

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of:
COMMONWEALTH EDISON COMPANY

(Braidwood Nuclear Power
Station, Units 1 and 2)

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)

Docket Nos. #50-456
#50-457

DOCKETED
USNRC

'85 OCT -9 P1:50

Affidavit of Dean Alan Hoffer

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

I, Dean Alan Hoffer, being first duly sworn, hereby deposes and states as follows:

1. I am employed by Commonwealth Edison Company as a Quality Assurance Engineer at the Braidwood Station.
2. My business address is Braidwood Nuclear Power Station, Braceville, Illinois 60407.
3. I have participated in the preparation of the response to Specific Interrogatories Nos. 58 and 59 filed by Intervenor's Rorem, et. al. These interrogatories pose specific questions with respect to the 68 separate items of Intervenor's QA Contention. In particular, I have reviewed the fourth, fifth and sixth paragraphs of the Responses to Item 6.B.5. and the last paragraph of Item 6.E. and subject to the corrections noted in Sections 4. and 5. below, they are true and correct to the best of my knowledge and belief.
4. In the sixth paragraph of the Response to Item 6.B.5, revise the fifth sentence to read:

"A drawing review program is being formulated to address the NRC concern that revisions prior to April 1984 were not properly controlled."
5. In the last paragraph of the Response to Item 6.E., revise the third sentence to read:

"These surveillances select a cable pan riser at random and verify proper cable routing through riser."

Further affiant sayeth not.

8510110142 851008
PDR ADOCK 05000456
Q PDR

Dean Alan Hoffer
Dean Alan Hoffer

Subscribed and sworn to before
me this 6th day of September, 1985

Carol G. McCoy
Notary Public

My Commission expires on 10/3/85.

CONTENTION ITEM 4.B

4. Contrary to Criterion II, Quality Assurance Program, of 10 C.F.R Part 50, Appendix B, Commonwealth Edison Company has failed to effectively provide for the indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.
- B. Four L.K. Comstock weld inspectors were not proficient in American Welding Society Structural Welding Code (Inspection Report 84-07, Exh. 18).

RESPONSE

A special NRC safety inspection was conducted on March 26, 28-29; April 3-5, 10-12; and May 23 and 31, 1984 by R. Schulz, J. Malloy, and W. Kropp from the U.S. Nuclear Regulatory Commission, Region III. The report setting forth the results of these inspections is documented in NRC Inspection Report 50-456/84-07; 50-457/84-07. It was determined from the inspection report that a Severity Level IV violation of 10 CFR 50, Appendix B, Criterion II had occurred.

The scope of this inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel. The inspector concluded from personnel interviews that four L.K. Comstock (Comstock) weld inspectors were not proficient in the American Welding Society Structural Welding code, AWS D1.1-1975. This conclusion was based on the Comstock weld inspectors' inability to answer questions regarding the AWS code description for the repair of weld cracks and fit-up tolerances.

CONTENTION ITEM 4.B

In response to the NRC, Commonwealth Edison stated that it believes "that the L.K. Comstock weld inspectors are competent and have been competent to perform their assigned weld inspection task." The Comstock weld inspectors had not received specific training in AWS D1.1-1975. The response noted that such training was not required by applicable Comstock procedures or by other more general regulatory requirements. Rather, inspector training addressing weld inspection had concentrated on Comstock Procedure 4.8.3 (Weld Inspection) which implements AWS D1.1-1975 as the applicable welding code as interpreted in Sargent & Lundy (S&L) Specification L-2790 requirements. This procedure specifically addresses the inspector's responsibilities with respect to the repair of weld cracks and fit-up tolerances.

