

UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the Matter of
Carolina Power and Light Company
H.B. Robinson Steam Electric
Generating Plant

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

ORDER IMPOSING CIVIL MONETARY PENALTY

I

Carolina Power and Light Company (CP&L/licensee) is the holder of Operating License No. DPR-23 (license) issued by the Nuclear Regulatory Commission (Commission/NRC) on July 31, 1970. The license authorizes the licensee to operate the H.B. Robinson Steam Electric Generating Plant, Unit 2, Hartsville, South Carolina, in accordance with the conditions specified therein.

II

A special inspection of the licensee's activities under the license was conducted on May 4-8, 1987 at the H.B. Robinson Steam Electric Generating Plant. The results of this inspection indicated that the licensee had not conducted its activities in full compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the licensee by letter dated June 16, 1988 and a corrected Notice was served on the licensee by letters dated December 20, 1989 and January 8, 1990. The Notice stated the nature of the violations, the provisions of the NRC's requirements that the licensee had violated, and the amount of the civil penalty proposed for the violations. The licensee responded to the Notice by letter dated September 1, 1988. In its response, the licensee agreed that all of the deficiencies, with the exception of the failure to properly consider instrument

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accuracy (Violation D), constituted violations of 10 CFR 50.49. But due to the circumstances associated with the specific violations and following the guidance of the "Modified Enforcement Policy Relating to 10 CFR 50.49" (Modified Policy), the licensee contended that the proposed civil penalty was inappropriate. To the extent the NRC concluded that a civil penalty was appropriate, the licensee argued that the proposed civil penalty was excessive for these EQ violations.

III

After consideration of the licensee's response and the statements of fact, explanations, and arguments contained therein protesting the appropriateness as well as the amount of the proposed civil penalty, the Deputy Executive Director for Nuclear Materials Safety, Safeguards and Operations Support, has determined, as set forth in the Appendix to this Order, that Violation D should be withdrawn, that the Modified Policy was properly applied, and that with the revision, the categorization of this action under the Modified Policy and the civil penalty amount remain as proposed. Accordingly a civil penalty of \$450,000 should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (ACT) 42 U.S.C. 2282, and 10 CFR 2.205, IT IS HEREBY ORDERED THAT:

The licensee pay a civil penalty in the amount of \$450,000 within 30 days of the date of this Order, by check, draft, or money order, payable to the Treasurer of the United States and mailed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555.

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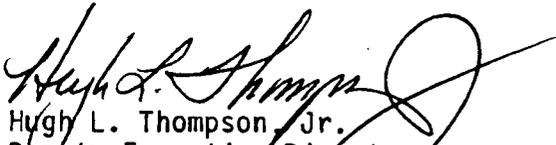
The licensee may request a hearing within 30 days of the date of this Order. A request for a hearing shall be clearly marked as a "Request for an Enforcement Hearing" and shall be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555; with copies to the Assistant General Counsel for Hearings and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; Regional Administrator, Region II, 101 Marietta Street, N.W., Atlanta, Georgia 30323; and the NRC Resident Inspector, H.B. Robinson Steam Electric Generating Plant.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the licensee fails to request a hearing within 30 days of the date of this Order, the provisions to this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

whether, on the basis of the admitted violations, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION


Hugh L. Thompson, Jr.
Deputy Executive Director
for Nuclear Materials Safety, Safeguards
and Operations Support

Dated at Rockville, Maryland
this 30th day of March 1990

APPENDIX

EVALUATION AND CONCLUSION

On June 16, 1988, the NRC staff issued a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) for the failure of Carolina Power and Light Company (CP&L) to adequately qualify electrical equipment important to safety as required by 10 CFR 50.49. By letter dated September 1, 1988, CP&L responded to the Notice by stating that CP&L had reviewed the Notice and agreed that all but one of the violations occurred, but disagreed with the imposition of the civil penalty. CP&L also argued that the NRC staff improperly applied the "Modified Enforcement Policy Relating to 10 CFR 50.49," (Modified Policy). A corrected Notice, was served upon the licensee by letters dated December 20, 1989 and January 8, 1990. The correction is reflected in the restatement of the violations set out below. The NRC staff's evaluations and conclusions regarding CP&L's response follow:

I. RESTATEMENT OF THE VIOLATIONS

- 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 taped 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 this 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 housing 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 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 .

(The facility operated in excess of 100 days in violation of EQ requirements.)

