



Commonwealth Edison

One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
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July 30, 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: Byron Station Units 1 and 2
I.E. Inspection Report Nos.
50-454/82-05 and 50-455/82-04

Reference (a): June 24, 1982 letter from
C. E. Norelius to Cordell Reed.

Dear Mr. Keppler:

Reference (a) provided the results of an inspection conducted by Mr. D. H. Danielson and other staff members of your office on March 29-31, April 1, 2, 5-9, 12-14, and May 11, 1982, of activities at Byron Generating Station. During the inspection it was determined that certain activities were not in compliance with NRC requirements. Attachment A of this letter contains Commonwealth Edison's response to the notice of violation which was appended to reference (a). In responding to some of the violations we have concluded that no basis existed for the citation. Accordingly, we request that violations 3c.a, 4c and 7 be withdrawn.

The response to violation 2 addresses your concern for the quality of the work done in the past. The review program outlined there provides additional assurance of adequate training and qualification of inspectors and of the overall quality of construction.

With regard to Commonwealth Edison Q.A. staffing, Quality Assurance personnel are assigned as part of our total training and development objectives at other project sites and operating stations for short periods to gain experience from established functioning Quality Assurance organizations. The two Byron Quality Assurance personnel identified in the report were each selected for assignments at LaSalle Quality Assurance to achieve better understanding of the Quality Assurance document review and document control activities and of requirements associated with Quality Assurance responsibilities involving the respective system release-for-operation plant start-up functions required to be done by site Quality Assurance. The purpose of assigning a person to an operating station is to give him experience in the surveillance and audit functions of Operations Quality Assurance so that he will better understand procedural considerations and what needs to be covered to assure all requirements are fulfilled during construction. In the case

of assigning the person to Quad Cities Station for a short period; we were providing a person training in operations Quality Assurance for application at Byron.

To cover the essential work responsibilities of these three people during their respective assignments, additional hours were worked by other members of Byron Quality Assurance staff. The interface of personnel with the LaSalle project by both the Byron and Braidwood sites as well as with and by the operating stations has proven to be very worthwhile in the development of our people and helps avoid new problems and the repetition of problems generally between our stations and construction sites. The NRC's interest is served in making sure apparent problems at LaSalle did not arise at Byron and Braidwood. Accordingly, because these types of training assignments are very beneficial, we plan to continue this method and practice of developing our people with various off-site assignments. We firmly believe this approach enhances the Quality Assurance organizations and provides better qualified and experienced people to perform the work at the newer project sites. This is especially true where experience can be gained from a system or procedure that has proven to be effective at another location.

As to why Site Quality Assurance Supervision was changed at Byron, all changes were made for good and sufficient management reasons with overall program performance the primary object. Unfortunately, the continuity of supervision was impaired by the death of a former supervisor in a car accident while driving home from work.

As to the comment that there is a need to create greater promotional opportunities in the Quality Assurance organization, the construction site Quality Assurance organization was changed about eighteen months ago to fit project needs, from a single supervisor in charge to a management organization with a Site Quality Assurance Superintendent, comparable to the Project Construction Superintendent, and two Site Quality Assurance Supervisors. This organization exists at all three construction sites. Furthermore, we have Station Quality Assurance Supervisors in charge of each of the operating station Quality Assurance groups who respectively report to higher level Supervisors and Directors of Quality Assurance. In other words, there are five supervisory and managerial levels offering multiple promotional opportunities, in addition to the many lower promotional opportunities for graduate engineers and non-graduates within the Quality Assurance Department.

As to staffing, as planned, the five additional graduate engineers who had been recruited at the colleges early this year have reported to construction Quality Assurance at Byron. In addition, three non-graduate people with hands-on experience, one as the Station Quality Assurance Supervisor, have been added to the Station Quality Assurance Organization at Byron. Special training, augmenting their engineering education, and hands-on experience to qualify them for the Quality

Assurance work activities they will perform is underway and will be substantially completed shortly. On-site orientation training also will be closely administered by Site Quality Assurance supervision. It has been clearly established that it is the responsibility of each responsible Quality Assurance Supervisor that site orientation training of his people shall be done adequately, completely and in a timely way.

Finally, to further assure that effective oversight of the quality activities is being achieved, special emphasis will be included in the respective off-site audits performed under the auspices of Corporate Quality Assurance to assess the adequacy and effectiveness of the quality activities at Byron and the training and development of the site Quality Assurance people. Also, the other two construction sites have been required to review the items identified in this inspection report as to whether corrective measures or other special attention is needed. Any necessary measures have been taken.

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

If you have any questions concerning this matter please direct them to this office.