Although Comstock Procedure 4.8.3 always incorporated AWS D1.1-1975 as interpreted in S&L Specification L-2790, that procedure was revised to further clarify the weld inspection requirements of AWS D1.1-1975 as interpreted in S&L Specification L-2790. In addition, after the NRC finding, Comstock weld inspectors received on-site training on S&L specification L-2790 and weld inspection requirements by the Level III Corporate Welding Engineer of L.K. Comstock Engineering Inc. Moreover, Comstock Procedure 4.1.3 (Qualification Classification and Training of QC Personnel) was revised subsequent to the NRC finding to specify which inspectors were required to read AWS D1.1-1975 and S&L Specification L-2790.

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REFERENCES

1. R.D. Walker letter to Cordell Reed, dated July 20, 1984 Enclosures: Appendix, Notice of Violation Inspection Reports 50-456/84-07 (DRS); 50-457/84-07 (DRS) (pages A0002059-2073).
2. D.L. Farrar letter to J.G. Keppler, dated August 20, 1984 transmitting Commonwealth Edison Company, Response to Inspection Report 50-456/84-07 and 50-457/84-07 (pages A0002074-2082).
3. I.F. DeWald memorandum to C. Mennecke, dated August 11, 1984 Enclosure: L.K. Comstock Procedure 4.1.3 (Qualification Classification and Training of QC Personnel). L.K. Comstock Procedure 4.8.3 (Weld Inspection) Rev. F. (5-10-84) (page 00000495).
4. Licensing file on Item 84-07-04, Contention 4.B (pages A0006773-6844)

CONTENTION ITEM 4.B

NAMES AND ADDRESSES

R. Warnick	NRC Region III
R. Schulz	NRC Region III
J. Malloy	NRC Region III
W. Kropp	NRC Region III
C. Mennecke	Commonwealth Edison Company
D. Hoffer	Commonwealth Edison Company
J. Gieseke	Commonwealth Edison Company
R. Seltmann	L.K. Comstock Company
I. DeWald	L.K. Comstock Company

CONTENTION ITEM 9.C

9. Contrary to Criterion IX, Control of Special Processes, of 10 C.F.R Part 50, Appendix B, Commonwealth Edison Company has failed to ensure that measures be established to assure that special processes, including welding are controlled and accomplished in accordance with applicable codes, standards, specifications, criteria and other special requirements.
- C. Nine L. K. Comstock filler metal withdrawal authorization forms documented the release of E7018 weld rod for cable pan welds between May 25, 1982 and July 28, 1982. (Inspection Report 84-13, Exhibit 24.)

RESPONSE

A routine NRC safety inspection was conducted by L. G. McGregor and R. D. Schultz from June 5 through July 6, 1984. The results of the inspection are documented in NRC Inspection Report Number 50-456/84-13 and 50-457/84-13.

The scope of the inspection included the review of structural supports for ten cable pans in the Auxiliary Building. The inspector examined these supports to determine compliance with the applicable drawings and procedures. Attributes examined consisted of support configuration, dimensions, and welding details. In addition, L. K. Comstock (Comstock) and Pittsburgh Testing Lab inspection reports were reviewed, as well as L. K. Comstock Procedures 4.8.3 (Weld Inspection) and 4.3.10 (Storage, Issue, and Control of Welding Material).

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During the review of over 300 filler metal withdrawal authorization forms, which document the release of weld rods, NRC inspectors noted that nine filler metal withdrawal authorization forms documented the assignment of E7018 weld rod for use in cable pan welding. According to Sargent & Lundy drawing 20E-0-3251, Revision AC and L.K. Comstock Procedures 4.3.3 (1/29/82), use of E60 series weld rod is required for cable pan welding (see reference 1 for the specific filler metal withdrawal authorization forms cited). The NRC also noted that on the nine forms identified, several E7018 weld rod heat numbers were incorrectly listed as E6013 weld rod heat numbers.

Based on a review of the finding by Commonwealth Edison, it was determined that the use of E70 series electrodes for cable pan welding was technically acceptable with no hardware problems implied. Commonwealth Edison's response cited the following reasons.

