



Commonwealth Edison

One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

February 4, 1982

Mr. James G. Keppler, Regional Administrator
Directorate of Inspection and
Enforcement - Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Braidwood Station Units 1 and 2
I.E. Inspection Report Nos.
50-456/81-14 and 50-457/81-14

Reference (a): January 5, 1982, letter from
C. E. Norelius to Cordell Reed.

Dear Mr. Keppler:

Reference (a), contained the results of an inspection conducted by Messrs. R. N. Gardner, R. B. Landsman, and R. N. Sutphin on November 18-20, 1981, at Braidwood Generating Station. During that inspection, it was determined that certain activities were not in compliance with NRC requirements. Attachment A to this letter contains Commonwealth Edison's response to the Notice of Violation which was appended to reference (a).

To the best of my knowledge and belief the statements contained in the attachment are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison employees, contractors, and consultants. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

Please address questions regarding this matter to this office.

Very truly yours,

L. O. DelGeorge
for

L. O. DelGeorge
Director of Nuclear Licensing

lm

SUBSCRIBED and SWORN to
before me this 5th day
of February, 1982

Rosalie A. Pienta
Notary Public

3380N
8203230359 820316
PDR ADOCK 05000456
PDR
Q

FEB 8 1982

ATTACHMENT A

Response to Notice of Violation
Inspection Report 50-456/81-14
Inspection Report 50-457/81-14

Violation 1:

10 CFR 50, Appendix B, Criterion VII, states in part, "Measures shall be established to assure that purchased....equipment... conform to the procurement documents. These measures shall include provisions, as appropriate, for....inspection at the contractor or subcontractor source, and examination of products upon delivery."

Commonwealth Edison Company Topical Report CE-1-A, "Quality Assurance Program for Nuclear Generating Stations," Revision 15, states in Section 7, that "The control of the quality of purchased material equipment and services is achieved through the evaluation of vendors, surveillance of their operations and required source inspection, documentation, receiving inspection...."

Contrary to the above, separation barriers between adjacent redundant indicators in main control board panels 1PM04J and 2PM04J were not installed during their manufacture as required by Westinghouse Specification 952538.

Response:

Corrective Action Taken and Results Achieved

Commonwealth Edison Company has issued NCR's 323 and 324 to identify Systems Controls panels 1 and 2 PM04J as violating separation requirements. The missing barriers and braiding will be installed as soon as the required materials are available.

Corrective Action Taken to Avoid Further Noncompliance

Commonwealth Edison Company Project Construction Department has performed a complete inspection to assure all control room panels and post accident monitoring indicators meet separation requirements as specified.

Date When Full Compliance Will Be Achieved

The missing parts will be installed by May 1, 1982.

Violation 2:

10 CFR 50, Appendix B, Criterion VI, states in part, "Measures shall be established to control the issuance of documents.... including changes thereto, which prescribe all activities affecting quality. These measures shall assure that documents, including changes, are....distributed to and used at the location where the prescribed activity is performed."

Commonwealth Edison Company Topical Report CE-1-A, "Quality Assurance Program for Nuclear Generating Station," Revision 15, states in Section 6, that "a document control system will be used to assure that documents such as specifications, procedures....are reviewed for adequacy.... Such documents will be distributed to and used at the locations where the prescribed activity is performed. Changes to these documents will be handled similarly...."

Contrary to the above, the revision to Sargent and Lundy Specification 2790A, which changed the specified terminal lugs to be used on Class 1E electrical terminations, was not translated into L. K. Comstock "Cable Termination Installation" Procedure No. 4.3.9.

As a result, unapproved terminal lugs were stored in Class 1E storage facilities and L. K. Comstock electricians were being instructed to use these unapproved lugs on Class 1E terminations.

Response:

Corrective Action Taken and the Results Achieved

The lugs in question were put on hold and segregated from other stock. No unapproved lugs were installed. Electricians were re-instructed in proper lug usage.

Corrective Action Taken to Avoid Further Noncompliance

The L. K. Comstock Procedure No. 4.3.9 was revised on November 20, 1981, reflecting the terminal lug requirements of S&L Specification L-2790. This includes changes as shown on ECN (Engineering Change Notice) 1359.

L. K. Comstock was instructed to review the current Specification L-2790 and all open ECN's to assure that all procedures are in accordance with the design documents. This has now been completed.

In the future, greater care will be exercised to assure proper review of all ECN and specification changes for inclusion in site contractor procedures.

Date When Full Compliance Will Be Achieved

November 20, 1981

Violation 3:

10 CFR 50, Appendix B, Criterion XVI states in part, that "Measures shall be established to assure that conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, defective materials and equipment, and non-conformances are promptly identified and corrected....the identification of the significant condition adverse to quality, the cause of the conditions, and the corrective action taken shall be documented and reported to appropriate levels of management."

Commonwealth Edison Company Topical Report CE-1-A, "Quality Assurance Program for Nuclear Generating Stations," Revision 15, Section 16, requires that, items such as "deficiencies, deviations, defective material and equipment and non-conformances which are adverse to quality and might affect the safe operation of a nuclear generating station are promptly identified and corrected."