Very truly yours,

Wayne L. Stiede

Wayne Stiede
Assistant Vice President

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Attachment

SUBSCRIBED and SWORN to
before me this 1st day
of August, 1982

Rosalie A. Puente
Notary Public

ATTACHMENT A

Response to Notice of Violation

4565N

VIOLATION: Item 1 (454/82-05-01; 455/82-05-01)

10CFR50, Appendix B, Criterion I, states in part, "the authority and duties of persons and organizations performing activities affecting the safety-related functions of structures, systems and components shall be clearly established and delineated in writing" and "such persons and organizations performing quality assurance functions shall report to a management level such that this required authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations, are provided."

The Licensee's Topical Report, CE-1-A, Revision 20, Section 1.A states "Edison has prime responsibility for controlling the quality of on-site work by field contractors,"... "The Commonwealth Edison Company Quality Assurance Program for Nuclear Generating Stations covers the organization arrangement whereby the Quality Assurance Department is a separate and independent organization".

Contrary to the above:

- Item 1a. On March 30, 1982, it was identified that the Quality Assurance Manager for Hatfield Electric Company, as shown in the Quality Assurance Manual, reports to the Vice-President, who is located on site and has direct responsibility for cost and schedule.
- Item 1b. On April 2, 1982, it was identified that the Quality Assurance Manager for Power-Azco-Pope, as shown in the Quality Assurance Manual, reports to the Project Manager, who has direct responsibility for cost and schedule.
- Item 1c. On April 8, 1982, it was identified that the Project Construction Department of the licensee is part of the approval chain regarding the hiring and promoting of contractor's quality assurance personnel.
- Item 1d. On March 30, 1982, it was identified that the Hatfield Electric Company has been operating with a Quality Assurance Organization other than that described in their Quality Assurance Manual.
- Item 1e. On April 4, 1982, it was identified that Johnson Controls, Inc. has been operating with a Quality Assurance Organization other than that described in their Quality Assurance Manual.

Item 1a. Corrective Action Taken and Results Achieved:

The Hatfield QA manual (including revised charts) has been submitted by the contractor and approved by CECO, indicating that the on-site QA group is to be moved to an off-site non-production position. The Hatfield QA manual, Revision 11 dated 4/8/82, was approved by CECO on 5/28/82.

Corrective Action Taken to Avoid Further Noncompliance:

All safety related site contractor QA manuals were reviewed and verified that this condition did not exist.

Date When Full Compliance Will Be Achieved:

May 28, 1982

Item 1b.

Corrective Action Taken and Results Achieved:

The Powers-Azco-Pope QA manual (including revised charts) has been submitted by the contractor and approved by CECO, indicating that the on-site QA group report to an off-site non-production position. The PAP QA manual, Rev. 0 dated 5/20/82, was approved by CECO, on 6/23/82.

Corrective Action Taken to Avoid Further Noncompliance:

All safety related site contractor QA manuals were reviewed and verified that this condition did not exist.

Date When Full Compliance Will Be Achieved:

June 23, 1982

Item 1c.

Corrective Action Taken and Results Achieved

The practice of hiring and promoting contractor QA personnel without QA management concurrence was discontinued during the NRC inspection survey.

Corrective Action Taken to Avoid Further Noncompliance

A directive was issued May 5, 1982, by Project Construction to Hatfield, Hunter, Powers-Azco-Pope, and Blount clarifying the methodology to be used in administration and approval of contractor cost reimbursable QA/QC personnel raises/promotions.

In order to achieve independence of QA/QC and Production with regard to raises and promotions of QA/QC supervision, auditing, and inspection personnel, the responsibility of administration and approval of such raises will be with the off-site organization to which the on-site QA/QC organization reports.

The off-site corporate organization will be responsible for wage increase administration for these on-site QA/QC personnel and will submit established wage increase and promotions to the CECO, site Project Superintendent for identification for invoicing.

Date When Full Compliance Will Be Achieved

May 5, 1982.

Item 1d. Corrective Action Taken and Results Achieved:

The Hatfield QA manual has been revised to reflect the actual site conditions and has been approved by CECO. The Hatfield QA manual, Rev. 11 dated 4/8/82, was approved by CECO. on 5/28/82.

Corrective Action Taken to Avoid Further Noncompliance:

All site contractors' QA managers were advised not to implement site organization changes until the QA manual is revised and approved by CECO. per BY letter #7910 dated 1/7/82.

Date When Full Compliance Will Be Achieved:

5/28/82

Item 1e. Corrective Action Taken and Results Achieved:

The Johnson Controls QA manual has been revised to reflect the actual site conditions and has been approved by CECO. The Johnson Controls QA manual, Rev. 1 dated 5/28/81 with addenda (dated 4/15/82), was approved by CECO. on 4/15/82.

Corrective Action Taken to Avoid Further Noncompliance:

All site contractors' QA managers were advised not to implement site organization changes until the QA manual is revised and approved by CECO. per BY letter #7910 dated 7/7/82.