1. The weld rod heat numbers identified are acceptable heat numbers traceable to valid certification papers.
2. The welds made utilizing either of these electrodes meet or exceed the strength requirements specified by AWS D1.1-75.

CONTENTION ITEM 9.C

3. The welders making these welds were qualified to use either filler metal.
4. Welding always required a 100% visual inspection and any unacceptable welds would have been identified.

In Inspection Report 456/457-85-005, March 12, 1985, the NRC stated that "the problems identified were the result of documentation error." The NRC has closed out this item because filler metal of either type met the design requirements. As stated in Commonwealth Edison response the following corrective action was taken to avoid further noncompliance:

1. LKC NCR 3275 has been issued to identify and disposition the violation of procedure 4.3.10. The initial disposition, which required review of all past weld filler metal withdrawal authorization forms, is being re-evaluated.
2. L.K. Comstock Procedure 4.3.10, (Storage, Issue and Control of Welding Material), has been revised to amplify and clarify the control of weld filler metal. Personnel responsible for weld rod control have been trained in this procedure.

In addition to the above items, NCR 3275 states that the Sargent & Lundy drawings were revised per ECN 23028 to allow the use of either E60 or E70 series electrode for cable pan welding.

CONTENTION ITEM 9.C

REFERENCES

1. R. F. Warnick letter to Cordell Reed dated, August 7, 1984 (pages A0002251-A0002268).
Enclosure: Appendix, Notice of Violation
Inspection Report: Number 50-456/84-13 (DRP); and
50-457/84-13 (DRP)
2. D. L. Farrar letter to J. G. Keppler, dated September 21, 1984 transmitting Commonwealth Edison Company Response to Inspection Report 50-456/84-13 and 50-457/84-13 (pages A0002269-A0002273).
3. NRC Inspection Report 456/457-85-005, dated March 12, 1985 (pages A0003250-A0003275)
4. L.K. Comstock NCR 3275 (pages 00000655-00000683).
5. L.K. Comstock Procedure 4.3.10 (Rev. D.) (pages 00002554-00002581)
6. Licensing file on Item 84-13-09, Cont. 9.C (pages A0008392-A0008449)

CONTENTION ITEM 9.C

NAMES AND ADDRESSES

J. G. Keppler	NRC Region III
R. F. Warnick	NRC Region III
C. Reed	Commonwealth Edison Company
J. Gieseke	Commonwealth Edison Company
R. Seltmann	L. K. Comstock

CONTENTION ITEM 10.F

10. Contrary to Criterion X, "Inspection" of 10 C.F.R. Part 50, Appendix B, Commonwealth Edison Company has failed to ensure that a program for inspection of activities affecting quality was 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.

F. Electrical contractor, Comstock, inspected and accepted a junction box which was later determined to have deficiencies in the location of the anchors used for mounting of the junction box. Anchors were accepted even though they were 3" from the required location specified by Sargent & Lundy drawing 20E-1-3571.

RESPONSE

The NRC conducted a routine safety inspection on March 25 through May 3, 1985. The inspection involved selective examination of procedures and representative records, observations, and interviews. The results of the inspections are documented in report numbers 50-456/85-15(DRP); 50-457/85-016(DRP).

The report noted that L.K. Comstock inspected and accepted a junction box with an incorrectly located expansion anchor. This inspection was performed by a junction box/equipment inspector. A second inspection of the junction box was then performed by another L.K. Comstock junction box/equipment inspector who confirmed the incorrect expansion anchor location and documented this on NCR 4139. Sargent & Lundy is now performing an engineering evaluation to determine dispositioning of NCR 4139.

CONTENTION ITEM 10.F

In response to this finding all junction box inspection activity of by the junction box/equipment inspector involved, was halted until an evaluation could be made. All safety related junction boxes inspected by the subject inspector (a total of seven) were reinspected by another L.K. Comstock inspector. The matter is being reviewed by Commonwealth Edison and Comstock.

