

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Carolina Power and Light Company  
Brunswick Steam Electric Plant  
Units 1 and 2

Docket Nos. 50-325 and 50-324  
License Nos. DPR-71 and DPR-62  
EA 90-130

During an NRC inspection conducted on July 9 - 13, 1990, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1990), the Nuclear Regulatory Commission proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below

- A. 10 CFR 20.201 (b) requires each licensee to make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations in this part and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. 10 CFR 20.201 (a) defines a "survey" as an evaluation of the radiation hazards incident to the production, use, release, disposal or presence of radioactive materials or other sources of radiation under a specific set of conditions.

Contrary to the above, on July 5, 1990, the licensee failed to adequately evaluate the extent of the radiation hazards present to preclude a substantial potential for an exposure in excess of 10 CFR 20 requirements for two individuals prior to their performing a modification on the Unit 1 "D" Traversing Incore Probe (TIP) Drive Mechanisms in the licensee's Unit 1 Reactor Building, in that, the workers received unplanned radiation exposure when they were momentarily exposed to an activated TIP having a radiation dose rate of approximately 1000 rem per hour on contact.

- B. Technical Specification 6.8.1 requires that written procedures be established, implemented, and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33, November 1972.

Regulatory Guide 1.33, November 1972, paragraph 9.e states general procedures for the control of maintenance repair, replacement, and modification work should be prepared prior to beginning work. These procedures should include information on areas such as the following:

- (1) Method for obtaining permission and clearance for operational personnel to work and for logging such work, and
- (2) Factors to be taken into account, including the necessity for minimizing radiation exposure to workmen, in preparing the detailed work procedures.

Technical Specification 6.11 requires that written procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

Contrary to the above, on July 5, 1990, the licensee failed to establish adequate radiation protection procedures concerning TIP replacement or modification, in that the licensee's procedure for plant modification 87-241 did not include necessary precautions to prevent accidental withdrawal of a highly radioactive detector into unshielded and occupied areas of the licensee's facility, creating the potential for significant personnel radiation exposures.

- C. 10 CFR 19.12 requires that all individuals working in a restricted area be kept informed of the storage, transfer, or use of radioactive materials or of radiation in such portions of the restricted area, and be instructed in the health protection problems associated with exposure to such radioactive materials or radiation, and in the precautions or procedures to minimize exposure.

Contrary to the above, on July 5, 1990, a licensee employee moving a highly radioactive TIP had not received training on the radiological hazards of the TIP system and had not been instructed that continued take-up of the detector's cable could cause the TIP to enter an unshielded and occupied area that could result in unplanned exposures to high radiation levels.

This is a Severity Level III problem (Supplement IV).

Cumulative Civil Penalty - \$62,500 (assessed equally among the three violations).

Pursuant to the provisions of 10 CFR 2.201, Carolina Power and Light Company (Licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, and if denied, the reasons why, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps that will be taken to avoid further violations, and (5) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, the Licensee may pay the civil penalty by letter addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a check, draft, money order, or electronic transfer payable to the Treasurer of the United States in the amount of the civil penalty proposed above, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty in whole or in part, such answer should be clearly marked as an "Answer to a Notice

of Violation" and may: (1) deny the violations listed in this Notice in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty the factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1990), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, letter with payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region II, and a copy to the NRC Resident Inspector at the Brunswick Steam Electric Plant.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By:  
Stewart D. Ebnetter

Stewart D. Ebnetter  
Regional Administrator

Dated at Atlanta, Georgia  
this 30<sup>th</sup> day of August 1990