Date When Full Compliance Will Be Achieved:

4/15/82

NONCOMPLIANCE: Item 2 (454/82-05-19; 455/82-04-19)

10CFR50, Appendix B, Criterion II - Quality Assurance Program states in part, "The program shall provide for indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained."

Commonwealth Edison Company (CECo) letter, L. O. DelGeorge to D. G. Eisenhut, U.S. NRC, Director, Division of Licensing, dated August 17, 1981, affirmed CECo. commitment to Regulatory Guide 1.58, ANSI N45.2.6-1978 as required by Generic Letter 81-01.

ANSI N45.2.6-1978 - Paragraph 1.1 states in part, "This Standard delineates the requirements for the qualification of personnel who perform inspection, examination and testing to verify conformance to specified requirements of nuclear power plant items (structures, systems and components of nuclear power plants) where satisfactory performance is required to prevent postulated accidents which could cause undue risk to the health and safety of the public, or to mitigate the consequences of such accidents if they were to occur."

ANSI N45.2.6-1978 - Paragraph 1.2 states in part, "The requirements of this Standard apply to personnel who perform inspections, examinations, and tests during fabrication prior to and during receipt of items at the construction site, during construction, during preoperation and startup test...." The requirements apply to personnel of the owners///, plant designers and plant constructors...."

ANSI N45.2.6-1978 - Paragraph 2.2 states, "The capabilities of a candidate for certification shall be initially determined by a suitable evaluation of the candidate's education, experience, training, test results, or capability demonstration."

ANSI N45.2.6-1978 - Section 3.1 states, "The requirements contained within this section define the minimum capabilities that qualify personnel to perform inspections, examinations, and tests which are within the scope of this standard."

ANSI N45.2.6-1978 - Sections 3.2, 3.3, and 3.4 specify the personnel capabilities of Level I, II, and III inspectors respectively. Sections 3.5, 3.5.1, 3.5.2, 3.5.3 provide education and experience recommendations for Level I, II, and III inspectors.

ANSI N45.2.6-1978 - Section 4 states in part, "Personnel who are assigned the responsibility and authority to perform functions covered by this Standard shall have, as a minimum, the level of capability shown in Table 1...."

Contrary to the above, certain contractor QA/QC supervisors and inspectors were not adequately qualified and/or trained to perform safety-related inspection functions. Examples of apparent noncompliance are identified in paragraph h. (2) of the attached report.

Item 2

Corrective Action Taken and Results Achieved:

With regard to this identified item of apparent noncompliance, as further clarified and expounded upon in paragraph h. (2) of the attached inspection report, wherein it states in part "Based on a review of training qualification and certification records of a minimum of ten percent of the QA/QC personnel working for contractors performing safety-related work it is apparent that an effective program does not exist to ensure that a suitable evaluation of initial capabilities is performed, that written certification is provided in an appropriate form, and that qualification criteria is established.", we provide the following:

As a result of the concerns identified by the Inspector, we have documented to the various contractors organizations minimum features and methodologies to be employed when training/qualifying/certifying QA/QC personnel. By establishing these minimum features and methodologies a higher degree of standardization in technique will result. Previously the methodology for QA/QC personnel training/qualification/certification employed as its backbone and basis the parameters of ANSI N45.2.6-1978. However, due to the fact that N45.2.6 states that the parameters contained within are recommended and alternate means are acceptable, results in an allowance to diverge from the parameters of N45.2.6. The minimum features and methodologies we have established as a result of the concerns identified by the Inspector continues to employ as its backbone and basis the parameters of ANSI N45.2.6-1978, and applies minimum criteria when utilizing alternate means. From the establishment of the documented directive of minimum features and methodologies we will achieve a standardization that more clearly represents that qualification criteria is established, that written certification is provided in an appropriate form, and that a suitable evaluation of initial capabilities is performed.

The procedures of the various contractors are being reviewed and revised when appropriate to incorporate the minimum features and methodologies. All future QA/QC personnel will be subject to training/qualification/certification in accordance with procedures which are in compliance with these established parameters; and all previously trained/qualified/certified QA/QC personnel will be re-evaluated in accordance with procedures which are in compliance with these established parameters.

Corrective Action Taken to Avoid Further Noncompliance

Audits and surveillances conducted in the area of training, qualification, and certification, which the inspection report makes note of, are the programmatic means established to routinely review the acceptability of QA/QC personnel.

Date When Full Compliance Will Be Achieved

The minimum features and methodologies to be employed were documented as a directive to the various contractors on April 27, 1982; after further dialogue with the Inspector these were further enhanced and redirected on June 9, 1982. The procedure revisions required as a result of review will be incorporated and implementation enacted by Sept. 1, 1982. The re-evaluation of previously trained/qualified/certified QA/QC personnel will be complete by November 30, 1982.

