

November 8, 1982

Hugh K. Clark, Esq., Chairman
Administrative Judge
P.O. Box 127A
Kennedyville, Maryland 21645

Dr. George A. Ferguson
Administrative Judge
School of Engineering
7200 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606

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Dr. Oscar H. Paris
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of
Illinois Power Company, et al.
(Clinton Power Station, Unit 1)
Docket No. 50-461 01.

Dear Administrative Judges:

Attached for your information are a recent Notice of Violation and Illinois Power Company's letter accepting imposition of \$90,000 in civil penalties.

Sincerely,

Richard J. Goddard
Counsel for NRC Staff

Attachment: As Stated

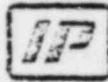
cc: Prairie Alliance
Sheldon A. Zabel, Esq.
Philip L. Willman, Esq.
Mr. Herbert H. Livermore
Jeff Urish, Vice President
Reed Neuman, Esq.

Atomic Safety and Licensing Board
Panel
Docketing and Service Section
Jan L. Kodner, Esq.
Gary N. Wright
Atomic Safety and Licensing Appeal
Board Panel

DS07

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NAME	:RGoddard/sab	:RLessy	:EReis	:	:
DATE	:11/8/82	:11/ /82	:11/8/82	:	:

ILLINOIS POWER COMPANY



0981-L
U-10002

CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

October 21, 1982

Docket No. 50-461

Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

This letter is in response to your Notice of Violation and Proposed Imposition of Civil Penalties dated October 5, 1982 for Clinton Power Station, Unit I, Docket No. 50-461, Investigation Report No. 50-461/82-02. Illinois Power Company's response to the Proposed Imposition of Civil Penalties is as follows:

A. The Notice of Violation states in part:

"Contrary to the above, Baldwin Associates QC inspectors did not have sufficient freedom to identify quality problems and were not sufficiently independent of cost and schedule. The results of interviews indicate that some QC inspectors were: (a) instructed by supervisors not to engage in discussions with NRC without approval from the BA Quality Control Manager; (b) not always supported by QC management; and (c) intimidated. The following are examples of insufficient freedom of QC inspectors, including insufficient freedom from cost and schedule, which occurred during December, 1981 and January, 1982:..."

With regard to Item A of the Notice of Violation, Illinois Power Company does not deny the violation as cited and will pay the civil penalty in the amount of \$40,000.00.

B. The Notice of Violation states in part:

"Contrary to the above, Illinois Power Company and its contractor, Baldwin Associates, did not adequately document and implement a quality assurance program in the electrical area and in areas which impacted on the electrical areas to comply with the requirements of Appendix B as evidenced by the following examples:"

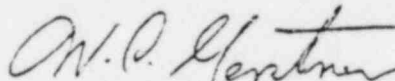
With regard to Item B of the Notice of Violation, Illinois Power Company does not deny the violation as cited and will pay the civil penalty in the amount of \$50,000.00.

Illinois Power Company does not protest the imposition of the civil penalties and by this letter forwards the draft in payment in the cumulative amount of Ninety Thousand Dollars (Enclosure #1).

Pursuant to the provisions of 10 CFR 2.201, Illinois Power Company will submit to the Director, Office of Inspection and Enforcement, US NRC, on or before November 5, 1982, a written statement or explanation, for each violation, including; (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which have been taken to avoid further violations; and (5) the date when full compliance will be achieved.

I hereby affirm that the information in this letter is correct to the best of my knowledge.