CONTENTION ITEM 10.F

REFERENCES

1. NRC Inspection Report Numbers 50-456/85-015(DRP);
50-457/85-016(DRP) (pages A0003386-3409).
2. L. K. Comstock NCR 4139 (pages 00002517-2526a).
3. L. K. Comstock memorandum from R. Seltmann to L. Tapella, dated
5/31/85 (page 00002723).
4. D. L. Farrar letter to J. G. Keppler, dated 6/21/85
Enclosure: Response to inspection report numbers 50-456/85-015
and 50-457/85-016 (pages A0003410-415).
5. Licensing file on Item 85-15-08, Cont. 10. F
(pages A0008695-8726).

CONTENTION ITEM 10.F

NAMES AND ADDRESSES

W. J. Kropp	NRC Region III
R. N. Gardner	NRC Region III
J. G. Keppler	NRC Region III
J. W. Gieseke	Commonwealth Edison Company
L. J. Tapeila	Commonwealth Edison Company
R. Seltman	L. K. Comstock

CONTENTION ITEM 11.B

11. Contrary to Criterion XV, "Nonconforming Materials, Parts or Components," of 10 C.F.R. Part 50, Appendix B, Commonwealth Edison Company has failed to ensure that measures were established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation.
- B. For Penetration Nos. E2 (sic) and E51, L.K. Comstock Inspection Reports were found which documented loose crimps at the determination blocks. No corrective action documents were written to identify and track these nonconforming conditions. Additionally, the cables from Comstock were not terminated and were tagged with orange out-of-service cards which are not controlled by the QA program. (Inspection Report 84-39/36, Exhibit 26.)

RESPONSE

Routine safety inspections were conducted by the NRC Region III Office on December 1, 1984 through February 1, 1985. The inspection involved a selective examination of procedures and representative records, observations, and interviews with personnel. The results of the inspection are documented in NRC Inspection Reports 50-456/84-39(DRP); 50-457/84-36(DRP).

The subject report noted that no corrective action documentation was generated for the deficiencies indicated in certain inspection documentation for electrical containment penetrations E24 and E51. Specifically, General Inspection Reports for the penetrations indicated that three wires had loosely crimped lugs, but no inspection correction report or nonconformance report was initiated. These same three wires were subsequently determined, lugs removed, and orange Station Construction Department (SCD) Out-of-Service cards hung for identification purposes.

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L.K. Comstock (Comstock) generated the General Inspection Reports based on a request by Commonwealth Edison Company Project Construction Department to reinspect the Bunker Ramo penetrations. This request was in response to NRC IE Bulletin 82-04, which identified certain deficiencies with the Bunker Ramo penetrations. Although Comstock performed the inspections of the Bunker Ramo penetrations in accordance with the applicable sections of inspection procedure 4.8.9 "Cable Termination Inspection", the results were recorded on a General Inspection Report rather than the procedures checklist forms.

These inspections were unique in that L. K. Comstock does not typically inspect work performed by manufacturers. General Inspection Reports are typically used when checklist forms need to be augmented or when they do not apply to the specific/unique inspection requirements.

Furthermore, despite the lack of documentation to track corrective action, the determinated wires and orange Out-of-Service cards would have been readily apparent in Commonwealth Edison's Operational Analysis Department testing. In addition, after the wires are terminated, construction tests are performed prior to energization of the circuits.

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Subsequent to the NRC finding, Comstock generated Inspection Correction Reports 8067 and 8068 to address the hardware deficiencies. In addition, a review of the remaining quality control files for Unit 2 electrical penetrations was performed. As indicated on a Comstock Memorandum (copy enclosed) from Mr. Hii to Mr. DeWald, NCR's were written to track the items where corrective action documentation was lacking.

Document review procedures require the review of all quality control documentation to verify the existence of corrective action documentation for deficiencies indicated on inspection reports. General Inspection Reports are currently being reviewed under procedure 4.13.1. In addition, 4.13.1.1 is being revised (Rev. B) to specifically incorporate General Inspection Reports. This revision will require a review of General Inspection Reports to assure that there are no additional discrepant items that are not being tracked through the nonconformance system.

