

APPENDIX B
NOTICE OF VIOLATION

Carolina Power and Light Company
Brunswick 1 and 2

License Nos. DPR-62
and DPR-71

Based on the results of the NRC inspection conducted December 8-19, 1980, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified:

- A. As required by 10 CFR 20.201, "Each licensee shall make or cause to be made such surveys as may be necessary for him to comply with the regulations in this part" (10 CFR Part 20). 10 CFR 20.103(a)(3) states that "the licensee shall use suitable measurements of concentrations of radioactive materials in air for detecting and evaluating airborne radioactivity in restricted areas"

Contrary to the above, on December 15, 1980, airborne radioactivity surveys were not taken in the breathing zone of persons working in the respirator cleaning and small tool decontamination areas, both of which were restricted areas. General area air sampling being conducted in these areas was not adequate to detect and evaluate the airborne radioactivity in the immediate working areas of these persons. Workers were decontaminating respirators and tools at the time.

This is a Severity Level V Violation (Supplement IV.E.2).

- B. As required by 10 CFR 20.103(a)(3), "the licensee ..., as appropriate, shall use measurements of radioactivity in the body ... as may be necessary for timely detection and assessment of individual intakes of radioactivity by exposed individuals." 10 CFR 20.103(b)(2) states that "Whenever the intake of radioactive material by any individual exceeds ... 40-hour control measure, the licensee shall make such evaluations and take such actions as are necessary to assure against recurrence. The licensee shall maintain records of such occurrences, evaluations, and actions taken in a clear readily identifiable form suitable for summary review and evaluation."

Contrary to the above, a measurement of radioactivity in the body of an individual on April 9, 1980, indicated an intake of radioactive material in excess of that which would result from inhalation of radioactive material for 40 hours at a uniform concentration specified in Appendix B, Table 1, Column 1 of 10 CFR Part 20, and the required evaluation, corrective actions to assure against recurrence and documentation had not been completed at the time of the inspection on December 19, 1980.

This is a Severity Level V Violation (Supplement IV.E.2).

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- C. As required by Technical Specification 6.8.1.a, written procedures shall be established, implemented, and maintained covering the activities and procedures recommended in Appendix A of Regulatory Guide 1.33, November 1972. The Regulatory Guide requires specific radiation protection procedures for control of radioactive material to protect the environment and minimize personnel exposure. Licensee procedures, BSEP Volume VIII, "Radiation Control and Protection", and RC&T 0215, "Unrestricted Release of Materials", require that (1) equipment for unconditional release from the Radiation Control Area to clean areas have less than 200 dpm/100 sq cm loose contamination and less than 0.25 mR/hour fixed contamination at one inch from the surface, and (2) plant materials for unrestricted release from the protected area have less than 200 dpm/100 sq cm beta-gamma removable contamination as determined by smears.

Contrary to the above, on December 17, 1980, the inspectors found a protective clothing boot in the construction contractor clean tool storage trailer outside of the Radiation Control Area which had loose contamination of approximately 500 dpm/100 sq cm and fixed contamination of approximately 4 mR/hour. Also, on December 17, 1980, the inspectors found a piece of wood in a woodpile outside of the protected area which had beta-gamma contamination of approximately 3000 dpm/100 sq cm.

This is a Severity Level V Violation (Supplement IV.E.2).

- D. As required by 10 CFR 20.203(b), "Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: CAUTION (OR DANGER) RADIATION AREA." 10 CFR 20.202(b)(2) states that radiation area "... means any area, accessible to personnel, in which there exists radiation ... at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirem, or in any 5 consecutive days a dose in excess of 100 millirem."

Contrary to the above, on December 9, 1980, numerous areas accessible to personnel within the reactor buildings of Units 1 and 2 which met the radiation area criteria of 10 CFR 20.202(b)(2) were not posted as required by 10 CFR 20.203(b). The entrances to the reactor buildings were posted as radiation areas.

This is a Severity Level V Violation (Supplement IV.E.2).

Pursuant to the provisions of 10 CFR 2.201, Carolina Power and Light Company is hereby required to submit to this office within twenty-five days of the date of this Notice, a written statement or explanation in reply, including (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid future violations; and (3) the date when full

compliance will be achieved. Under the authority of Section 182 of the Atomic Energy Act of 1954, as amended, this response shall be submitted under oath or affirmation.

Date: APR 27 1981