Very truly yours,



W. C. Gerstner
Executive Vice President

Certified Mail - Return Receipt Requested

Enclosure 1

cc: Mr. J. G. Keppler (Director, Region III)
NRC Resident Inspector
Illinois Department of Nuclear Safety
Director - Quality Assurance

DCS

Stock Form 1414
October 1967
Title "GAO Manual
1114-106

BILL FOR COLLECTION

Bill No. _____

U. S. Nuclear Regulatory Commission

Date October 26, 1982

(Department or Establishment and Bureau or Office)

Washington, DC 20555

(Address)

PAYER:

Illinois Power Company
500 South 27th Street
Dacatur, IL 62525

*This bill should be returned by the
payer with his remittance.
SEE INSTRUCTIONS BELOW.*

Date	DESCRIPTION	Quantity	Unit Price		Amount
			Cost	Per	
10/26/82	Payment for CP dated 10/5/82, Docket No. 50-461.				\$90,000.00
AMOUNT DUE THIS BILL.					\$90,000.00

This is not a receipt

INSTRUCTIONS

Tender of payment of the above bill may be made in cash, United States postal money order, express money order, bank draft, or check, to the office indicated. Such tender, when in any other form than cash, should be drawn to the order of the Department or Establishment and Bureau or Office indicated above.

Receipts will be issued in all cases where "cash" is received, and only upon request when remittance is in any other form. If tender of payment of this bill is other than cash or United States postal money order, the receipt shall not become an acquittance until such tender has been cleared and the amount received by the Department or Establishment and Bureau or Office indicated above.

Failure to receive a receipt for a cash payment should be promptly reported by the payer to the chief administrative officer of the bureau or agency mentioned above.

IE-14

ILLINOIS POWER COMPANY
DECATUR, ILLINOIS

No. K 65352

REMITTANCE STATEMENT

INVOICE DATE	INVOICE NUMBER	PURCHASE ORDER NO.	AMOUNT OF INVOICE (All Applicable Discounts Have Been Deducted)	TOTAL REMITTANCE
FINE FOR NRC VIOLATIONS AT CLINTON POWER STATION			90,000.00	\$90,000.00

PLEASE DETACH BEFORE DEPOSITING



ILLINOIS POWER COMPANY
DECATUR, ILLINOIS

No. K 65352

OCTOBER 19 1982

K65352

PAY TO THE ORDER OF
THE TREASURER OF THE
UNITED STATES
DIRECTOR OF OFFICE OF INSPECTION
AND ENFORCEMENT USNRC
WASHINGTON, DC 20555

\$90,000 DOLLARS 00 CENTS \$90,000.00

CONTINENTAL ILLINOIS NATIONAL BANK
AND TRUST COMPANY OF CHICAGO
CHICAGO, ILLINOIS

M.H. Piecke
J.M. [Signature]
FOR THE TREASURER

⑈065352⑈ ⑈07000039⑈ 50⑈02699⑈



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

October 5, 1982

Docket No. 50-461
EA 82-93

Illinois Power Company
ATTN: Mr. W. C. Gerstner
Executive Vice President
500 South 27th Street
Decatur, IL 62525

Gentlemen:

This refers to the investigation conducted by Region III during the period January 5 to March 3, 1982, of electrical construction activities at the Clinton Nuclear Power Station. The investigation was initiated as a result of allegations made to the NRC senior resident inspector at the Clinton site. The allegations were made by several electrical quality control (QC) inspectors who are employed by Baldwin Associates, your principal contractor.

The findings of the investigation reveal a breakdown of your quality assurance (QA) program, as related to electrical construction. This is evidenced by numerous examples of noncompliance with eleven of the eighteen criteria for a quality assurance program as set forth in Appendix B of 10 CFR Part 50. As a result of preliminary investigation findings, Illinois Power Company issued a Stop Work Order for specified electrical construction activities. On January 27, 1982, the Region III Office issued a Confirmatory Action Letter addressing the Stop Work Order and describing programmatic changes that would be necessary prior to the resumption of such work. The principal cause of the breakdown, in our view, was Illinois Power Company's failure to exercise adequate oversight and control over its principal contractor to whom the work of establishing and executing quality assurance programs had been delegated.

