

September 10, 1985

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:

The Commission has issued the enclosed Amendment No. 91 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 April 30, 1985.

The amendment changes the Technical Specifications (TS) to revise the TS Table 3.6.3-1 to reflect modifications being made during the current refueling outage to provide a dedicated purge system for post-accident combustible gas control.

A copy of the related Safety Evaluation is also enclosed.

Sincerely,

Original signed by/

Marshall Grotenhuis, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:

1. Amendment No. 91 to License No. DPR-71
2. Safety Evaluation

cc w/enclosures:

See next page

DISTRIBUTION

Docket File

NRC PDR

Local PDR

ORB#2 Reading

HThompson

HWhitener

SNorris

MGrotenhuis

OELD

LJHarmon

ELJordan

BGrimes

TBarnhart (4)

WJones

MVirgilio

ACRS (10)

OPA, CMiles

RDiggs

Gray File

Extra - 5

JPartlow

*Please see previous concurrence page.

DL:ORB#2

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DL:AD-OR

SNorris:rc*

Grotenhuis*

DVassallo*

CBarth*

GLamas

08/08/85

08/12/85

08/13/85

08/14/85

09/11/85

9/16/85

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PDR ADOCK 05000325
PDR

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. 91
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 April 30, 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. 91, 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 'D. Vassallo', with a long horizontal flourish extending to the right.

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 10, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 91

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

Revise the Appendix A Technical Specifications as follows:

<u>Remove</u>	<u>Insert</u>
3/4 6-15	3/4 6-15
3/4 6-16	3/4 6-16
	3/4 6-16a

The changed areas are indicated by vertical lines.

TABLE 3.6.3-1 (Continued)
PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION</u>	<u>VALVE GROUP^{1/}</u>	<u>ISOLATION TIME (Seconds)</u>
HPCI steam line isolation valves E41-FOO2 E41-FOO3	4	50
HPCI torus suction isolation valves E41-FO42 E41-FO41	4	80
RCIC steam line isolation valves E51-FOO7 E51-FOO8	5	20
Drywell purge exhaust backup valve CAC-V10	6	15
Containment air purge isolation valve CAC-V15	6	15
Suppression chamber vent valve CAC-V22	6	15
Drywell purge exhaust valve CAC-V23	6	15
Nitrogen makeup and inerting inlet valve CAC-V4	6	15
Suppression chamber inerting inlet valve CAC-V5	6	15

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION</u>	<u>VALVE GROUP^{1/}</u>	<u>ISOLATION TIME (Seconds)</u>
Drywell inerting inlet valve CAC-V6	6	15
Suppression chamber purge exhaust isolation valve CAC-V7	6	15
Suppression chamber vent valve bypass valve CAC-V8	6	15
Drywell purge exhaust isolation valve CAC-V9	6	15
Drywell vent isolation valve CAC-49	6	15
Drywell vent backup valve CAC-50	6	15
Containment atmosphere dilution inlet valve CAC-V55	6	15
Containment atmosphere dilution inlet valve CAC-V56	6	15
Suppression Chamber Make-Up Valve CAC-V170	6	15
Drywell Make-Up Valve CAC-V171	6	15
Suppression Chamber CAD Inlet Valve CAC-V160	6	15

TABLE 3.6.3-1 (Continued)PRIMARY CONTAINMENT ISOLATION VALVES

<u>VALVE FUNCTION</u>	<u>VALVE GROUP^{1/}</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
Drywell 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. 91 TO FACILITY LICENSE NO. DPR-71

CAROLINA POWER & LIGHT COMPANY

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

DOCKET NO. 50-325

1.0 INTRODUCTION

By letter dated April 30, 1985 (NLS-85-072) the Carolina Power & Light Company (the licensee) requested an amendment to Facility Operating License No. DPR-71 for the Brunswick Steam Electric Plant (BSEP) Unit 1. The amendment changes the Technical Specifications (TS) to revise TS Table 3.6.3-1 to reflect modifications being made during the upcoming refueling outage to provide a dedicated purge system for post-accident combustible gas control.

2.0 EVALUATION

The modification performed on the Brunswick Unit 1 containment atmospheric dilution (CAD) system will provide a dual dedicated single active failure proof supply of nitrogen for use in post-accident conditions. Currently, nitrogen is transported from the storage tank into the reactor building by a 1-inch line. Once inside the reactor building, the 1-inch line ties into a 20-inch inerting line. Supply of nitrogen through this line into the containment is currently contingent on operation of large air operated isolation valves. The scheduled modification reroutes both the inerting and exhaust lines of the CAD system, thereby providing post-accident purging capability independent of these large air operated isolation valves. The 20-inch inerting and exhaust lines will still be used under normal startup and makeup conditions. As a result of the modification, the suppression chamber and drywell makeup CAD Inlet valves (CAC-V47) and CAC-V48) are being deleted from TS Table 3.6.3-1. In addition, seven new primary containment isolation valves are being added to TS Table 3.6.3-1.

The revision reflects a modification to the dedicated purge system for post-accident combustible gas control. The bypassing of the two large air operated valves by two separate one-inch nitrogen lines provides a more reliable source of nitrogen for post-accident conditions. The replacement valves are in redundant pairs in parallel.

The effect of this modification is to provide separate independent systems for containment atmosphere control and further to provide for containment atmosphere dilution post accident through the use of one-inch globe valves which have greater leak tight integrity than the 18-inch butterfly valves in the normal nitrogen inerting and makeup system. The proposed amendment to TS Table 3.6.3-1 is to identify the appropriate isolation valves.

The staff has reviewed the licensee's request and finds that the modifications and the proposed changes to Technical Specification Table 3.6.3-1 are acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

The amendment involves a change in the 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 is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the 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

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: H. Whitener

Dated: September 10, 1985