II. SUMMARY OF LICENSEE'S RESPONSE

CP&L maintains that the Notice (1) incorrectly alleges that the instrument loop accuracy deficiency was a violation; (2) fails to establish that CP&L "clearly should have known" of the violations prior to November 30, 1985; (3) incorrectly classifies two examples as significant; and (4) incorrectly applies the mitigation/escalation factors.

A. Denial of Proposed Violation D Regarding Instrument Loop Accuracy

CP&L denies that it violated any NRC requirement because it met the past interpretation of the requirement applied by the NRC staff during its regulatory review and acceptance of plant programs and methodology. CP&L maintains that it was in compliance with "instrument accuracy" requirements as defined and accepted by previous NRC staff practice, NRC consultant practice, and industry practice.

CP&L contends that, until the recent round of EQ inspections, the NRC staff consistently interpreted the instrument accuracy requirement as not requiring a detailed review of all inaccuracies from other components in the loop.

CP&L further contends that the NRC staff has changed its position with regard to instrument loop accuracy and that the new position should be issued as a Generic Letter or as a Bulletin. CP&L maintains that, since this is a "new" interpretation, the imposition of the requirement should allow appropriate implementation time and that the imposition should be considered under 10 CFR 50.109, Backfitting.

For the above reasons, CP&L maintains that it was in compliance with NRC requirements regarding instrument accuracy, and it denies the proposed violation.

B. "Clearly Should Have Known" Test

CP&L contends that the NRC staff failed to specifically analyze the factors set forth in the Modified Policy, and has failed to describe in detail, for each alleged deficiency, the facts relied upon in concluding that CP&L "clearly should have known" of the deficiencies. Additionally, CP&L stated that "A mere recitation of the conclusion that the licensee 'clearly should have known' is legally insufficient without full and complete support."

CP&L recognizes that the NRC staff may have conducted a detailed inquiry in this case; however, CP&L concludes that "... the Notice provides only a cursory and legally insufficient summary of the conclusions reached." Despite that conclusion, the licensee did provide arguments to support the position that CP&L should not clearly have known of the violations associated with instrument loop accuracy and Limitorque motor operators.

In summary, CP&L argues that the NRC staff failed to provide a legally sufficient factual basis for each and every "clearly should have known" finding and, therefore, the staff cannot conclude that CP&L "clearly should have known" of the violations and has deprived CP&L the opportunity to respond meaningfully to the Notice.

C. EQ Violation not Sufficiently Significant to Merit a Civil Penalty Under the Modified Policy.

CP&L contends that proposed Violation examples A.2 and B.4 are in the category described in Part III of the Modified Policy which addresses those violations not sufficiently significant to warrant a civil penalty.

For example A.2, CP&L contends that the actuators were required to operate within 15 seconds and were therefore qualifiable for their application "as-is." CP&L states that this information was acknowledged by the NRC staff during the inspection and therefore the proposed example falls into the category of not sufficiently significant to warrant a civil penalty.

For example B.4, CP&L contends that, since it identified this discrepancy and corrected it within days of identification, this should fall into the same category as above. CP&L also contends that it presented information to show that the taped splices in question were qualified or qualifiable.

D. Application of Mitigation/Escalation Factors

CP&L submits that an analysis of the factors for mitigation/escalation compels greater mitigation than reflected in the Notice as follows:

Factor 1: Identification and Prompt Reporting

CP&L maintains that escalation is not appropriate solely because the NRC staff identified the deficiency. It argues that escalation should be applied only if the licensee had a reasonable opportunity after November 30, 1985 to identify and report a violation but failed to do so.

CP&L further states that, in order to apply escalation, information that was used to decide the "clearly should have known" issue should not be the sole basis for the escalation.

CP&L argues that, for proposed examples A.1, B.1, B.2, and C, it had no reasonable opportunity to identify and correct the deficiencies. For proposed examples B.3 and B.4, CP&L did identify and correct the deficiencies prior to the inspection, which should be considered as a mitigating factor.

CP&L contends that the only considerations for this factor are mitigating and, for the cases where it had an opportunity to identify and correct the problem, it did so in an expeditious manner. CP&L concludes that the NRC staff should propose mitigation of the base civil penalty by 50 percent.

Factor 2: Best Efforts

CP&L maintains that the NRC staff should consider, when evaluating this factor, whether licensees used best efforts to implement an EQ program and not whether individual violations existed as of November 30, 1985. CP&L argues that it would be "double counting" for the NRC staff to escalate a proposed civil penalty because of a violation that the licensee "clearly should have known," yet did not take best efforts to correct prior to the EQ deadline.

