

February 7, 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 Nos. 81 and 107 to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2. The amendments consist of changes to the Technical Specifications in response to your submittal of October 2, 1984.

The amendments change the Technical Specifications by revising Table 4.3.5.9-1 to remove the requirement for control room alarm annunciation when the noble gas activity monitors of the main stack monitoring system, the reactor building ventilation monitoring system, or the turbine building ventilation monitoring system experience a high-voltage circuit failure. In addition, the requirement for control room alarm annunciation is removed for the condition when the noble gas activity monitor of the reactor building ventilation system is not set in the "operate mode."

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. 81 to License No. DPR-71
2. Amendment No. 107 to License No. DPR-62
3. 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. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 81
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 October 2, 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-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. 81, 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 7, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 81

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO. 50-325

Revise the Appendix A Technical Specifications as follows:

Remove

3/4 3-76

Insert

3/4 3-76

TABLE 4.3.5.9-1RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTSTABLE NOTATION

- (a) Refer to Appendix E of the OFFSITE DOSE CALCULATION MANUAL for specific instrumentation identification numbers.
- (b) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used. Previously established calibration procedures may be substituted for this requirement (refer to Bases 3/4.3.5.9).
- (c) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway, as described below, and control room alarm annunciation occurs if any of the following conditions exist:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 2. Circuit failure (High-voltage low).
 3. Instrument indicates a downscale failure.
 4. Instrument not set in "operate" mode.

The CHANNEL FUNCTIONAL TEST of the channel up to but not including operation of the isolation valve for this pathway shall be performed within the specified surveillance interval. Testing of the isolation valve for this pathway to demonstrate operability shall be performed during the CHANNEL CALIBRATION.

- (d) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 2. Instrument indicates a downscale failure.
 3. Instrument not set in "operate" mode (not applicable to the Reactor Building Ventilation Monitoring System noble gas activity monitors).



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. 107
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 October 2, 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:

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.

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 7, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 107

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO. 50-324

Revise the Appendix A Technical Specifications as follows:

Remove

3/4 3-76

Insert

3/4 3-76

TABLE 4.3.5.9-1 (Continued)

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTSTABLE NOTATION

- (a) Refer to Appendix E of the OFFSITE DOSE CALCULATION MANUAL for specific instrumentation identification numbers.
- (b) The initial CHANNEL CALIBRATION shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards shall permit calibrating the system over its intended range of energy and measurement range. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration shall be used. Previously established calibration procedures may be substituted for this requirement (refer to Bases 3/4.3.5.9).
- (c) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway, as described below, and control room alarm annunciation occurs if any of the following conditions exist:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 2. Circuit failure (High-voltage low).
 3. Instrument indicates a downscale failure.
 4. Instrument not set in "operate" mode.

The CHANNEL FUNCTIONAL TEST of the channel up to but not including operation of the isolation valve for this pathway shall be performed within the specified surveillance interval. Testing of the isolation valve for this pathway to demonstrate operability shall be performed during the CHANNEL CALIBRATION.

- (d) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:
1. Instrument indicates measured levels above the alarm/trip setpoint.
 2. Instrument indicates a downscale failure.
 3. Instrument not set in "operate" mode (not applicable to the Reactor Building Ventilation Monitoring System noble gas activity monitors).



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 81 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 107 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 October 2, 1984, the Carolina Power & Light Company (the licensee) submitted proposed changes to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2.

The proposed changes modify the TS to: (1) delete a requirement for control room annunciation of a high-voltage circuit failure alarm, a feature which is not present in the originally installed equipment, and (2) delete a requirement for control room annunciation or alarm if an instrument is not set in the "operate" mode, a feature which is not present in the originally installed equipment. These Technical Specifications are part of the Standard Radiological Effluent Technical Specifications (RETS), adopted by the licensee in Amendment No. 62, Unit 1, and in Amendment No. 88, Unit 2, both dated December 7, 1983.

2.0 Discussion

The TS section (Table 4.3.5.9-1) in question was adopted by the licensee in the changeover to the standard RETS, in Amendment No. 62, Unit 1, December 27, 1983, and Amendment No. 88, Unit 2, December 27, 1983. In the preparation of the referenced amendments, the licensee inadvertently included changes which did not reflect the actual design features of certain items of installed equipment. The proposed amendments would delete those inadvertent changes.

Table Notation (d)2 to Table 4.3.5.9-1 (Amendment No. 62, Unit 1 and Amendment No. 88, Unit 2) provides for control room alarm annunciation if the instrument experiences circuit failure. "High-voltage low" is given as an example of circuit failure. Affected monitors are the noble gas activity monitor of the main stack monitoring system, the reactor building ventilation monitoring system, and the turbine building ventilation monitoring system. Table Notation (d)4 to Table 4.3.5.9-1 (Amendment No. 62, Unit 1 and Amendment No. 88, Unit 2) additionally provides for control room annunciation when the noble gas activity monitor of the reactor building ventilation system is not set in the "operate" mode. The

referenced notations are to existing installed instrumentation systems which do not have the design capabilities specified.

3.0 Evaluation

The proposed revisions to TS Table 4.3.5.9-1 (Units 1 and 2) delete reference to instrumentation functions which are not present in the design of radioactive effluent monitoring systems now installed at Brunswick. The revisions necessary to TS Table 4.3.5.9-1 are (1) the deletion of the requirements for control room alarm annunciation when the noble gas activity monitors of the main stack monitoring system, the reactor building ventilation monitoring system, or the turbine building ventilation monitoring system experience a circuit failure and (2) the deletion of the requirement for control room alarm annunciation for the condition when the noble gas activity monitor for the reactor building ventilation system is not set in the "operate" mode.

The instrumentation systems affected by the proposed amendment are provided with both upscale and downscale trips which alarm in the control room. In most cases of circuit failure, either an upscale or downscale trip would occur. In the case of circuit failure involving low high-voltage, an observable downscale trend would occur. For the reactor building monitor, the performance of once-per-shift channel checks would detect the failure. For the main stack and turbine building monitors, a check source test performed automatically every five minutes would detect the low high-voltage condition. The reactor building monitor is not provided with an "operate" mode switch; however, the once-per-shift channel checks assure timely detection and verification of the monitors' operability.

The proposed revisions reflect the design features of the existing monitors. The TS requirements referencing these features were part of the standard RETS package adopted by the licensee and were inadvertently included in that package.

It has not been the policy of the staff to impose new requirements on the use or functioning of existing equipment. Since the proposed revisions reflect existing equipment design capabilities, the staff considers relief from the standard RETS requirements to be appropriate. The proposed revision is therefore consistent with GE/BWR-4 Standard TS guidance for operating reactors. Based on the above evaluation, the staff concludes that the proposed amendments are acceptable.

4.0 Environmental Considerations

The amendments involve 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 amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet 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 amendments.

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 amendments 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 7, 1985