Another finding of significant concern to us relates to the intimidation of quality control inspectors by Baldwin Associates management personnel. This is clearly a barrier to effective implementation of a quality assurance program and results in the loss of the organizational independence

CERTIFIED MAIL
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described in Criterion I of Appendix B to 10 CFR Part 50. The importance of this matter is reflected in the recent amendment (Public Law 96-295, June 30, 1980) to the Atomic Energy Act of 1954, which added Section 235 relating to protection of nuclear inspectors such as your contractor's quality control inspectors. The safety significance of the above matters was initially discussed during a management meeting on January 29, 1982, attended by you and members of your staff and by NRC representatives from the Office of Nuclear Reactor Regulation and the Region III Office. We acknowledge that you initiated corrective action immediately following the January 29 meeting. These matters were further discussed on April 8, 1982, during an enforcement conference in the Region III Office between members of your staff and the Region III staff.

In order to emphasize the need for licensees to maintain a work atmosphere where quality assurance personnel are not intimidated, and to assure implementation of an effective quality assurance program that identifies and corrects construction deficiencies, we propose to impose civil penalties for the items set forth in the Appendix to this letter. The violations in the Appendix have been categorized at the severity levels described in the NRC Enforcement Policy published in the Federal Register, 47 FR 9987 (March 9, 1982). The base value for each of the two Severity Level III violations is \$40,000. However, after considering the circumstances of the violations, and the multiple occurrences, we are increasing the amount of the civil penalty for Violation B to \$50,000. After consultation with the Director of the Office of Inspection and Enforcement, I have been authorized to issue the enclosed Notice of Violation and Proposed Imposition of a Civil Penalty in the cumulative amount of Ninety Thousand Dollars. I am particularly concerned by the number of instances where Baldwin Associates electrical QC supervisors took disposition actions which were not consistent with established QC program procedures, and the instances where Baldwin electrical construction staff apparently ignored QC stop work actions. Instances such as these raise questions on the effectiveness of the Baldwin project administration, and the Illinois Power Company quality assurance program.

You are required to respond to this letter and should follow the instructions in the Appendix when preparing your response. Your reply to this letter and the results of future inspections will be considered in determining whether further enforcement action is appropriate.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

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

Sincerely,

James G. Keppler
James G. Keppler
Regional Administrator

Enclosure: Notice of Violation
and Proposed Imposition of
Civil Penalties

cc w/encl:
DMB/Document Control Desk (RIDS)
Resident Inspector, RIII
Karen Borgstadt, Office of
Assistant Attorney General
Gary N. Wright, Manager,
Nuclear Facility Safety
Randall L. Plant, Prairie
Alliance

RIII
SEM
Norelius/sv
10/4/82

Spessard
Spessard
10/4/82

RIII
LWS
Schultz
10-4-82

RIII
D
Davis
10/5/82

RIII
JK
Keppler
10/5/82

NOTICE OF VIOLATION

AND

PROPOSED IMPOSITION OF CIVIL PENALTIES

Illinois Power Company
Clinton Nuclear Power Station

Docket No. 50-461
Construction Permit No. CPPR-137

As a result of the investigation conducted at the Clinton Nuclear Power Station in Clinton, Illinois from January 5 to March 3, 1982, multiple examples of the violations listed below were identified. The numerous examples of these violations demonstrate Illinois Power Company's (IP's) failure to exercise adequate oversight and control of their principal contractor, Baldwin Associates (BA), to whom they had delegated the work of establishing and executing quality assurance programs, and thereby fulfill their responsibility for assuring the effective execution of a quality assurance (QA) program. This failure manifested itself in intimidation of quality control (QC) inspectors and in a widespread breakdown in the implementation of the quality assurance program in the electrical area.

Because of the significance of failing to maintain a work environment where quality assurance personnel are free from intimidation, and not assuring implementation of an effective quality assurance program which identifies and corrects construction deficiencies in the electrical area and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C) 47 FR 9987 (March 9, 1982), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended ("Act"), 42 U.S.C. 2282, and 10 CFR 2.205 in the amounts set forth for these violations listed below.