Finally, as an additional prudent step, Commonwealth Edison Company instructed L.K. Comstock to perform an additional review of all Unit 2 containment electrical penetrations with outboard terminal blocks. The results of these reviews indicated additional examples of minor deficiencies in Bunker Ramo hardware. These deficiencies were documented on L.K. Comstock NCR's, and these will be evaluated and dispositioned to repair equipment as required.

CONTENTION ITEM 11.B

REFERENCES

1. NRC Inspection Reports 50-457/84-36(DRP); 50-456/84-39 (pages A0002757-2769)
2. R. F. Warnick letter to Cordell Reed, dated 3/15/85 transmitting Notice of Violation (pages A0002757-2769)
3. L. K. Comstock Inspection Correction Report 8068, dated 2/1/85 (pages O0002531-2534)
4. L. K. Comstock Inspection Correction Report 8067, dated 2/1/85 (pages O0002527-2530)
5. L. K. Comstock Procedure 4.13.1.1 "Turnover Document Review" (O0002668-2697)
6. L. K. Comstock Procedure 4.11.2 "Corrective Action" (pages *O0001050-1059)
7. L. K. Comstock Procedure 4.13.1 "Quality Control Documentation Requirements of Quality Related Documents" (pages O0002653-2667)
8. Inspection Procedure 4.8.9 "Cable Termination Inspection" (pages O0002631-2647)
9. NRC IE Bulletin 82-04, 12/3/82 (pages C0003270-3278)
10. Licensing file Item 84-36-01, Cont. 11.B (pages A0008727-8760)

CONTENTION ITEM 11.B

NAMES AND ADDRESSES

L. G. McGregor	NRC Region III
P. R. Pecke	NRC Region III
D. L. Shamblin	Commonwealth Edison Company
J. W. Gieseke	Commonwealth Edison Company
T. W. Ronkoske	Commonwealth Edison Company
L. M. Kline	Commonwealth Edison Company
I. DeWald	L. K. Comstock
R. Seltmann	L. K. Comstock

CONTENTION ITEM 4.A

4. Contrary to Criterion II, "Quality Assurance Program", of 10 C.F.R. Part 50, Appendix B, Commonwealth Edison Company has failed to effectively provide for the indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.
- A. Comstock failed to establish program for identifying the required reading for weld inspectors and conducting practical tests. G.K. Newberg failed to implement the personnel indoctrination and training for QC inspector tests. (Inspection Report 84-07, Exh. 18.)

RESPONSE

A NRC special safety inspection was conducted by R. Schulz, J. Malloy and W. Kropp on March 26, 28-29; April 3-5, 10-12 and May 23 and 31, 1984. The results of the inspections were recorded in Report Number 50-456/84-07 (DRS); 50-457/84-07 (DRS). The item was transmitted to Commonwealth Edison Company on July 20, 1984, on a Notice of Violation (Items A.1 and A.2) to Inspection Reports 50-456/84-07; 50-457/84-07.

L. K. Comstock

In addition to the NRC's concern regarding required reading, in the same time frame a Commonwealth Edison Site QA identified a deficiency with respect to consistency of required reading in Braidwood Quality Assurance Audit QA-20-84-521. The item was reported as Finding 4 in the audit report dated 4-30-84.

In response to Commonwealth Edison Braidwood QA Audit Finding 4 and the NRC inspection finding, L. K. Comstock developed a matrix of required reading. The matrix was designed to assure uniformity of required reading prior to inspector certification. It was based on the reading required

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for an QC Inspector to be knowledgeable in their area(s) of certification. Subsequently, L.K. Comstock revised their procedure for "Qualification Classification, and Training of QC personnel" to include the required reading matrix. The matrix was incorporated as part of Form 58 in procedure 4.1.3, revision C, dated August 14, 1984.

