capability would also be extended to the 18-inch inboard drywell purge isolation valve.

The above modifications to the drywell and suppression chamber purge lines have been proposed to take advantage of the radioactive scrubbing capability of the suppression pool. Without the changes, post-accident venting using the small 2-inch line would go directly from the drywell to the SBGTS. With the modifications, the pathway would be from the drywell, through the pool and then to the SBGTS.

These changes are the same as those that have been approved by the staff and implemented on Brunswick Unit 2. The staff's evaluation concerning these changes, as well as other modifications, was issued on May 5, 1986, to support the Brunswick Unit 2 Technical Specification (TS) changes in Amendment 125.

The licensee's submittal of December 16, 1986, also included a proposed revision to the Unit 1 TSs that was necessitated by the above valving modifications.

2.0 EVALUATION

The proposed purge line changes will affect the overall plant isolation arrangement to a very limited extent. Basically, one half of the drywell

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2-inch bypass line will be removed and added to the suppression chamber purge line. As a result, the line arrangement from the suppression chamber will be identical to the existing drywell purge arrangement. The remaining drywell pathway will still be quite similar to the existing pathways. The only significant change is related to the isolation role of the inboard 18-inch valve. In the modified version, the valve serves as the inboard isolation valve for both the main 18-inch pathway, as well as the 2-inch bypass. This arrangement satisfies both GDC 54 and GDC 56 of 10 CFR Part 50, Appendix A, and, therefore, is acceptable. The suppression chamber isolation arrangement, since it is identical to the current drywell arrangement, is also acceptable.

In addition to the above considerations, the proposed modifications have been implemented on Brunswick Unit 2. Acceptance of these proposed modifications would allow Unit 1 to become identical to Unit 2 with respect to the previously staff approved piping arrangements.

Finally, the proposed TS change is simply a change in the nomenclature of the moved isolation valve. Again, this change will make both Unit 1 and 2 TSs identical in this area.

Based on the evaluation provided above, the staff finds the proposed modifications to the purge lines of the CAD System and the corresponding revision to the TS are 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. 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 offsite; 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 the amendment involves no significant hazards consideration, which was published in the Federal Register on February 11, 1987 (52 FR 4403), and consulted with the State of North Carolina. No public comments were received, and the State of North Carolina did not have any comments.

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

Principal Contributor: J. S. Guo

Dated: May 15, 1987

May 15, 1987

AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NO. DPR-71

Brunswick Steam Electric Plant, Unit 1

DISTRIBUTION:

Docket No. 50-325

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GPA/PA

ARM/LFMB

Brunswick File

cc: Plant Service List