- A. 10 CFR 50, Appendix B, Criterion I states, in part, "The applicant may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part thereof, but shall retain responsibility therefor....The persons... performing quality assurance functions shall have sufficient authority and organizational freedom to identify quality programs...including sufficient independence from cost and schedule."

The Clinton Power Station Quality Assurance Manual, Chapter 1, Paragraph B.2 states, "Quality assurance organizations shall have sufficient freedom to identify quality problems; initiate, recommend, or provide solutions; to verify implementation of solutions; and to control further processing, delivery, installation, or utilization of nonconforming materials or items until proper dispositioning has occurred."

Contrary to the above, Baldwin Associates QC inspectors did not have sufficient freedom to identify quality problems and were not sufficiently independent of cost and schedule. The results of interviews indicate that some QC inspectors were: (a) instructed by supervisors not to engage in discussions with NRC without approval from the BA Quality Control Manager; (b) not always supported by QC management; and (c) intimidated. The following are examples of insufficient freedom of QC inspectors, including insufficient freedom from cost and schedule, which occurred during December 1981 and January 1982:

1. Communications between BA QC inspectors and NRC personnel regarding QC activities were hampered by the actions of BA QC management, in that, on January 26, 1982, QC inspectors were approached by NRC representatives in the QC field office to obtain information regarding a mechanically assisted cable pull. The QC inspectors advised the NRC personnel that they could not engage in any discussions with the NRC without approval from the BA Quality Control Manager.
2. A discharged BA QC inspector stated under oath on January 27, 1982 that he was instructed not to spend time with NRC personnel because BA QC management believed he was providing too much information, and that part of the reason he was fired was for giving information to the NRC. Another BA QC inspector stated he felt he was fired for giving information to the NRC.
3. The discharge of two BA Quality Control inspectors on January 26, 1982, during the course of the NRC investigation was perceived by other BA Quality Control inspectors as being at least in part the result of their having provided information to the NRC and their discharges had a chilling effect on BA QC inspectors prior to the rehiring of the individuals.
4. A BA QC inspector stated he felt intimidated by a BA QC supervisor into initialing his acceptance on a traveler. Although denied by the supervisor, two other individuals stated it was their perception undue pressure was exerted on the inspector by their supervisor.
5. BA QC inspectors were told by a BA QC supervisor that their primary function was to support the crafts.
6. A verbal STOP WORK Order issued by a BA QC inspector on January 6, 1982, as requested by an IP QA engineer during a power-assisted cable pull, was overridden by BA construction supervision.

7. During a cable pull on January 6, 1982, the EA electrical superintendent in charge of the pull intimidated an IP QA engineer with cost aspects if he pursued his request to install additional tensiometers by telling the IP QA engineer that he would have to accept responsibility for authorizing the additional time and money to install the tensiometers and complete the pull.

This is a Severity Level III violation (Supplement II).

(Civil Penalty - \$40,000).

- B. 10 CFR 50, Appendix B, Criterion II, requires holders of construction permits for nuclear power plants to document, by written policies, procedures, or instructions, a quality assurance program which complies with the requirements of Appendix B for all activities affecting the quality of safety-related structures, systems, and components and to implement that program in accordance with those documents.

The Clinton Power Station QA Manual, Chapter 2, Paragraph B.5 states, "Activities affecting quality and the conditions under which these activities are performed shall be controlled."

Contrary to the above, Illinois Power Company and its contractor, Baldwin Associates, did not adequately document and implement a quality assurance program in the electrical area and in areas which impacted on the electrical areas to comply with the requirements of Appendix B as evidenced by the following examples:

1. 10 CFR 50, Appendix B, Criterion III states, in part, "Measures shall be established to assure that applicable regulatory requirements and the design basis...are correctly translated into specifications, drawings, procedures, and instructions."