Following the procedure revision, L. K. Comstock initiated review of their QC Inspector Certification packages for consistency of required reading in accordance with the new matrix for related sign-offs to verify acceptable completion of initial certification requirements. Items in the certification package found deficient as a result of this review are documented and addressed on a case by case basis on L.K. Comstock nonconformance reports. These NCR's are currently being dispositioned by evaluating the discrepancies identified for impact on the adequacy of the inspector's qualifications. To date the evaluation has raised no questions as to the adequacy of past inspections.

On July 27, 1984, Commonwealth Edison Company Braidwood QA conducted a follow-up surveillance (#3748) to review the status of Finding 4 and to discuss the Notice of Violation. This follow-up found that the required reading "matrix" had been established and was submitted for CECO review. Approval was given on 8/14/84.

In order to upgrade the portion of the training program pertaining to conducting a practical test, L. K. Comstock has revised Procedure 4.1.3 to strengthen the requirements for practical examinations. In most

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cases, actual field installations are used for practical tests. In some instances mock installations or word problems are used where field installations are not available. Where practical, items with and without known defects will be used for practical examinations (Paragraph 3.5.1.2). Also, on practical exams for certification, a score of 100% must be achieved on attributes related to accept/reject criteria. These changes were implemented in L.K. Comstock Procedure 4.1.3, Revision C, dated 8/14/84.

The NRC reviewed Commonwealth Edison's action taken for item 50-456/84-07-02A and 50-457/84-07-02A relative to required reading for inspector certification, found it acceptable and closed the item in Inspection Report 50-456/84-42; 50-457/84-38. To provide added assurance that this program is effective, Commonwealth Edison QA continues to review 100% of the certification packages prior to an individual performing any inspection. In addition, L.K. Comstock QA and Edison QA perform periodic audits of the certification program.

G.K. Newberg

The NRC inspectors noted that Gust K. Newberg Construction Company failed to implement a specific portion of its personnel indoctrination and training program adequately, namely, G.K. Newberg Procedure No. 37, with regard to the grading of General Tests given to QC inspectors. The specific violation was that three of the six tests reviewed were graded incorrectly. One Newberg Level II inspector answered 31 of 40 questions, constituting a failing score of 77.5% (80% passing). This general test was erroneously scored 80% due to human error, in that the reviewer

CONTENTION ITEM 4.A

mistakenly added up the test results. General tests for two other inspectors were incorrectly graded in that two wrong answers for each individual were marked correct. However, after correction, the scores for both individuals were still above 80%. In response to the NRC finding Commonwealth Edison instructed G.K. Newberg to write an NCR, (No. 213-767), and to perform a review of all personnel qualifications. If tests were found that were graded incorrectly, Newberg was to correct scores and retest any individual who did not pass the tests and perform an inspection of a small sample of that individual's inspection work prior to the individual's satisfactory completion of retesting.

G. K. Newberg QA performed a complete review of all certification tests and found that two individuals did not satisfactorily pass the general tests after a 100% review of personnel qualifications records. This was documented on NCR NO. 213-767. These individuals were retested (both individuals successfully passed) and ten of their first inspections were reinspected by a qualified Level II and found acceptable. In addition, the Commonwealth Edison Site Quality Assurance performed a review (surveillance #3523) of these qualifications for proper grading of tests and found them to be acceptable. G. K. Newberg QA also audited the QC inspector certification procedural packages to applicable requirements. This audit found a number of documentation discrepancies. In order to close out this audit, G. K. Newberg QA recertified all active QC inspectors and wrote NCR Nos. 213-912 and 213-1115 to document procedural violations. These NCR's were closed out based on correction of documentation or of supplemental documentation. The process used to close out these NCR's determined that none of the problems identified

CONTENTION ITEM 4.A

raised concerns about prior hardware inspections. In completing these corrective actions G. K. Newberg's training implementation came into compliance with its QC Inspector Qualification Procedure No. 37.