Noncompliance Item 2 - Additional Information Request

Your letter of June 24, 1982, transmitting your Notice of Violation and Inspection Report 50-454/82-05; 50-455/82-04, requested additional information in response to noncompliance item 2 with regard to the action taken or planned to assure that:

- (1) other quality control inspectors are properly trained and certified,
- (2) quality control inspectors working for contractors that have completed safety-related work and no longer have personnel on site were properly trained and qualified to perform the inspection functions assigned, and
- (3) inspections performed by quality control inspectors that were improperly trained and qualified were valid.

Action Taken or Planned

(1): As previously stated, contractor procedures are being reviewed and revised where appropriate, and when these actions are complete a re-evaluation of previously trained/qualified/certified personnel will be made.

(2): A review of the training/qualification/certification records, of quality control inspectors of contractors who have completed their scope of work and no longer have personnel on site, will be performed against the features and methodologies presently established. As a result of this audit review the following actions will be executed: (i) where the records demonstrate compatibility with the presently established features and methodologies, the audit review report will document acceptability; (ii) where the records demonstrate significant divergence from the presently established features and methodologies the review scope will be expanded to determine the comprehensiveness of the overview inspections performed by the independent inspection contractor in order to establish the acceptability of inspected materials, components and processes; or a reinspection of the features inspected by the subject inspector(s) for the first month post certification will be performed and results will be included in audit review report to document acceptability.

(3): The validity of inspections will be reaffirmed by the execution of any one or combination of the following: (i) inspector(s) performance results in the retraining/requalification/recertification process, (ii) acceptability of audit review of former personnel certification records, (iii) comprehensiveness of overview inspections performed by the independent inspection contractor, (iv) reinspection of features inspected for the first month post certification.

VIOLATION: Item 3 (454/82-05-09; 455/82-04-09)

10CFR50, Appendix B, Criterion V states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances..."

The licensee's Topical Report, CE-1-1A, Revision 20, Section 5 states, "The quality assurance actions carried out for design, construction, testing, and operation activities will be described in documented instructions, procedures, drawings, specifications, or checklists." "Activities affecting quality are required by the Edison quality program to be prescribed by documented instructions, procedures or drawings."

Contrary to the above; the following activities were not controlled by procedures or instructions:

- Item 3a. On March 30, 1982, it was identified that Hatfield Electric Company was utilizing a Discrepancy Report System, which was not referenced or controlled by a procedure, to track and correct discrepancies and nonconforming conditions discovered during inspections of safety-related equipment.

Corrective Action Taken and Results Achieved:

The use of Trouble Letters by Hatfield Electric Company was stopped on May 26, 1982 and their Procedure No. 6, Revision 9, Dated May 4, 1982 was implemented. Revision 9 to Procedure No. 6 describes the use of Discrepancy Reports, Hatfield form HP-63.

Corrective Action Taken to Avoid Further Noncompliance:

Hatfield Electric Company Procedure No. 6, Revision 9, Dated May 4, 1982 and Implemented on May 26, 1982 describes the Discrepancy Report System developed as a result of this item of noncompliance. The procedure states specific guidelines as to when a DR should be generated verses an NCR, how DR's are to be controlled and how corrective action is to be documented.

Date When Full Compliance Will Be Achieved:

The Discrepancy Report System per Hatfield Electric Company Procedure No. 6 was implemented on May 26, 1982.

- Item 3b. On April 2, 1982, it was identified that Powers-Azco-Pope was utilizing a Fabrication/Installation Surveillance System, which was not controlled by a procedure, to track and correct discrepancies and nonconforming conditions discovered during inspections of safety-related equipment.

Corrective Action Taken and Results Achieved:

Powers-Azco-Pope procedure QC-4, Nonconformance Control, Revision 9 dated 4/8/82, includes instructions for the use and control of the Fabrication/Installation Surveillance Report (Form 101). This procedure has been approved and is currently being implemented.

Corrective Action Taken to Avoid Further Noncompliance

Powers-Azco-Pope Procedure QC-4, Revision 9, was implemented on 5/19/82. Appropriate personnel have been trained in the use of the Fabrication/Installation Surveillance Report (Form 101) as detailed in the above listed procedure, any Fabrication/Installation Surveillance Reports that were still open prior to implementation of this procedure have been logged and are being tracked per the requirements of Procedure QC-4, Revision 9.

Date When Full Compliance Will Be Achieved:

5/19/82.

Item 3c. On April 9, 1982, it was identified that Hatfield Electric Company procedures did not contain an electrical cable rework procedure nor the requirements to calculate electrical cable sidewall pressures prior to pulling cable.