CP&L maintains that the efforts that were taken prior to the deadline were significant. CP&L argues that, since it implemented a program to meet 10 CFR 50.49, as stated in the inspection report, it made best efforts in the EQ area.

CP&L believes that its efforts warrant mitigation; however, it feels that, as a minimum, the NRC staff should propose no escalation on the basis of this factor.

Factor 3: Corrective Actions

CP&L contends that it should receive 50 percent mitigation under this factor because the corrective action measures taken including remaining in a shutdown mode until full resolution of the deficiencies, additional testing and analyses of related EQ questions, and change-out of equipment constitute the full scope of timely corrective actions that could have been taken. With respect to timeliness of corrective actions, CP&L argues that a licensee's corrective actions must be judged only after a licensee reasonably determines that a violation exists.

E. Summary

CP&L agrees, with one exception, that the deficiencies cited in the Notice constitute violations of 10 CFR 50.49. CP&L maintains, however, that due to the circumstances surrounding the specific violations and following the guidance of the Modified Policy, the civil penalty is inappropriate for these EQ violations. To the extent that the NRC staff considers a civil penalty appropriate, CP&L argues that the civil penalty is excessive.

III. NRC's STAFF'S EVALUATION OF LICENSEE'S RESPONSEA. NRC Staff's Evaluation of Instrument Loop Accuracy

The NRC staff concludes that consideration of instrument loop accuracy has been and continues to be a valid EQ consideration. However, based on the licensee's acknowledgement that this issue is a valid technical concern today that will be accounted for in the future EQ decisions, and our belief that enforcement action with respect to this aspect of the licensee's EQ performance would serve no further purpose, the NRC staff has decided to withdraw Violation D.

B. NRC Staff's Evaluation of the "Clearly Should Have Known" Test

Contrary to the licensee's arguments, the Notice and transmittal letter issued to CP&L contained all the necessary elements for assessing a civil penalty required by Section 234b of the Atomic Energy Act and as set forth in 10 CFR 2.205. The NRC staff, in the context of applying the Modified Policy, agrees that the licensee should be provided with sufficient information regarding the NRC staff's finding that the licensee "clearly should have known" of the unqualified equipment in order to provide the licensee with the opportunity to contest that finding. Several steps have been taken in this matter to provide the licensee with the appropriate information. First, the Modified Policy has been made available to the licensee. Second, the NRC inspection report, which has been sent to the licensee, and upon which the enforcement action is based, documents the NRC's findings which form the basis for the "clearly should have known" conclusion. Third, an enforcement conference was held at which the inspection findings were discussed in depth. Finally, and most importantly, the NRC staff has articulated, in the cover letter which transmitted the Notice, the reasons why it believes the licensee "clearly should have known" of the EQ deficiencies. In that letter, the NRC staff highlighted the significant facts supporting the staff's conclusion. The NRC staff disagrees that the cover letter's explanation must be exhaustive and include all the facts and factors considered. The NRC staff's approach is consistent with the approach taken under the General Enforcement Policy whenever the NRC discusses the determination of the severity level of a violation or application of the escalation and mitigation factors. In such cases, the NRC staff provides the licensee with reasonable notice and a number of meaningful opportunities during the enforcement process to respond.

Regarding the licensee's position that the NRC staff has to balance the factors in arriving at a "clearly should have known" decision, the NRC staff agrees with that position in so far as it means that the NRC staff must weigh all relevant information for and against such a finding, before reaching a conclusion. In other words, compelling or particularly significant information applicable to one of the four factors would be sufficient to conclude that a licensee clearly should have known of a violation regardless of whether some less significant information against such a conclusion or a lack of information existed under any of the other three factors. In the NRC staff's view, the transmittal letter provided the licensee with sufficient information regarding the "clearly should have known" test. Based on the information provided, the licensee should have assessed the items as shown below:

