

**CP&L**

**Carolina Power & Light Company**

P. O. Box 1551 • Raleigh, N. C. 27602

APR 23 1992

SERIAL: NLS-92-112

R. A. WATSON  
Senior Vice President  
Nuclear Generation

United States Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62  
REPLY TO NOTICE OF VIOLATION (EA 92-024)

Gentlemen:

On March 24, 1992, the Nuclear Regulatory Commission issued a Notice of Violation (EA 92-024) for an issue at the Brunswick Steam Electric Plant, Units 1 and 2. Details of the NRC inspections are provided in Inspection Report Nos. 50-325/92-01 and 50-324/92-01 dated February 13, 1992. Carolina Power & Light Company hereby responds to the Notice of Violation. The enclosure to this letter provides CP&L's reply to the Notice of Violation in accordance with the provisions of 10 CFR 2.201. Also enclosed is a check payable to the Treasurer of the United States in the amount of One Hundred Thousand Dollars (\$100,000.00).

Please refer any questions regarding this submittal to Mr. D. C. McCarthy at (919) 546-6901.

Yours very truly,

*R. A. Watson*

R. A. Watson

WRM/wrm (\wp\ea92024.006)

Enclosures

cc: Mr. S. D. Ebner  
Mr. N. B. Le  
Mr. R. L. Prevatte

R. A. Watson, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

*Betty Jean Young*  
Notary (Seal)

My commission expires: 9-23-95



*W/Check # 577222*  
*IE14*  
*11*

9204280411 920423  
PDR ADOCK 05000324  
Q PDR

ENCLOSURE

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2  
NRC DOCKET NOS. 50-325 & 50-324  
OPERATING LICENSE NOS. DPR-71 & DPR-62  
REPLY TO NOTICE OF VIOLATION AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Inspection conducted on January 4-31, and February 3, 1992, a violation of NRC  
regulations was identified. In accordance with the "General Statement of Policy and Procedure  
for Notices of Violation and Enforcement Actions," 10 CFR Part 2, Appendix C (1991), 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 violation and  
associated civil penalty are set forth below:

Technical Specification 6.8.1.a requires written procedures shall be established and  
implemented as recommended in Appendix "A" of NRC Regulatory Guide 1.33,  
November 1972. Section I.1 of Appendix "A" requires that procedures for maintenance  
which can affect the performance of safety-related equipment be properly preplanned and  
performed within written procedures or instructions appropriate to the circumstances.

Contrary to the above, on January 3, 1992, the licensee performed a maintenance work  
activity on Emergency Diesel Generator (EDG) No. 2, a safety-related component, using a  
procedure that was not appropriate to the circumstances. Specifically, the procedure,  
"Reprinting Diesel Generators," dated May 16, 1991 and updated January 2, 1992, did not  
receive an adequate review to evaluate the impact of the preplanned work on the  
operability of EDG No. 2. The maintenance work activity performed under this procedure  
resulted in the failure of EDG No. 2 to start upon receipt of a valid start signal on  
January 6, 1992.

This is a Severity Level III violation (Supplement I).  
Civil Penalty - \$100,000

RESPONSE TO VIOLATION:

Admission or Denial of Violation:

Carolina Power & Light Company admits to this violation.

Reason for the Violation:

On January 3, 1992, while Emergency Diesel Generator No. 2 was operable, Project Support  
Services (formerly Plant Services) personnel completed spray cleaning of the emergency diesel  
generator in preparation for painting in accordance with an informal written work instruction. At

0045 hours on January 6, 1992, during testing of the Unit 2 Main Turbine overspeed trip function, a component failure of the primary electrical lockout logic circuitry initiated an automatic start of all four emergency diesel generators. Emergency Diesel Generator Nos. 1, 3, and 4 started as designed, but Emergency Diesel Generator No. 2 failed to start.

An investigation revealed that the No. 2 Emergency Diesel Generator failed to start due to binding of the fuel racks resulting from the dried residue of the cleaning agent Planisol-M. If not thoroughly rinsed and/or correctly mixed, the cleaning agent's meta-silicate component dries to form a crystalline bond.