Item 3c.a. Corrective Action Taken and Results Achieved:

The (architect/engineer) S & L electrical installation drawings list cable maximum pulling tensions. Cables which are installed in accordance with the pulling tensions listed will also be in accordance with the cables maximum allowable sidewall pressure. Hatfield Electric Company Procedure No. 10 states that maximum cable pulling tensions will be in accordance with those listed on the S & L drawings. Therefore, it is not necessary for the contractors procedure to address maximum cable sidewall pressure as a separate item.

Corrective Action Taken To Avoid Further Noncompliance:

Since S & L considers maximum cable sidewall pressure when listing the maximum cable pulling tensions on the installation drawings, there is no need to have the electrical contractors procedures address this item. No further corrective action is necessary.

Item 3.c.b. Corrective Action Taken and Results Achieved:

Hatfield Electric Company Procedure No. 10, "Class I Cable Installation" is being revised to address precautions to be taken for rework of Class I cable. The procedure will include parameters and precautions presently implemented, such as actions to be taken when a new revision to routing is issued post-installation and monitoring to be employed when removing cables.

Corrective Action Taken To Avoid Further Noncompliance:

Train Contractor personnel and implement the new Hatfield Electric Company Procedure 10.

Date When Full Compliance Will Be Achieved:

August 7, 1982

- Item 3d. On April 7, 1982, it was identified that the Hatfield Electric Company's NCR form contained a section titled "Action to Prevent Recurrence" but there was no direction in the body of Procedure Number 6 for actions to be taken to satisfy this requirement nor does the procedure assign responsibility for this section of the NCR.

Corrective Action Taken and Results Achieved:

HECo Procedure #6 is being revised to include direction on completing the HECo NCR form section titled "Action to Prevent Recurrence" and also to assign responsibility for completing this section of the NCR.

Action Taken to Avoid Further Noncompliance:

N/A

Date When Full Compliance Will be Achieved:

7/31/82

VIOLATION: Item 4 (454/82-05-13; 455/82-04-13)

10CFR50, Appendix B, Criterion XV, states in part, "measures shall be established to control materials, parts or components which do not conform to requirements in order to prevent their inadvertent use or installation."

The licensee's Topical Report, CE-1-A, Revision 20, dated February 17, 1982, Section 15, states in part, " items involving construction, maintenance and modifications which are found nonconforming...will be controlled to prevent their inadvertent use or installation."

Contrary to the above:

Item 4a. On March 31, 1982, it was identified that three (3) CECO nonconformance reports (F-634, F-645 and F-682) had been voided rather than closed, with reference to corrective action taken to resolve the nonconformance. By voiding the subject NCR's, the tracking system to verify that the approved disposition has been completed and corrective action to prevent recurrence is negated. Also, the voided NCR's are removed from the trend analysis system.

Corrective Action Taken and Results Achieved:

The subject NCR's have been re-reviewed and the following action taken;

NCR F-634 has been superseded by NCR F-721 to provide a tracking mechanism for trending as well as to document the evaluation of the subject cable. As noted in the inspection report, an evaluation of the cable was performed on April 7, 1982.

NCR F-645 has been superseded by NCR F-722 to provide a tracking mechanism for the completion of rework and recalibration of the subject wattmeters as well as for trending purposes.

NCR F-682 has been superseded by NCR F-723 to provide a tracking mechanism for trending purposes.

In addition, other NCR's which have been voided have been reviewed to assure that they have been voided properly.

Corrective Action Taken to Avoid Further Noncompliance:

A policy has been established between Byron QA and Project Construction that voiding of NCR's will no longer be allowed. Though as stated in the report that voiding of NCR's is an accepted practice in the industry, the establishment of this policy should preclude further problems in this area.

Item 4b. On April 7, 1982, it was identified that three (3) nonconformance reports (98, 99, and 100) had been voided by the Hatfield Electric Company rather than closed, with reference to corrective action taken to resolve the nonconformance. The subject NCRs were voided because an FCR was or would be issued to accept the items as installed. At the time the NCRs were voided, there was no assurance that all the FCRs would be approved. By voiding the NCRs, the tracking system to verify that the proposed disposition was accepted, was negated and the NCRs were removed from the trend analysis system.

Corrective Action Taken and Results Achieved:

As stated in the NRC inspectors report, on April 9, 1982 Hatfield Electric Company prepared NCR 432 to document the item originally contained in NCRs 98, 99 and 100.

Also, on April 15, 1982, Hatfield Electric Company held a training session on NCR processing in which the subject of proper closure of NCRs was addressed.

Corrective Action Taken to Avoid Further Noncompliance:

Hatfield Electric Company Procedure No. 6, Revision 9, Dated May 4, 1982 and Implemented on May 26, 1982 now requires them to forward a completed copy of all NCRs to Commonwealth Edison Company. CECO, PCD and QA will review the NCRs for proper closure.