Contrary to the above, the following non-conforming conditions were either (1) not promptly identified or (2) not properly corrected:

- a. Two stressing gauges were found to be out of the required accuracy range and were sent out for recalibration. However, corrective action was not taken to identify and correct any potential deficiency caused by the use of the non-conforming gauges.
- b. The specified disposition of NSCI NCR No. 137 did not address the non-conformance report subject (i.e. failure to follow the specified tendon stressing sequence).
- c. Seventeen tendons were installed for more that 180 days without being greased. This condition was not in accordance with Sargent & Lundy (S&L) Specification L-2722 requirements and was not identified as non-conforming.

Response:

a. Corrective Action Taken and Results Achieved

Gauge calibration is checked daily. A lift-off test will be performed on the last tendon stressed on each day the gauges were found to be out of tolerance. The results of these tests will be evaluated by the Architect/Engineer to determine if futher action is necessary. A report of this evaluation will be provided by June 30, 1982.

Corrective Action Taken to Avoid Further Noncompliance

The contractor's stressing procedure has been revised to require issuance of an NCR if a gauge is found to be out of calibration. In addition, a more reliable gauge is being procured for use on the Unit 2 containment.

Date When Full Compliance Will Be Achieved

December 7, 1981.

b. Corrective Action Taken and Results Achieved

The revised stressing sequence was approved verbally by the Architect/Engineer on August 6, 1981. This approval was formalized by A/E approval of NSCI Procedure 7D, Revision 8, on November 18, 1981.

Corrective Action Taken to Avoid Further Noncompliance

None required because the nonconformance has been promptly identified and corrected.

Date When Full Compliance Will Be Achieved

November 18, 1981.

c. Corrective Action Taken and Results Achieved

Some of the seventeen tendons were unstressed and could be inspected. No corrosion was found so the remaining tendons will not be inspected.

Corrective Action Taken to Avoid Further Noncompliance

Contractor personnel have been aware of the correct interpretation of the A/E's tendon installation specification requirement.

Date When Full Compliance Will Be Achieved

November 23, 1981.

Based on the action taken, we respectfully request that the Severity Level IV assigned to this violation be reduced to a Severity Level V violation.

Violation 4:

10 CFR 50, Appendix B, Criterion X, states in part, "A program for inspection of activities affecting quality shall be established and executed by or for the organization performing the activity to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity.... Examinations, measurements, or tests of material or products processed shall be performed for each work operation to assure quality."

Commonwealth Edison Company Quality Assurance Program for Nuclear Generating Stations, Topical Report CE-1-A, Revision 15, Section 10, Inspection states in part, page 10-2 "The applicable Edison site Quality Assurance Superintendent or Designee or Station Quality Assurance Engineer or Inspector will assure that required inspection of purchased items as required and determined by engineering is carried out, that inspection procedures, instructions or checklists specify the necessary measuring and test equipment including accuracy requirements, that contractor test procedures approved by Edison or the Architect Engineer are judiciously implemented and that procurement requirements are being fulfilled." "The plan for each inspection will also identify, for example, the parameters to be checked, accept/reject criteria, equipment needed for the inspection or contractor documentation to be reviewed;" page 10-3 "In-process and final inspections and tests will be used to assure conformance to design requirements for fabrication and construction work." "Written procedures or checklists will be used to specify and verify final inspections and tests,".... "inspection and test records will provide objective evidence that inspections and tests were performed in compliance with instructions and procedures to verify design and code requirements."

S&L Specification L-2722, Revision 14, "Injection of Corrosion Preventive Grease," Section 13-508.2, states in part, "In addition, each tendon which is not stressed within 90 days after it is installed in its sheathing, shall be greased within that 90 day period.... Time from initial placement of the tendons to greasing may be increased to 180 days, provided a Random Sample of 10% of the tendons are withdrawn monthly between the 90 and 180 day period and inspected for corrosion. Tendons which show signs of corrosion during the 90 to 180 day period shall be rejected."

Contrary to the above, the inspector found the Unit #1 tendons had been installed for over 90 days without being greased, and that inspection and test records did not provide objective evidence that inspection and tests were performed as required by the referenced inspection specification. Furthermore, an inspection instruction/procedure has not been prepared for the required inspections, addressing the requirements of Specification L-2722.

Response:

Corrective Action Taken and Results Achieved

Tendons which has been installed for over 90 days had been inspected in accordance with NSCI Procedure 7B Appendix "A" but were not recorded as such. The only notation made was that it was part of the "10% monthly inspection".

Corrective Action Taken to Avoid Further Noncompliance

Napoleon Steel Procedure 7D was revised on December 7, 1981, (Revision 9) to require that these tendons be inspected to Appendix "A" of NSCI Procedure 7B. The acceptability of the tendons is noted on the stressing card as well as referencing Procedure 7B, Appendix A.

Date When Full Compliance Will Be Achieved

December 7, 1981.