1. Electrical cable: As discussed in the transmittal letter for the Notice, the need to properly qualify electrical cable was discussed in both Inspection and Enforcement (IE) Bulletin 79-01B (Attachment 2) and IE Circular 78-08. Additionally, given the extensive use of the unqualified cable, it cannot reasonably be argued that this was an isolated problem of which the licensee should not have clearly known. This is especially true recognizing that some of the cable used in the plant was properly qualified indicating that licensee personnel were aware that electrical cable qualification was required.
2. Valve Operators V-744A and B: The licensee knew that these operators had to be qualified because they were identified on the master list as requiring qualification. The licensee in its reply to the Notice acknowledged that the qualification documentation in the file for these operators was not complete. Notwithstanding this error on the part of licensee personnel, it is the NRC staff's position that the licensee knew qualification was required and consequently the "clearly should have known" test is met.
3. Crouse-Hinds Electrical Penetrations: The licensee clearly should have known that these electrical penetrations were not qualified because the qualification documentation (1) did not even address the type of splices found in the assemblies and (2) inadequately demonstrated the similarity between the electrical connectors used in the Robinson assemblies and those qualified at Brunswick.

The NRC staff has reviewed an extensive amount of correspondence between the licensee and the NRC staff relative to these penetrations and has found no evidence that the licensee ever informed the NRC staff or its contractors of the existence of the splices in the assemblies. Therefore, the licensee cannot reasonably argue that the NRC staff accepted the qualification of assemblies as installed. The licensee, however, knew that the penetrations had to be qualified as evidenced by all the correspondence with the NRC staff about them and clearly the qualification of the splices would make up an important portion of the overall qualification of the assembly.

With regard to the electrical connectors, the licensee asserted that the connectors were qualified by similarity with the Brunswick electrical connectors. The NRC staff, however, never accepted the similarity argument for the Robinson connectors prior to the November 30, 1985 deadline. Upon inspecting the Robinson connectors in 1987, the NRC staff concluded that the licensee should clearly have recognized that similarity of the Brunswick and Robinson connectors had not been demonstrated because the qualified Brunswick connectors contained an extra seal which the Robinson connectors did not have and which was not accounted for by testing or analysis.

4. Limitorque Valve Operators V866A and 866B: In its response to the Notice, the licensee admits that these operators were not installed in accordance with the qualification documentation. However, the licensee argues that, based on the "reasonable assurance" standard, it performed adequate walkdowns, sufficiently detailed reviews of NRC generic correspondence, and proper procurement receipt reviews to ensure qualification of, among other things, Limitorque valve motor operators.

The need to qualify electrical splices has long been recognized as a necessary element of any EQ program and the installation of T-drains was clearly required by the qualification documentation. The NRC staff agrees with CP&L that it has never been required that a licensee perform inspections of every component in every vendor-supplied assembly. However, the NRC staff did expect that a certain number of assemblies would be inspected as part of the EQ walkdowns. The scope of such inspections would be determined by the quality of the qualification record available. Clearly in this case, the qualification record for motor operators was not outstanding or complete enough to warrant total reliance upon it without appropriate field verification.

Had such inspections been properly performed and had the information in the NRC's generic issuances, such as Information Notice (IN) 83-72, been properly utilized to determine the types of components of particular concern, CP&L would have clearly found these unqualified components. The position CP&L has taken relative to the information that was provided in IN 83-72 is overly narrow. The fact that the IN specifically cites the discovery of a Buchanan terminal block is not extremely important. The important issue raised by the IN was the general one of unqualified components being found in equipment previously thought to be qualified.

The NRC staff has reviewed the letter Limitorque Corporation issued in response to IN 83-72 relied upon by the licensee and found that the conclusion reached by Limitorque in the last paragraph of the letter, that licensees need take no action with respect to IN 83-72, is not supported by the body of the letter. The NRC staff rejects the letter as the basis for a licensee not pursuing the issues raised in the IN and finds that the letter in its totality is consistent with the NRC staff's "clearly

should have known" finding. Consistent with that point, the NRC found that a number of licensees had acted upon the IN after reviewing the Limatorque letter.

The NRC staff was concerned that the Limatorque letter started out apparently intent on describing an isolated problem with terminal blocks at the Midland site and then abruptly went into discussing the generic use of Buchanan 0824 terminal blocks in Westinghouse supplied equipment. The discussion of the Buchanan terminal blocks in Westinghouse equipment is, in the staff's view, significant for both plants with such equipment and those without it. Most importantly, the Midland facility did not have Westinghouse supplied equipment, yet Limatorque chose to discuss this issue among a number of seemingly Midland specific issues. It is clear that the Buchanan terminal block information along with other discussion supplied in the letter about the Midland specific problems should have alerted licensees to the potential for environmental qualification deficiencies as the result of work performed not only by the vendor (Limatorque) but that performed by the nuclear steam supply system provider or the architect engineer. Therefore, it is clear that assurances from the vendor may not provide a sufficient basis for concluding that no problem existed with motor operators because changes to the motor operators may have been required or made by other organizations.