Date When Full Compliance Will Be Achieved:

May 26, 1982

Item 4c. On April 7, 1982, it was identified that the Hatfield Electric Company had improperly closed NCR 168, in that after CECO. engineering dispositioned the subject NCR to replace the item, the Hatfield Electric Company closed the NCR without accomplishing the approved disposition. At the present time, there is a nonconforming cable installed, and the tracking system to replace the cable, has been negated.

Corrective Action Taken and Results Achieved:

Subsequent to the NRC exit, a review of documentation records revealed that PTL Report No. EH 117 had documented the cable reel number and cable footage marker of the damaged cable referenced on Hatfields NCR 168. From this information the cable in question was identified as 1VD086.

The documentation for cable 1VD086 revealed that it had been scrapped on March 16, 1981 and that it was repulped with new cable on August 25, 1981.

NCR 168 was closed on August 22, 1981 stating that "No cable could be located at 1899B (11&N) which would require repulping." On August 22, 1981 this was a true statement, as the damaged cable had been removed on March 16, 1981.

Corrective Action Taken to Avoid Further Noncompliance:

Hatfield Electric Company Procedure No. 6, Revision 9, Dated May 4, 1982 and Implemented on May 26, 1982 now requires them to forward a completed copy of all NCRs to Commonwealth Edison Company. CECO, PCD and QA will review the NCRs for proper closure.

Date When Full Compliance Will Be Achieved:

May 26, 1982

VIOLATION: Item 5 (454/82-05-11; 455/82-04-11)

10CFR50, Appendix B, Criterion V states, "Activities affecting quality shall be prescribed...and shall be accomplished in accordance with these instructions, procedures or drawings."

The licensee's Topical Report, CI-1-A, Revision 20, Section 2.2 commits to comply with the Regulatory Position of Regulatory Guide 1.38, Revision 2, which endorses ANSI N45.2.2-1972. Also Section 5 states, "The quality assurance actions carried out for design, construction, testing, and operation activities will be described in documented instructions, procedures, drawings, specifications, or checklists"... "Activities affecting quality are required by the Edison quality program to be prescribed by documented instructions, procedures or drawings."

Contrary to the above; the following activities were not accomplished according to procedures or instructions:

Item 5a. On April 2, 1982, it was identified that Powers-Azco-Pope was storing rejected material among accepted material in Warehouse No. 4. This is contrary to their Procedure No. FP-3.

Corrective Action Taken and Results Achieved:

The items with reject tags were relocated to a box identified as containing rejected material. This box is located in the "HOLD AREA" to maintain segregation from acceptable items.

The use of red tags to identify material as "SAFETY RELATED" will be discontinued and existing red tags removed. The classification of material is already being performed during material receiving inspection by Powers-Azco-Pope per Procedure FP-3.

Corrective Action Taken To Avoid Further Noncompliance:

Powers-Azco-Pope Procedure FP-3 has been reviewed with the appropriate warehouse personnel to insure proper implementation of requirements for segregating and tagging rejectable material.

The use of the red "SAFETY RELATED" tags has been discontinued.

Date When Full Compliance Will Be Achieved:

July 30, 1982

Item 5b. On April 2, 1982 it was identified that Powers-Azco-Pope had not tagged a defective torque wrench with a reject tag. This is contrary to their Procedure No. FP-11.

Corrective Action Taken and Results Achieved:

The Powers-Azco-Pope torque wrench, TW-4, was damaged in that it could only operate in the clockwise direction. This did not affect the calibration status of the wrench as documented on the calibration record for TW-4. This wrench was not recalibrated and therefore placed on hold because there was no need for it's use in the field. Torque wrench TW-4 has now been rejected on Powers-Azco-Pope Reject Tag No. 11.

Corrective Action Taken To Avoid Further Noncompliance:

Any tools or equipment that cannot be properly calibrated, will be rejected per Powers-Azco-Pope Procedure FP-11.

Date When Full Compliance Will Be Achieved:

April 13, 1982

Item 5c. On March 30, 1982, it was identified that Hatfield Electric Company did not tag torque wrenches which were past their calibration due date. This is contrary to their Procedure No. 24.

Corrective Action Taken and Results Achieved:

The subject torque wrenches were immediately tagged by Hatfield QC Dept. and removed from the storage shelf, crated and shipped off site for recalibration on April 2, 1982. Investigation showed that none of these torque wrenches were used after their recalibration was due.

Corrective Action Taken to Avoid Further Noncompliance:

The error which led to the violation of Procedure No. 24 was pointed out to Hatfield Electric Company QA personnel. They were also instructed on the importance of red tagging defective or out of calibration tools per Procedure No. 24 so that they can be clearly identified from tools which are approved for use.

