

CP&L

Carolina Power & Light Company

Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461-0429

December 22, 1983

FILE: B09-13510C
SERIAL: BSEP/83-3994

Mr. James P. O'Reilly, Administrator
U. S. Nuclear Regulatory Commission
Region II, Suite 3100
101 Marietta Street N.W.
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
30-DAY NONROUTINE RADIOLOGICAL ENVIRONMENTAL EVENT REPORT (2-SR-83-32)

Dear Mr. O'Reilly:

Results of gamma analysis of a bottom sediment sample collected November 11, 1983, as part of Brunswick Steam Electric Plant's Environmental Radiological Monitoring Program, detected Co-60 at a concentration of 7.69 ± 0.15 pCi/g at Sample Station No. 33. The analysis of this sample was completed on November 22, 1983. The MDA value for this sample is 0.11 pCi/g. The Co-60 activity found in this sample constitutes a 30-day reportable event in accordance with Technical Specification, Appendix B, Section 5.4.2b, pertinent to environmental sampling.

This bottom sediment sample was collected as part of an expanded surveillance program on bottom sediment in the discharge canal. The current sample results indicate a slight increase in activity at Sample Station No. 33. Sample Station No. 34, which was reported in October 1983, has decreased to a level that is statistically insignificant in accordance with the T-test calculation set forth in the Technical Specification, Appendix B, Section 5.4.2b.

The Co-60 activity found in this sample is reportable due to a factor of 10 increase above the MDA. There is no radiation hazard or exposure to the public due to this activity. There was no Co-60 found in surface water samples taken from the intake and discharge canals or from the ocean during November 1983.

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James P. O'Reilly

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The sampling frequency for bottom sediment samples has been increased from semiannually to monthly in order to more closely monitor the Co-60 activity and to determine if trends in the activity levels can be predicted.

Very truly yours,



C. R. Dietz, General Manager
Brunswick Steam Electric Plant

AHC/kal/LETC1

Enclosure

cc: Mr. R. C. DeYoung
NRC Document Control Desk