Criterion III also states, in part, "Measures shall be established for the identification and control of design interfaces and for coordination among participating design organizations."

The Clinton Power Station QA Manual, Chapter 3, Paragraph B.2 states, in part, "Design basis, regulatory requirements...shall be adequately translated into the various design documents." Chapter 3, Paragraph B.4 states, in part, "Interfaces within and between each design organization shall be controlled with adequate procedures to assure that there is no conflict in design objectives."

- (a) Contrary to the above, measures did not assure that the applicable regulatory requirements were correctly translated into specifications, drawings, procedures, and instructions. For example, the requirements of Regulatory Guide 1.29, "Seismic Design Classification", as adopted in the Clinton Power Station FSAR, Paragraph 8.1.6.1.4 were not incorporated in the fire protection piping installation specifications, K2856, nor on the installation drawings, Contract No. 32-1240 SH, 23 sheets. As a result, fire protection piping which was not seismically qualified was not adequately separated from safety-related electrical raceways.
- (b) Contrary to the above, the design interface and coordination between the architect engineer's piping and electrical design groups was not properly controlled. For example: the fire protection piping installation contractor, while working from approved drawings in the cable spread room, could not install 4" piping due to interference with safety-related 2" conduit and pull box 1P0119, and in two instances NRC inspectors observed, pipe hangers for 2" piping had been bent to fit around the installed safety-related conduit. Two instances were observed by NRC inspectors where non-seismically supported (Category II) piping was within 3", minimum of 11" required, of seismically supported (Category I) safety-related raceway.
- (c) Contrary to the above, Paragraph 3.2 of Sargent and Lundy Standard STD-EA-122, which is referenced in Electrical Installation Specification K2999, and which requires that cable trays and hangers should be braced during the pulling operations to provide pulling tension reaction, was not translated into the Cable Installation Procedure, BAP 3.3.2, as a prerequisite to pulling cables. As a result, cables were installed in cable trays 1-H13P-714A, 1-H13P-714B, 1-H13-742E, 1-H13P-742F, 1-H13P-742A, and 1-H13P-717A which were not braced (attached) to their support hangers.
- (d) Contrary to the above, Paragraph 903.1.e of Electrical Installation Specification K2999 states, "The greater part of the total length of most cables will be installed in cable trays, but extensions from trays to equipment shall be installed in conduits. In certain cases, the required conduit extensions from the cable trays to equipment may not be shown on the drawings, but Contractor shall install the necessary conduit." This specification was not translated into Raceway Installation Procedure BAP 3.3.1, nor as a prerequisite to pulling cables in the Cable Installation Procedure BAP 3.3.2. As a result 21 cables extending from cable trays into 4160V switchgear 1A1 were not installed in conduits, and 17 cables extending from cable trays into HPCS panel E22-S004 were not installed in conduits.

2. 10 CFR 50, Appendix B, Criterion V states, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, or a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

The Clinton Power Station QA Manual, Chapter 5, Paragraphs B.1 and B.2 states, "Written procedures, instructions, and drawings shall be developed and used, as appropriate, for activities affecting quality. Instructions, procedures, and drawings shall include applicable qualitative and quantitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Contrary to the above, documented instructions were not adequately prescribed in travelers or were not adequately documented in travelers for electrical penetrations 1EE-01E, 1EE-02E, 1EE-03E, 1EE-05E, 1EE-06E, 1EE-07E, 1EE-14E, and 1EE-18E in that vital steps and data as required by Specification K2978, "Installation Manual for Electrical Penetration Assemblies," were omitted from the travelers or required data was not entered. For example:

