



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

DMB
1E01

MAY 7 1984

Docket Nos. 50-456
50-457
Construction Permit Nos. CPPR-132
CPPR 133
EA 84-35

Commonwealth Edison Company
ATTN: Mr. James J. O'Connor
President and Chief
Executive Officer
Post Office Box 767
Chicago, IL 60690

Gentlemen:

This refers to the special quality assurance program inspection conducted by Messrs. T. E. Vandell, R. D. Schulz, I. T. Yin, D. E. Keating, C. C. Williams, and D. R. Hunter of this office on June 20-24, June 27-July 1, August 1-5, August 9, October 4-7, and October 24, 1983, and January 11-13, January 26, and February 9, 1984, at Braidwood Station, Units 1 and 2, and to the discussions of our findings during the conduct of the inspection. This also refers to enforcement conferences which were conducted concerning the findings of this inspection in the Region III office on December 20, 1983, between Mr. C. Reed and other members of your staff and Mr. A. B. Davis and other members of the Region III staff, and on March 7, 1984, between you and me and members of our staffs.

The purpose of this inspection was to assess the effectiveness of the quality assurance programs of the piping contractor, the electrical contractor, and the heating, ventilation, and air conditioning (HVAC) contractor. The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

The inspection revealed a number of deficiencies concerning the verification of correct material for ASME piping components, control of HVAC welding activities, and design control of field run small bore piping and associated hanger installation activities. These deficiencies existed even though CECO had recently conducted comprehensive reviews of the performance of all site contractors in response to a proposed civil penalty issued on February 2, 1983, involving one of these contractors. We are concerned that experience gained at other CECO facilities and the lessons learned from the mechanical equipment placement violations at Braidwood were not adequately applied to the Braidwood facility.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

8406050345 840507
PDR ADDOCK 05000456
Q PDR

11

The major factors contributing to the deficiencies were inadequate contractor programs and workmanship, inadequate licensee reviews of the contractor programs, and inadequate licensee quality assurance overview to ensure contractor activities met all requirements. The violations indicate the need for more aggressive CECO management involvement in and support of the CECO QA Program to ensure that all safety-related activities performed by contractor personnel are in accordance with the regulations, codes, standards, and license requirements. The stop work orders and construction deficiency reports which were issued as a result of our inspection findings in the areas of small bore piping hangers, HVAC welding activities, and piping material control should have been initiated by CECO without the involvement of the NRC. We are encouraged by the personnel and organizational changes you described during the March 7, 1984, enforcement conference which indicate that you recognize the need for increased management involvement in the quality assurance program and have taken some positive actions in that regard.

The deficiencies concerning piping material control resulted in the quality of some installed piping being indeterminate and resulted in some material being installed that did not meet design requirements. A documented inspection program had not been implemented to assure correct material installation for 2"-and-under safety-related piping prior to July 1983; therefore, inspection records verifying correct material installation prior to that date do not exist. A documented inspection program had not been implemented to assure correct material installation for safety-related piping over 2" prior to November 1982; therefore, inspection records verifying correct material installation prior to that date do not exist. During the March 7, 1984 enforcement conference you described a verification program you are developing which will include a 100% inspection of all installed piping and associated records. We understand that the results of that program and the completion of any necessary corrective actions that might result will ensure that all installed piping material meets design requirements. Since we will need to evaluate the results of your verification efforts in order to fully assess the significance of the programmatic deficiencies, enforcement action is not being taken on this violation at this time. Following our review of your efforts we will determine the appropriate enforcement action. Until that time, this matter is being classified as Unresolved Items 456/83-09-04(A); 457/83-09-04(A) and 456/83-09-04(B); 457/83-09-04(B).

The items of noncompliance identified during the inspection are specified in the enclosed Appendix, and have been categorized as a Severity Level IV in accordance with the NRC Enforcement Policy of 10 CFR Part 2, Appendix C, published in the Federal Register 47 FR 9987 (March 9, 1982). A written response is required. A response is also requested for Unresolved Items 456/83-09-04(A); 457/83-09-04(A) and 456/83-09-04(B); 457/83-09-04(B). Your response should include a description of your program to verify the quality of installed piping components, your efforts to improve the aggressiveness and effectiveness of CECO management involvement in and support of the CECO QA Program, and the basis for your confidence in the performance of all site contractors. Your response should address why the contractor programs in the piping and HVAC areas were inadequate, why CECO reviews of the deficient programs failed to identify the deficiencies, and why the CECO QA overview was

MAY 7 1984

inadequate to ensure the contractor activities met all requirements. Also, your response should describe your efforts to assure that all construction workers and their supervisors understand their role in building quality into the facility.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure(s) will be placed in the NRC Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1). If we do not hear from you in this regard within the specified periods noted above, a copy of this letter, the enclosure(s), and your response to this letter will be placed in the Public Document Room.

The response directed by this letter and the enclosed Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,
Original signed by
James G. Keppler

James G. Keppler
Regional Administrator

Enclosures:

- 1. Appendix, Notice of Violation
- 2. Inspection Reports
No. 50-456/83-09(DE);
No. 50-457/83-09(DE)

cc w/encls:

- D. L. Farrar, Director of Nuclear Licensing
- M. Wallace, Project Manager
- R. Cosaro, Project Superintendent
- J. F. Gudac, Station Superintendent
- DMB/Document Control Desk (RIDS)
- Resident Inspector, RIII
- Phyllis Dunton, Attorney General's Office, Environmental Control Division
- Jane Whicher, Esq.

IE: ESTHAR
GRKlingler
5/3/84

W. Lloyd
ELD S. Burns
for Lieberman
5/2/84

ES:D
JAAxelrad
5/3/84

IE: [Signature]
JTB/Tor
5/9/84

IE: [Signature]
RCDE Young
5/9/84

Ng [Signature]
5/3/84

5/7/84

RIII
OBS
Streeter/sv
05/04/84

RIII
Spessard
5/7

RIII
Lewjs

RIII
WKS 5-7-84
Schultz

RIII
Lewjs

RIII
Keppler
5-7-84

Schulz

Yin

Vandel

Keating

Williams

Danielson

Hunter

Distribution

PDR

LPDR

RCDeYoung, IE

JTaylor, IE

JAAxelrad, IE

GKlingler, IE

JLieberman, ELD

JKeppler, RIII

JNGrace, IE

NRC Resident Inspector

IE:EA File

IE:ES File

DCS