



Carolina Power & Light Company

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

April 20, 1983

FILE: B09-13510C
SERIAL: BSEP/83-1202

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 NO. 50-325 AND 50-324
LICENSE NO. DPR-71 AND DPR-62
30-DAY NONROUTINE RADIOLOGICAL ENVIRONMENTAL EVENT REPORT

Dear Mr. O'Reilly:

Results of gamma analysis of a bottom sediment sample collected March 8, 1983, as part of Brunswick Steam Electric Plant's Environmental Radiological Monitoring program, detected Co-60 at a concentration of 3.70 ± 0.08 pCi/g at sample station No. 33. The analysis of this sample was completed on March 25, 1983. The MDA value for this station is 0.06 pCi/g. The Co-60 activity found in this sample constitutes a 30-day reportable event in accordance with technical specifications, Appendix B, Section 5.4.2b, pertinent to environmental sampling.

This bottom sediment sample was collected as part of an expanded surveillance program on the sediment in the discharge canal. The current sample results indicate that the Co-60 activity has decreased by a factor of three at station No. 33. Station No. 34, which was reportable in December 1982, still remains at a very low level of Co-60 in the sediment.

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 activity found in the surface water samples from the intake and discharge canals or from the ocean during March 1983.

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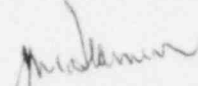
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Mr. James P. O'Reilly

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The sampling frequency for bottom sediment samples has been increased from semiannually to monthly for the period of November 1982 through June 1983, in order to more closely monitor the increased Co-60 activity levels and to determine if trends in the activity levels in the discharge canal bottom sediments can be predicted. This sample represents the fifth of the monthly samples that will be taken in this effort.

Very truly yours,



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

RMP/jo/LETJ03

Enclosure

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