

February 20, 1985

Docket Nos. 50-325/324

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

Dear Mr. Utley:

The Commission has issued the enclosed Amendment No. 108 to Facility Operating License No. DPR-62 for the Brunswick Steam Electric Plant, Unit 2. The amendment consists of changes to the Technical Specifications in response to your submittal of September 26, 1984.

The amendment changes the Technical Specifications by revising Tables 3.3.5.2-1 and 4.3.5.2-1 and TS 3/4.6.6.4 to reflect requirements for the drywell/suppression chamber hydrogen and oxygen analyzers. These requirements were identified in NUREG-0737 as TMI Action Plan Item II.F.1.6.

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. 108 to License No. DPR-62
2. Safety Evaluation

cc w/enclosures:
See next page

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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. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 108
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 September 26, 1984, 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:

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2. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 108, 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



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

Attachment:
Changes to the
Technical Specifications

Date of Issuance: February 20, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 108

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

Revise the Appendix A Technical Specifications as indicated below. The changed area is indicated by vertical line.

Remove

3/4 3-48

3/4 3-49

3/4 6-30

Insert

3/4 3-48

3/4 3-49

3/4 6-30

TABLE 3.3.5.2-1

REMOTE SHUTDOWN MONITORING INSTRUMENTATION

<u>FUNCTIONAL UNIT AND INSTRUMENT NUMBER</u>	<u>READOUT LOCATION</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1.. Reactor Vessel Pressure (C32-PI-3332 and C32-PT-3332)	RSP*	1
2. Reactor Vessel Water Level (B21-LT-N017D-3, B21-LSH-N017D-3) (B21-LI-3331, B21-LI-R604AX, B21-LT-3331, B21-LT-N026A)	RSP*	1
3. Suppression Chamber Water Level (CAC-LI-3342 and CAC-LT-3342)	RSP*	1
4. Suppression Chamber Water Temperature (CAC-TR-778-7)	RSP*	1
5. Drywell Pressure (CAC-PI-3341 and CAC-PT-3341)	RSP*	1
6. Drywell Temperature (CAC-TR-778-1,3,4)	RSP*	1
7. Residual Heat Removal Head Spray Flow (E11-FT-3339 and E11-FI-3339)	RSP*	1
8. Residual Heat Removal System Flow (E11-FT-3338, E11-FI-3338, and E11-FY-3338)	RSP*	1
9. Residual Heat Removal Service Water Discharge Differential Pressure (E11-PDT-N002BX and E11-PDI-3344)	RSP*	1

*Remote Shutdown Panel, Reactor Building 20' Elevation

TABLE 4.3.5.2-1

REMOTE SHUTDOWN MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>FUNCTIONAL UNIT AND INSTRUMENT NUMBER</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Reactor Vessel Pressure (C32-PI-3332 and C32-PT-3332)	M	Q
2. Reactor Vessel Water Level (B21-LT-NO17D-3, B21-LSH-NO17D-3) (B21-LI-3331, B21-LI-R604AX, B21-LT-3331, B21-LT-NO26A)	NA M	Q Q
3. Suppression Chamber Water Level (CAC-LI-3342 and CAC-LT-3342)	M	R
4. Suppression Chamber Water Temperature (CAC-TR-778-7)	M	R
5. Drywell Pressure (CAC-PI-3341 and CAC-PT-3341)	M	Q
6. Drywell Temperature (CAC-TR-778-1,3,4)	M	R
7. Residual Heat Removal Head Spray Flow (E11-FT-3339 and E11-FI-3339)	M	Q
8. Residual Heat Removal System Flow, (E11-FT-3338, E11-FI-3338, and E11-FY-3338)	M	Q
9. Residual Heat Removal Service Water Discharge Differential Pressure (E11-PDT-NOO2BX and E11-PDI-3344)	M	Q

CONTAINMENT SYSTEMSGAS ANALYZER SYSTEMSLIMITING CONDITION FOR OPERATION

3.6.6.4 Two independent gas analyzer systems for the drywell and suppression chamber shall be OPERABLE with each system consisting of an oxygen analyzer and a hydrogen analyzer.

APPLICABILITY: CONDITION 1.

ACTION:

- a. With one oxygen and/or one hydrogen analyzer inoperable, restore at least two oxygen and two hydrogen analyzers to OPERABLE status within 31 days or be in at least STARTUP within the next 8 hours. The provisions of Specification 3.0.4 are not applicable.
- b. With no gas analyzer OPERABLE for oxygen and/or hydrogen, be in at least STARTUP within 8 hours.