The letter then shifts back to problems characterized as Midland specific including a discussion of unidentifiable terminal blocks. That discussion in the Limatorque letter (#9 of the numbered items) does not provide adequate information to allow a knowledgeable reader to fully understand the situation including whether it was truly only a Midland problem. First, given that the Limatorque qualification tests for motor operators used only certain types of terminal blocks, the letter did not provide a basis for assuring customers that these or other types of unidentifiable terminal blocks did not exist in motor operators at other plants. Second, the letter states that the unidentifiable terminal blocks were used in low voltage control circuits and were identified and found "suitable" for their application. The letter does not answer such questions as whether the terminal blocks were ultimately identified to be of the types that had previously been used in testing, whether they were "suitable" in all possible control circuit applications at Midland as well as at other plants, and if not of a type previously tested, how the suitability discussed in the letter equated to the record of qualification required by 10 CFR 50.49.

With regard to grease found in the geared limit switches, the NRC staff concludes that it is an integral part of the motor operated valves which is subject to degradation as a result of exposure to radiation, temperature, aging, and humidity. 10 CFR 50.49(f) requires that 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 the equipment to be qualified is acceptable. Additionally, the DOR Guidelines state that the tested specimen should be the same as that being qualified and should be of identical design and material construction. In this case, the licensee's EQ program did not evaluate the significance of using a different grease from that which was tested. The vendor specifically stated which lubricants were qualified for use inside containment. In short, the licensee did not qualify motor operators lubricated with greases other than that specified by the vendor and clearly should have known that operators in that condition were not qualified.

The Notice incorrectly cited these two operators as containing unqualified motor brakes and an unqualified terminal block. These conditions were actually found in V744A and B discussed in #2 above. Notwithstanding those errors, the licensee clearly should have known V866A and B were not qualified for the reasons stated above.

5. Raychem Splices: As stated in the transmittal letter for the Notice, vendor acceptance criteria were available to assist the licensee in Raychem splice installation. The installed splices did not meet these criteria. In its response, the licensee acknowledged the fact that acceptance criteria were available and therefore the NRC staff concludes that an EQ engineer with that information clearly should have questioned the adequacy of the actual Raychem splice installation.
6. Taped Splices: The licensee did have documentation demonstrating qualification of Scotch 33 and 17 tapes and thus was aware that tape had to be qualified. The licensee clearly should have known that splices using Scotch 88 tape were unqualified because that type of tape was not approved for use in EQ applications and similarity to qualified tapes had not been demonstrated nor had installed Scotch 88 configurations been demonstrated to be similar to the test configurations of qualified tapes.
7. Cable entrance seals: The Rosemount and ASCO qualification documentation required that the transmitters and solenoid valves have cable seals. The licensee admits that the documentation in fact requires sealing and only offers misinterpretation of the information as the reason for failing to have seals. Notwithstanding the error on the part of licensee personnel, it is the NRC staff's position that the documentation was sufficiently detailed to conclude that the licensee clearly should have known to seal the cable entrances.

B. Categorization of the Violation Examples A.2 and B.4

For certain violations discussed above, the licensee provided additional information obtained or developed after the inspection regarding the qualification of equipment. Notwithstanding the fact that the NRC staff finds that, in some of those cases, the information provided still does not demonstrate qualification or qualifiability of the equipment as it was installed, favorable information developed after identification of a violation does not justify or reduce the significance of the preexisting lack of knowledge concerning equipment qualification. The only exceptions to this rule include cases in which a documentation deficiency is essentially one of a minor nature which is readily correctable based on knowledge, tests, or analyses that existed prior to the qualification deadline. The NRC staff would consider such violations as Severity Level IV or V.

Based on the position stated above, the NRC staff concludes that examples A.2 and B.4 were appropriately classified in the Notice and therefore should form portions of the violations for which the civil penalty is assessed. In the case of both of these examples, the problems were more than minor file deficiencies. For V-744A and B (example A.2), as stated in the Notice, no qualification information existed. The licensee later determined that these components need not be qualified and could be removed from the Master List. While this may be the case now, the licensee had originally determined that these items were to be qualified but it had no basis to support qualification at the time of the inspection. This deficiency is not a minor item of the type warranting classification at a lower severity level. For the Scotch 88 tape splices (example B.4), documentation demonstrating the qualification of Scotch 33 and 17 tapes was provided. However, the analysis necessary to demonstrate the similarity of the type of tape used to the types of tape tested and the analysis necessary to demonstrate the similarity of the configurations employed to the types tested were not provided nor available.