Previous responses to this violation have been presented to the NRC during the March 3, 1992, Brunswick Enforcement Conference and as an additional example in the response to Notice of Violation contained in Enforcement Action 91-158.

#### Event Cause:

Plant analysis has determined that failure of Emergency Diesel Generator No. 2 to auto start was due to the following:

- (1) Failure of the Project Support Services work control process to identify those types of cleaning activities which could potentially affect equipment operability. The specific technical cause of the event described in the violation above was the use of Planisol-M cleaning solvent that caused binding of the emergency diesel generator fuel racks.
- (2) The lack of a formal procedure resulted in post-maintenance testing not being performed.

Consequently, the following normal processes required for activities affecting quality were not invoked:

- (1) formal procedure technical and 10 CFR 50.59 reviews,
- (2) incorporation of the work into the Automated Maintenance Management System and Site Work Force Control planning process, and
- (3) consideration of post maintenance testing.

#### Corrective Steps Which Have Been Taken and Results Achieved:

1. Use of Planisol-M was immediately suspended at the Brunswick Plant site. Stores was prohibited from issuing Planisol-M until an evaluation of the effects of Planisol-M was completed and procedures providing guidance for its use were issued.

2. Recognizing the importance of this event and the potential effect of the failure to follow normal processes required for activities affecting quality, management directed that Project Support Services organization work be brought under the formal control of the Site Work Force Control Group Process Procedure (BSP-43). An assessment of the Project Support Services work activities was performed to identify those activities with the potential for affecting the operability of safety related equipment. Based on the results of this assessment, activities with the potential for affecting safety related equipment will require Site Work Force Control review and processing through the Automated Maintenance Management System prior to implementation. These steps will provide the opportunity for greater managerial control of activities with the potential to impact safety-related equipment.
3. Detailed reviews of the event by management with involved personnel were conducted.
4. Communication of the event with other CP&L nuclear sites and the industry through a Nuclear Network entry was completed January 21, 1992.
5. A review of past similar activities by Project Support Services on Engineered Safeguards Feature equipment and systems was performed to identify potential inoperabilities. The results of this review revealed that no activities had been performed which could have degraded Engineered Safeguards Feature system operability.
6. Prior to the event cited, Brunswick Plant management had recognized the need for improvement in the areas of work control and self assessment. Plant management and the Nuclear Assessment Department have assessed work control and plant management has developed a corrective action plan in response to this assessment. Additionally, Work Control and Corrective Action Program assist visits by INPO scheduled for February 10, 1992, and March 2, 1992, have been conducted.

Corrective Actions That Will Be Taken To Avoid Further Violations:

On January 3, 1992, the Nuclear Regulatory Commission issued a Notice of Violation (EA 91-158). In addition to the corrective actions described in the response dated February 14, 1992 (Serial: NLS-92-031) and the supplemental response letter dated March 30, 1992 (Serial: NLS-92-098) to that enforcement action, the following corrective actions will be taken to avoid further recurrence of the problems identified in the violation recited herein:

1. An approved procedure to control future Emergency Diesel Generator repainting activities is in the final review process and will be implemented by July 31, 1992. This procedure will address the concern raised by use of Planisol-M and lubrication checks following cleaning.
2. Formal controls for painting on Engineered Safeguards Feature systems is currently being evaluated. The results of this evaluation and the recently completed

assessment identifying Site Work Force Control and Automated Maintenance Management System requirements for activities affecting safety related equipment will be formally incorporated within formal procedures by July 24, 1992.

Date When Full Compliance Will Be Achieved:

Based on establishment of interim controls including suspension of diesel generator cleaning and painting work activities until an approved procedure is complete and the incorporation of the Project Support Services organization into the Site Work Force Control process, the company believes that full compliance has been achieved. To ensure continued compliance, the corrective actions delineated within the preceding section will be implemented by July 31, 1992.