



Carolina Power & Light Company

USNRC REGION II  
ATLANTA, GEORGIA

MAY 21 1982

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Mr. James P. O'Reilly, Regional Administrator  
United States Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W., Suite 3100  
Atlanta, GA 30303

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 AND 50-324  
LICENSE NOS. DPR-71 AND DPR-62  
RESPONSE TO INFRACTIONS OF NRC REQUIREMENTS

Dear Mr. O'Reilly:

Carolina Power & Light Company (CP&L) has received I.E. Inspection Report 50-324/82-09 and 50-325/82-09 for the Brunswick Steam Electric Plant Unit Nos. 1 and 2, and finds that it does not contain any information of a proprietary nature.

The report identified one item that appears to be in noncompliance with NRC requirements and one new unresolved item. CP&L's response to the noncompliance is addressed in the attachment to this letter. The response to the new unresolved item will be forwarded from the plant.

Should you have any questions concerning this letter or the attachment, please contact my staff.

Yours very truly,

B. J. Furr  
Vice President  
Nuclear Operations

MSG/lr (n-57)  
Attachments

cc: Mr. R. C. DeYoung (NRC)  
Mr. J. Van Vliet (NRC)

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## ATTACHMENT

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 AND 50-324  
LICENSE NOS. DPR-71 AND DPR-62  
IE INSPECTION REPORT 50-324/82-09 AND 50-325/82-09  
RESPONSE TO INFRACTIONS OF NRC REQUIREMENTS

As a result of the NRC inspection conducted on March 22-26 and 30-31, 1982, and in accordance with the NRC Enforcement Policy, 45 FR 9987 (March 9, 1982), the following violation was identified at Carolina Power & Light Company's (CP&L) Brunswick Steam Electric Plant (BSEP) Unit Nos. 1 and 2.

### Violation (Severity Level IV)

Technical Specification 6.8.1 requires that written procedures be implemented and maintained covering activities in Appendix A of Regulatory Guide 1.33 which specifies procedures for control of radioactivity. Procedure RC&T 2000, "Radioactive Airborne Effluent Releases and Reports" specifies the sampling procedure for analysis of gas from the stack.

Contrary to the above, during the period from June 1, 1981 through March 24, 1982, stack gas samples were not collected in accordance with the approved procedure.

### Carolina Power & Light Company's Response

Carolina Power & Light Company acknowledges that this was a violation of NRC requirements. The intent of E&RC Procedure 2000 is to obtain a gaseous effluent sample for analysis. The method described in procedure 2000 indicated that a Marinelli beaker was to be used as a collection container. Due to the elevated quantities of noble gases being released, the concentration of noble gases collected in the marinelli beaker was too high for analysis on the GeLi multi-channel analyzer. As geometry tables were established for a 14.2 cc vial collection container, this alternate collection method was implemented. However, procedure 2000 was not revised to allow this method.

Use of the 14.2 cc collection vial for off-gas analysis has been discontinued until appropriate procedural changes have been implemented. The one liter Marinelli beaker is currently being used as specified in the current procedure. Therefore, this item is considered closed.

As requested by Mr. C. D. Evans, an evaluation was performed to determine why a comparison check of the two sampling methods (marinelli and 14.2 cc vial) showed that the 14.2 cc vial method was approximately 40% lower for all noble gases. The evaluation determined the following:

- a) The marinelli sample is taken under pressure, therefore, the gas concentration being measured is higher than a comparable 14.2 cc vial sample.
- b) The efficiency calibration curves at the lower energies were inaccurate for the marinelli sample. This provided the maximum portion of the identified error.

An evaluation of the differences obtained by using the 14.2 cc vial and the marinelli beaker has indicated that a representative sample can be obtained using the 14.2 cc vial. The activity of the 14.2 cc vial sample was in agreement as indicated by results of the confirmatory measurements made by the NRC mobile lab.

New efficiency curves have been established using NBS sources to allow for accurate marinelli beaker sample. Procedure changes will be effected to reflect the best standards to use to ensure proper efficiency calibration curves at low energy levels.