SURVEILLANCE REQUIREMENTS

4.6.6.4 Each gas analyzer system (CAC-AT-4409, Division I and CAC-AT-4410, Division II) shall be demonstrated OPERABLE at least once per 92 days by performing a CHANNEL CALIBRATION using standard gas samples containing a nominal:

- a. Zero volume percent hydrogen, balance nitrogen.
- b. Seven to ten volume percent hydrogen, balance nitrogen.
- c. Twenty-five to thirty volume percent hydrogen, balance nitrogen.
- d. Zero volume percent oxygen, balance nitrogen.
- e. Seven to ten percent oxygen, balance nitrogen.
- f. Twenty to twenty-five percent oxygen, balance nitrogen.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 108 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 September 26, 1984, the Carolina Power & Light Company (the licensee) submitted proposed changes to the Technical Specifications appended to Facility Operating License No. DPR-62 for the Brunswick Steam Electric Plant, Unit 2. The proposed changes would modify the Technical Specifications in response to NRC Generic Letter No. 83-36, dated November 1, 1983. These Technical Specifications are related to NUREG-0737 items which have to do with containment conditions during and following accident conditions and impose additional limiting conditions for operation and surveillance requirements for the instrumentation for measuring the above quantities.

2.0 Discussion

In November 1980, the staff issued NUREG-0737, "Clarification of TMI Action Plan Requirements" which included all TMI Action Plan items approved by the Commission for implementation at nuclear power reactors. NUREG-0737 identifies those items for which Technical Specifications (TS) were scheduled for implementation after December 31, 1981. The staff provided guidance on the scope of Technical Specifications for all of these items in Generic Letter 83-36. Generic Letter 83-36 was issued to all Boiling Water Reactor (BWR) licensees on November 1, 1983. In the Generic Letter, the staff requested licensees to:

- a. Review their facility's Technical Specifications to determine if they were consistent with the guidance provided in the Generic Letter, and
- b. Submit an application for a license amendment where deviations or absence of Technical Specifications were found.

By letter dated March 2, 1984, the licensee responded to Generic Letter 83-36 by submitting Technical Specification change requests for Brunswick Units 1 and 2. Prior to that date, Amendment 63 dated December 28, 1983, had been issued for Unit 1 concerning TMI Action Plan Item II.F.1.6,

Containment Hydrogen Monitors, and included the deletion of references to drywell oxygen concentration monitors in TS Tables 3.3.5.2-1 and 4.3.5.2-1 (remote shutdown monitoring instrumentation) and the incorporation of revised instrument tag numbers and calibration gas sample ranges in TS 3/4.6.6.4 (gas analyzer systems).

In the preparation of the March 2, 1984 request for Technical Specification changes for Brunswick Unit 2 (which resulted in issuance of Amendment 99 for Brunswick Unit 2), the licensee inadvertently omitted identification of TS Tables 3.3.5.2-1 and 4.3.5.2-1 (remote shutdown monitoring instrumentation) or TS 3/4.6.6.4 (gas analyzer systems) as needing revisions to be consistent with the parallel requirements of the Brunswick Unit 1 Technical Specifications.

3.0 Evaluation

Item 2 above delineates TMI Action Plan requirements that have been reviewed and approved but for which Technical Specifications have not been issued. Only II.F.1.6 will be included in this amendment and only for Brunswick Unit 2. II.F.1.6 has been completed for Unit 1 in Amendment No. 63 dated December 28, 1983.

NUREG-0737 Item II.F.1.6 concerns containment hydrogen monitoring. The proposed revisions to TS Tables 3.3.5.2-1 and 4.3.5.2-1 delete reference to a previously existing monitor which has been replaced by a new wider range drywell hydrogen and oxygen monitoring system. The revisions necessary to TS Tables 3.3.5.2-1 and 4.3.5.2-1 are the deletion of references to drywell oxygen, item 7, and the renumbering of items 8, 9 and 10. The drywell oxygen concentration indication of the remote shutdown panel has been removed as part of the replacement of the previously existing drywell hydrogen/oxygen monitoring system. Corresponding changes to TS Table 3.3.5.3-1 and TS Table 4.3.5.3-1 were previously made in Amendment 99 dated August 13, 1984, to document changes in tag number and replacement of old instruments reflecting increased measurement ranges, improved design, remote calibration features, and improved moisture removal capabilities. The changes incorporated in this amendment are necessary to remove reference to the previously existing system.

The proposed revision to TS 4.6.6.4 incorporates the increased calibration gas sample ranges necessary to correspond to the increased measurement range of the new wide-range hydrogen and oxygen monitoring system and the incorporation of revised instrument tag numbers. The proposed change is consistent with GE/BWR-4 Standard Technical Specification guidance.

We have reviewed the proposed Technical Specifications and find that they are administrative changes and LCO changes necessary to reflect the installation of instrumentation as recommended in NUREG-0737. Therefore, we find the proposed Technical Specifications acceptable.

4.0 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.

5.0 Conclusions

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: P. Stoddart

Dated: February 20, 1985