C. Application of Mitigation/Escalation Factors

Factor 1: Identification and Prompt Reporting

The criterion established for this factor in the Modified Policy is "Identification and Reporting, if required, of the EQ violations (including opportunities to identify and correct the deficiencies)." In the June 16, 1988 letter transmitting the Notice, it was explained that an escalation of 25 percent was applied because NRC identified the majority of the EQ violations in this matter. In recognition of the fact that the licensee did identify some of the violations, full escalation was not deemed appropriate.

The NRC staff does not accept the licensee's argument that some type of notice after the November 30, 1985 deadline is a necessary condition for considering NRC staff identification of deficiencies under this factor. The licensee has a continuing obligation to assure compliance with NRC requirements. The failure of the licensee to identify EQ violations after the deadline is a failure to assure compliance with

10 CFR 50.49 and warrants escalation. If information became available after the deadline to aid in identifying a deficiency and the licensee failed to do so, that would certainly contribute to escalation of the civil penalty, since that would reflect the failure to take advantage of a clear opportunity to identify and correct the deficiency. However, escalation or less than full mitigation of the civil penalty can also be based simply on the number and type of unqualified components identified by the NRC staff following the EQ deadline. NRC inspections are performed on an audit basis, with a relatively small number of inspectors who focus on a small percentage of the plant components to confirm that regulatory requirements are met. Therefore, given the limited scope of NRC inspections, and the reliance placed on licensee efforts to assure compliance, escalation based on NRC identification of violations is appropriate.

Factor 2: Best Efforts

The escalation of the civil penalty by 50 percent for a lack of best efforts does not suggest that CP&L made no efforts to comply with EQ requirements. The NRC staff recognizes the programmatic efforts made by CP&L in the 1979-1985 time frame. However, the licensee's program implementation and verification efforts which failed to meet the "best efforts" standard. Implementation and verification of a proper EQ program rests with the licensee and, based upon the identified deficiencies, while for the most part a satisfactory EQ program was formulated for Robinson, best efforts were not made in the areas of implementation and verification. As stated in the letter transmitting the Notice, the NRC staff concluded that, when electrical cable, a fundamental component of any EQ program, is not properly identified during the implementation and verification phases of the program, best efforts were not demonstrated regardless of the quality of the written program. That fact is especially applicable in a case such as this where cable affecting so much equipment important to safety was found to be unqualified. With regard to the licensee's argument that NRC SER comments as well as NRC Inspection Report comments demonstrate best efforts, the NRC staff does not agree. The SER review focused almost exclusively on the written description of the program and not on implementation and verification of the program.

Factor 3: Corrective Action

The criterion established for this factor in the Modified Policy is corrective actions to result in full compliance (including the time taken to make an operability or qualification determination, the quality of any supporting analysis, and the nature and extent of the licensee's efforts to come into compliance). This factor was applied to mitigate the civil penalty by 25 percent because of extensive corrective actions which were initiated once EQ deficiencies were properly acknowledged and it was fully understood what action was needed to bring the plant into full compliance with 10 CFR 50.49.

With respect to the licensee's question concerning what more could have been done, the issue was not how much was done but rather how quickly it was done. With the possible exception of the instrument loop accuracy issue, it is the NRC staff's position that all the other deficiencies were clear violations that required hours and not weeks to acknowledge. That being the case, corrective action for these deficiencies should have been more promptly addressed. With regard to the licensee's assertion that the fact the plant remained shut down should be given consideration under corrective actions, the NRC staff did consider that circumstance when applying this factor. Therefore, for the reasons stated above full mitigation under this factor is not warranted.

IV. NRC CONCLUSION

Based upon the above considerations, the NRC staff has decided to withdraw Violation D. Beyond that, no additional information has been provided that would cause the NRC staff to either withdraw a violation or reconsider its categorization. The remaining violations affect a sufficient number of systems and components that are important to safety to warrant classification of this EQ problem as a Category A problem. Therefore, the NRC staff adheres to its classification of the remaining violations as a Category A problem under the Modified Policy, and concludes that the proposed civil penalty of \$450,000 should be imposed.

Carolina Power & Light Company

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*no legal
objection
subject to
noted changes
on p. 12 of Appendix*

*made
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