As a result of NCR 213-912, G. K. Newberg QA initiated a Corrective Action Request ("CAR") No. 008 dated February 29, 1985 to investigate the generic implications, if any, of the inspector certification problems and to assure that effective action was taken to correct any underlying problems. The specific adverse condition addressed was that review of QC inspector certification packages indicated that they were not complete. Problems included failure to maintain mock inspection checklists, training documented on incorrect form, missing documentation etc. The CAR identified the probable cause of the deficiencies as improper attention to detail to assure quality of previous items. As a result of this CAR, QCP 37 was revised to add a checklist to verify completion of certification activities prior to certifying an inspector. A training coordinator was added in March 1985 to provide better tracking of the certification process.

CONTENTION ITEM 4.A

REFERENCES

1. D.L. Farrar letter to J.G. Keppler dated August 20, 1984; Enclosure, Response to Inspection Report 50-456/84-07; 50-457/84-07 (pages A0002074-2082).
2. G.K. Newberg Nonconformance Report No. 213-767 dated 4/23/84 (pages R0000133a-R0000154).
3. Braidwood Q.A. Surveillance Report No. 3523 dated 4/18/84 (pages B0005693-B0005695).
4. Q.C. Inspector Qualification Procedure No. 37 (pages Q0000117-Q0000133).
5. R. D. Walker (NRC) letter to Cordell Reed, dated July 20, 1985, transmitting Notice of Violation (pages A0002059-2073).
6. NRC Region III Inspection Report Numbers 50-456/84-07; 50-457/84-07 (pages A0002059-2073).
7. L. K. Comstock Procedure 4.1.3, Qualification Classification and Training of Q.C. Personnel, Revision C, dated 8-14-84 (pages O0000176-O0000252).
8. Braidwood QA Surveillance Report Number 3748, Follow-Up Audit Report Number QA-20-84-521 (pages B0005696-B0005713).
9. NRC Region III Inspection Report Numbers 50-456/84-42; 50-457/84-38 (pages A0002785-A0002803).
10. G. K. Newberg Nonconformance Report No. 213-912 dated October 25, 1984 (pages Q0000155-O0000179).
11. G. K. Newberg nonconformance report No. 213-1115 dated April 24, 1985 (pages Q0000180-Q0000230).
12. G. K. Newberg Audit Report No. 84-5 issued May 15, 1984 (pages Q0000338-Q0000345).
13. G. K. Newberg Corrective Action Report No. 008 dated February 28, 1985 (pages Q000256).

CONTENTION ITEM 4.A

NAMES AND ADDRESSES

J. G. Keppler	NRC Region III
R. D. Walker	NRC Region III
R. Schulz	NRC Region III
J. Malloy	NRC Region III
W. Kropp	NRC Region III
R. C. Tate	Commonwealth Edison Company
J. Gieseke	Commonwealth Edison Company
R. Spence	Commonwealth Edison Company (Consultant)
J. J. Hariston	Road #1, Box 338 Vernon, VT 05354 (Work Ph: 802-254-5199)
R. Donica	G. K. Newberg Construction Company
R. Seltmann	L. K. Comstock

CONTENTION ITEM 6.E

6. Contrary to Criterion V, "Instruction, Procedures and Drawings," of 10 C.F.R. Part 50, Appendix B, Commonwealth Edison Company has failed to ensure that activities affecting quality are prescribed by documented instructions, procedures, or drawings, and are accomplished in accordance with these instructions, procedures, or drawings.
- E. Cables 2AF307 and 2AF154 were not routed by Comstock per pull cards, and the QC inspector accepted the cable pulls documenting that the cables were pulled in accordance with the pull cards. (Inspection Report 84-31/29, Exhibit 13.)