Date When Full Compliance Will Be Achieved:

July 19, 1982

Item 5d. On April 5, 1982, of 13 reports reviewed it was identified that 12 nonconformance reports prepared by Powers-Azco-Pope did not address corrective action to prevent recurrence. This is contrary to their QA manual, Section B-8, Para. B-8.8.2.

Corrective Action Taken and Results Achieved:

All PAP nonconformance reports which are presently open have been reviewed to assure that corrective action to prevent recurrence has been addressed. In addition, PAP has been directed to include corrective action to prevent recurrence on all nonconformance reports issued after April 12, 1982. Commonwealth Edison Company QA Department will not concur with proposed disposition to PAP nonconformance reports unless corrective action to prevent recurrence is addressed. Also, all site contractor nonconformance reporting systems have been reviewed to assure that corrective action to prevent recurrence has been addressed.

Corrective Action Taken to Avoid Further Noncompliance:

PAP has been directed to revise their NCR form to include a section which addresses "corrective action taken to prevent recurrence". The revision to the PAP QA manual has been submitted to CEC Co. and was accepted on June 25, 1982. The PAP site procedure for nonconformance control, QC-4, is presently being revised and will be submitted to CEC Co. by July 23, 1982.

Date When Full Compliance Will Be Achieved:

Full compliance shall be achieved when PAP procedure QC-4 has been approved for use by CEC Co. This shall be completed by July 31, 1982.

Item 5e.

On April 7, 1982, it was identified that the conditions maintained by the licensee in Warehouse No. 1 and No. 5 were contrary to CEC Co. Quality Procedure 13-1 and to the requirements of ANSI N45.2.2-1972.

Corrective Action Taken and Results Achieved:

The unacceptable housekeeping conditions in warehouse #1 and #5 have been corrected. These actions were verified by CEC Co. Quality Assurance in Surveillance Report No. 3622.

Corrective Action Taken To Avoid Further Noncompliance:

Quality Assurance shall perform scheduled surveillances of CEC Co. warehouses to assure acceptable storage conditions.

Date When Full Compliance Will Be Achieved:

May 7, 1982

VIOLATION: Item 6 (454/82-05-08; 455/82-04-08)

10CFR50, Appendix B, Criterion VI, states, "Measures shall be established to control the issuance of documents, such as instructions, procedures, and drawings, including changes thereto, which prescribe all activities affecting quality."

The licensee's Topical Report, CE-1-A, Revision 20, Section 6 states, "A document control system will be used to assure that documents such as specifications, procedures, and drawings are reviewed for adequacy and approved for release by authorized personnel."..."Each receiving office or area shall have a controlled method for checking receipt of new or revised documents and assuring that the latest revised document is in use."

Contrary to the above:

Item 6a. On April 4, 1982, of 12 drawings reviewed it was identified that one drawing located in the Johnson Controls Incorporated on-site office drawing file was not of the proper revision.

Corrective Action Taken and Results Achieved:

The outdated drawings listed in the inspection summary have been removed from the work locations. Johnson Controls has replaced these drawings with the current revisions.

Corrective Action Taken To Avoid Further Noncompliance:

Commonwealth Edison Quality Assurance Dept. performed special surveillances of Johnson Controls work areas in the building. All drawings reviewed were of the proper revision. Document control is also reviewed as part of the regularly scheduled surveillances performed by the CECO. and Johnson Controls QA Departments.

Date When Full Compliance Will Be Achieved:

April 13, 1982

Item 6b. On April 7, 1982, of 10 drawings reviewed it was identified that two drawings located in the Hunter Corporation document station 1-H were not of the proper revision.

Corrective Action Taken and Results Achieved:

The outdated drawings listed in the inspection summary have been removed from the work locations. Hunter will issue the current revision when work resumes in the Unit 2 containment.

Corrective Action Taken To Avoid Further Noncompliance:

Commonwealth Edison Quality Assurance Dept. performed special surveillances of Hunter work areas in the building. All drawings reviewed were of the proper revision. Document control is also reviewed as part of the regularly scheduled surveillances performed by the CECo. and Hunter QA Departments.

Date When Full Compliance Will Be Achieved:

April 13, 1982

NONCOMPLIANCE: Item 7 (454/82-05-17; 455/82-04-17)

10CFR50, Appendix B, Criterion IX, states in part, "Measures shall be established to assure that special processes, including welding..., are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes,..."

The licensee's Topical Report, CE-1-A, Revision 20, dated February 17, 1982, page 9-1, Revision 15, dated January 2, 1981, Section 9, "Control of Special Processes," third paragraph, states in part, that, "Process control procedures will be used as required by specifications, codes or standards, as applicable...."

