

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTY

Carolina Power and Light Company
H. B. Robinson Steam Electric Plant
Unit 2

Docket No. 50-261
License No. DPR-23
EA 87-166

During an NRC inspection conducted on May 4-8, 1987, violations of NRC requirements were identified. In accordance with the "Modified Enforcement Policy Relating to 10 CFR 50.49, Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants" contained in Generic Letter 88-07, 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 50.49(d) requires that each item of electrical equipment important to safety shall be identified, be placed on a list and information such as performance specifications and environmental conditions be provided.

Contrary to the above, from November 30, 1985 until the time of the inspection:

1. The Carolina Power and Light Company (CP&L) files did not contain documentation of the environmental qualification (EQ) of plant electrical cable in that electrical cables used in many systems important to safety inside containment were not identified as requiring EQ qualification, nor traceable to any available qualification documentation.
 2. The EQ Tag Files did not provide any EQ information concerning two valve operators (V-744 A and B) which were required to be environmentally qualified.
- B. 10 CFR 50.49(f) and (k) respectively require that: (1) each item of electrical equipment important to safety shall be qualified by testing of, or experience with, identical or similar equipment, and the qualification shall include a supporting analysis to show that the equipment to be qualified is acceptable, and (2) electrical equipment important to safety which was previously required to be qualified in accordance with the Division of Operating Reactors (DOR) "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors," dated November 1979 (DOR Guidelines) need not be requalified to 10 CFR 50.49. DOR Guidelines, Section 5.2.2, allows the use of type tests to qualify equipment important to safety if the equipment is identical in design and material construction to the test specimen.

Contrary to the above, from November 30, 1985 until the time of the inspection:

1. The CP&L files did not adequately document qualification of Crouse-Hinds electrical penetrations in that the plant equipment was not identical in design and material construction to the qualification test specimen, and deviations were not adequately evaluated as part of the qualification documentation. Specifically, electrical connectors and shrink-fit sleeve splices were not type-tested and were not qualified by similarity analysis.
 2. The CP&L files did not adequately document qualification of two Limitorque valve operators (V-866A and 866B) in that the plant equipment was not identical in design and material construction to the qualification test specimen and deviations were not adequately evaluated as part of the qualification documentation. Specifically, in one or both of the valve operators, unqualified grease was used for the geared limit switches, T-drains and grease relief valves were missing, motor leads had unqualified taped splices, a terminal block was unidentified and/or unqualified, and qualification of a motor brake was not documented.
 3. The CP&L files did not adequately document qualification of numerous electrical splices using Raychem sleeving in that the plant equipment was not identical in design and material construction to the Raychem test specimens addressed in the files and deviations were not adequately evaluated as part of the qualification documentation.
 4. The CP&L files did not adequately document qualification of tape electrical splices in that the tape splices were not identical in design and material construction to a qualification test specimen and deviations were not adequately evaluated as part of the qualification documentation.
- C. 10 CFR 50.49(f) and (k) respectively require that: (1) each item of electric equipment important to safety shall be qualified by testing of, or experience with, identical or similar equipment, and the qualification shall include a supporting analysis to show that the equipment to be qualified is acceptable, and (2) electric equipment important to safety which was previously required to be qualified in accordance with DOR Guidelines need not be requalified to 10 CFR 50.49. DOR Guidelines, Section 5.2.6 requires that equipment mounting and electrical or mechanical seals used during the type test must be representative of the actual installation for the test to be considered conclusive.

Contrary to the above, from November 30, 1985 until the time of the inspection, the installed configuration of Automatic Switch Company (ASCO) solenoid valves and Rosemount 1153A transmitters was not qualified in that electrical connection penetrations in the device housings were left unsealed while the test reports specified that the housings were to be sealed.

- D. 10 CFR 50.49(f) and (k) respectively require that: (1) each item of electric equipment important to safety shall be qualified by testing of, or experience with, identical or similar equipment, and the qualification shall include a supporting analysis to show that the equipment to be qualified is acceptable, and (2) electric equipment important to safety which was previously required to be qualified in accordance with DOR Guidelines need not be requalified to 10 CFR 50.49. DOR Guidelines, Section 5.2.5, requires that operational modes tested must be representative of the actual application requirements and that failure criteria should include instrument accuracy requirements based on the maximum error assumed in the plant safety analyses.

Contrary to the above, from November 30, 1985 until the time of the inspection, CP&L files did not adequately address instrument accuracy in that the files did not contain documentation specifying required accuracies and comparisons of those accuracies with instrument errors from LOCA type tests. Specifically, required accuracies were not documented and shown to be satisfied for Rosemount 1153A transmitters and 176KF Resistance Temperature Detectors.

This is an EQ Category A problem.

Cumulative civil penalty - \$450,000 (assessed equally among the violations).
(The facility operated in excess of 100 days in violation of EQ requirements.)

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. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) admission or denial of the violation, (2) the reasons for the violation if admitted, (3) the corrective steps that have been taken and the results achieved, (4) the corrective steps which 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, or money order 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

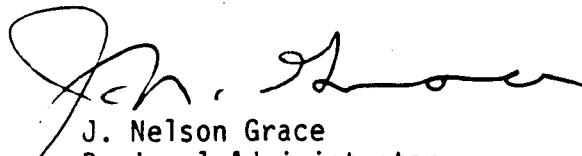
the Licensee fail to answer within the time specified, an order imposing the civil penalty will be issued. Should the Licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" 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, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in the "Modified Enforcement Policy Relating to 10 CFR 50.49, Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants" contained in Generic Letter 88-07 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 the penalty due, which has been subsequently 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 responses to the Director, Office of Enforcement, noted above (Reply to a 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, DC 20555, with a copy to the Regional Administrator, Region II and a copy to the NRC Resident Inspector, H. B. Robinson Steam Electric Plant.

FOR THE NUCLEAR REGULATORY COMMISSION


J. Nelson Grace
Regional Administrator

Dated at Atlanta, Georgia
this 16th day of June 1988