RESPONSE

The NRC Region II Office conducted routine safety inspections on October 8 through November 9, 1984, which included the review of cable pulling. The results of the inspections were documented in NRC Inspection Report Numbers 50-456/84-31(DRP); 50-457/84-29(DRP).

It was noted in the report that two QC accepted cables were not routed in accordance with the cable pull cards. Specifically, two out of approximately eight routing points in each of the cable routings were incorrect.

To assess the extent of the deficiency, twenty-four randomly chosen cables that had been accepted by the inspector who inspected the misrouted cables were reinspected by another qualified cable inspector. All twenty-four cables were found correctly routed. The acceptable sample reinspection results indicate that the misrouting of two cables was an isolated occurrence by the QC inspector involved.

CONTENTION ITEM 6.E

A review of the two cable routings revealed that the cables were identical (the same type and segregation code) and that their routings were identical except for certain intermediate points. Installation was inadvertently interchanged at these intermediate points. This misrouting had no safety implications.

In response to the NRC findings, L.K. Comstock generated Nonconformance Reports 3433 and 3494 to address the deficiencies. These NCR's were dispositioned with respect to the installation by changing the cable pull cards to reflect the as-installed conditions. In addition, the QC inspector involved was retrained in applicable cable installation and cable inspection procedures (Comstock procedures 4.3.8 and 4.8.8) and appropriate craft personnel were also retrained in installation. These NCR's were closed on February 2, 1985.

Commonwealth Edison Site QA surveillances 4051, 4099, 4152, 4577, 4647, and 4781 have reviewed the routing of cables and are not limited to the specific inspector involved in the identified NRC item of noncompliance. These surveillances are part of an on-going program by CECO QA to conduct periodic surveillances to verify proper cable routing. These surveillances select a cable pan riser at random and verify proper cable routing through that riser. The first surveillance took place in November, 1984. Surveillance 4051 found a cable routing deficiency that has been corrected. The remaining surveillances found cable routing to be acceptable.

CONTENTION ITEM 6.E

REFERENCES

1. NRC Report Numbers 50-456/84-31; 50-457/84-29 (pages A0002627-2640).
2. D. L. Farrar letter to J. G. Keppler, dated 12/21/84, transmitting Commonwealth Edison's Response to I.R. 50-456/84-31; 50-457/84-29 (pages A0002641-2643).
3. L. K. Comstock Nonconformance Report 3433 (page 00000352).
4. Licensing File on Item 84-29-09, Cont. 6.E (pages A0007409-7483).
5. Commonwealth Edison Company QA Surveillance 4051 (page B0002422-2424).
6. Commonwealth Edison Company QA Surveillance 4099 (pages B0002425-2425a).
7. Commonwealth Edison Company QA Surveillance 4152 (pages B0002426-B00002429).
8. Commonwealth Edison Company QA Surveillance 4577 (pages B0002441-2442).
9. Commonwealth Edison Company QA Surveillance 4647 (pages B0002443-2446).
10. Commonwealth Edison Company QA Surveillance 4781 (pages B0005295-B0005296).
11. L.K. Comstock Nonconformance Report 3494 (page 00000354).

CONTENTION ITEM 6.E

NAMES AND ADDRESSES

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J. Gieseke	Commonwealth Edison Company
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD P1:50

In the Matter of)
COMMONWEALTH EDISON COMPANY)
(Braidwood Station Units 1 and 2))

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

Docket Nos. 50-456
50-457

CERTIFICATE OF SERVICE

I hereby certify that a copy of the NOTICE OF APPEARANCE of Lisa C. Styles was served by deposit in the United States mail, first-class postage prepaid, on the persons identified below, this 8th day of October, 1985.

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Administrative Law Judge
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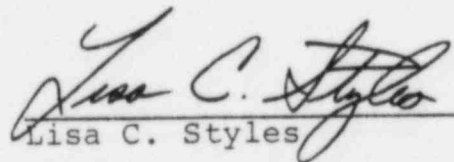
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