The ASME B & PV Code Section III, 1974 Edition, Summer 1974 Addenda, Article NA-4000, Subarticle NA-4411, states in part, that "The program shall include measures to control the issuance and disposition of documents, such as..., instructions, procedures,...., including changes thereto, which prescribe the activities affecting quality. These measures shall assure that documents including changes..., distributed to and used at the location where the prescribed activity is performed."

Corrective Action Taken and Results Achieved:

Control of construction processes (ref: NA-4450/NCA-4134.9) is achieved thru job traveller packages and process sheets. Process sheets serve to specify technical requirements for performance of the construction process. Included in the technical requirements parameters of the process sheets are the welding procedure specification number to which the welding process to be utilized is qualified under, and the essential welding parameters in terms of joint type (i.e. consumable insert, backing strip, open butt, fillet), purge gas required or not applicable, preheat temperature requirements, root weld pass requirements, second weld pass requirements, remaining weld pass requirements, maximum interpass temperature requirements, weld surface requirements, post weld heat treatment requirements, et. al. The job traveller packages and process sheets are at the location where the prescribed activity is performed, in that they are utilized and maintained by the supervisor directing the work (i.e. craft foreman). The welding procedure specifications are maintained in the work area, in that they are distributed for use to the various area document stations and welding material issue stations. It is our position that the above programmatic features comply with the referenced applicable code. These specific construction activities have undergone the survey for implementation requirements of the ASME B & PV Code Section III (reference: NCA-8160) and Certificates of Authorization have been granted, we therefore maintain that welding is being accomplished in accordance with the applicable code.

Corrective Action To Avoid Further Noncompliance:

None Required

Date When Full Compliance Will Be Achieved:

Not Applicable

VIOLATION: Item 8 (454/82-05; 455/82-04-05)

10CFR50, Appendix B, Criterion XVII states, "Sufficient records shall be maintained to furnish evidence of activities affecting quality. Consistent with applicable regulatory requirements, the applicant shall establish requirements concerning record retention, such as duration, location, and assigned responsibility."

The licensee's Topical Report, CE-1-A, Revision 20, Section 2.2, commits to the Regulatory Position of Regulatory Guide 1.88, Revision 2, which endorses ANSI N45.2.9-1974.

Contrary to the above, on April 7, 1982, it was identified that Midway Industrial Contractors did not provide the security standards established by ANSI N45.2.9-1974, to preclude the entry of unauthorized personnel into the storage area and to guard against larceny and vandalism.

Corrective Action Taken and Results Achieved:

The vault in which the item of noncompliance was identified is shared by several contractors; specifically, Johnson Controls, Westinghouse - SAMU, Ebasco Services, Inc., Reliable Sheet Metal and Midway Industrial Contractors. The entrance to the vault was locked; however, it was found that the individual safe belonging to Midway Industrial Contractors was found unlocked. As indicated in the inspection report, the safe containing quality records of Midway Industrial Contractors has been locked.

Corrective Action Taken to Avoid Further Noncompliance:

A directive has been sent to each contractor sharing the subject vault stressing the importance of maintaining an adequate level of security. In addition, periodic checks are made by CECO. to assure maintenance of adequate security levels for all site records vaults.

Date When Full Compliance Will Be Achieved:

July 19, 1982

VIOLATION: Item 9 (454/82-05-10; 455/82-04-10)

10CFR50, Appendix B, Criterion XVIII states, "A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program.

The licensee's Topical Report CE-1-A, Revision 20, Section 2.2 commits to comply with the Regulatory Position of Regulatory Guide 1.144, Revision 1, which endorses ANSI N45.1.12-1977.

Contrary to the above, on March 29, 1982, it was identified that the audit reports of Commonwealth Edison Company, Powers-Azco-Pope, Pittsburgh Testing Laboratory, Johnson Controls, Incorporated, Hunter Corporation, and Hatfield Electric Company failed to include the criteria, established in ANSI N45.2.12-1977, regarding persons contacted in the audit and a summary of audit results including an evaluation statement regarding the effectiveness of the quality assurance program elements which were audited.

Corrective Action Taken and Results Achieved:

A directive dated 4/14/82 has been issued to all site contractors requesting that all new audit reports issued include a listing of personnel contacted during the audit and an evaluation statement regarding the effectiveness of the Quality Assurance program elements which were audited. This directive includes a request that contractors notify their respective offsite auditing groups to assure that the requirements are included for offsite auditors also. In addition, a training session was held for on-site CECO. Quality Assurance personnel to communicate the requirements of ANSI N45.2.12 in audit reports with emphasis placed on the above requirements. Also, a follow-up surveillance has been performed by CECO. Quality Assurance to assure that these requirements are being met.

Corrective Action Taken to Avoid Further Noncompliance:

The actions taken as stated above should preclude any further noncompliance in this area.

Date When Full Compliance Will Be Achieved:

July 14, 1982