- (a) Inert gas pressure was not recorded as required by Paragraph 6.10 of the specifications.
- (b) Paragraphs 6.11 through 6.16 of the specifications were omitted in the subject travelers. These paragraphs address the detailed instructions and handling precautions necessary for the removal of the penetrations from their shipping container and the installation of the penetrations in the nozzle.
- (c) Paragraphs 6.27 through 6.31 of the specifications require that the primary and secondary header plate bolts be torqued, using a calibrated torque wrench. The torque values, torque wrench number, and torque wrench calibration due date were not recorded on the subject travelers nor on any documents attached to the travelers. Therefore, it could not be determined that a calibrated torque wrench was used to torque the primary and secondary header plate bolts.
- (d) Paragraphs 6.33.1 through 6.33.15 "Blind Flange Installation" and Section 9.0 "Installation of Pressure Switch, Pressure Gauge, and Fill Valve" and 10.0 "Electrical Tests" of the specifications were omitted from the travelers.

(e) During the leak rate test, Paragraphs 7.3 and 7.5 of the specifications require that the pressure gauge reading, temperature adjacent to the penetration, and the time and date be recorded. Gauge number, gauge calibration due date and temperature readings were not recorded on the subject travelers nor on any documents attached to the travelers.

3. 10 CFR 50, Appendix B, Criterion VI states, in part, "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.... Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval unless the applicant designates another responsible organization."

The Clinton Power Station QA Manual, Chapter 6, Paragraphs B1 and 2 states, in part, "Documents shall be reviewed for adequacy by appropriately qualified personnel, approved for issue and use by authorized personnel.... Changes to documents shall be subject to the same degree of control as applied to the original documents."

Contrary to the above, Quality Control Instruction QCI-401, "Raceway Hanger/Support Fabrication/Installation Inspection," was revised by Baldwin Associates Interoffice Memorandum QCE-81-032, dated September 2, 1981, and Quality Control Instruction QCI-403, "Cable Tray/Conduit Installation Inspection Criteria," was revised by Baldwin Associates interoffice Memorandum QCE-81-012 dated June 9, 1981. The subject interoffice memoranda did not receive the same level of approval (i.e., QC Manager and the Quality and Technical Service Manager) as the quality control instructions they revised, nor were they controlled in accordance with BA's Document Control Procedure BAP2.0.

4. 10 CFR 50, Appendix B, Criterion VII states in part, "Measures shall be established to assure that purchased material, equipment, and services, whether purchased directly or through contractors and sub-contractors, conform to the procurement documents."

Specification K2980 specifies the requirements for the procurement of cable trays and supports. Paragraph 2.2 of Form 1895-E, which is referenced in this specification, states in part, "Poorly galvanized work shall be rejected by the Purchaser."

Contrary to the above, NRC inspectors observed numerous raceway sections stored in laydown areas and sections of installed raceway, some with cable in them, which did not meet the requirements of the purchase documents and which had not been rejected and were not identified with "hold" or "reject" tags to indicate they were nonconforming.

5. 10 CFR 50, Appendix B, Criterion IX states, "Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements."

The Clinton Power Station QA Manual, Chapter 9 states, in part, "Purpose - To establish requirements assuring that special processes are performed under adequate controls and that procedures governing these processes are established in accordance with applicable codes...."

The note under Paragraph 8.8 of Specification K2978 requires that the welding of the secondary header plate and enclosure mounting ring be in accordance with the ASME Boiler and Pressure Vessel Code (ASME Code), Section III.

Paragraph 6.2.1 of BA Technical Services Procedure BTS 402, "Weld Control" states, in part, "On all ASME related work, the Technical Services Welding Technician/Inspector will record the welder's unique identification number on the traveler, and cross reference the traveler information to the BTSF-030 Form (Weld Material Field Requisition)."

Baldwin Associates Procedure BAP 2.19, "Control of Welding Filler Materials," Paragraph 5.1 states, in part, "The Discipline Superintendent shall direct welders to retain the pink copy of the Welding Material Field Requisition, Form JV-200, in order that the appropriate Technical Services Inspector may transcribe the heat/lot number and welder's symbol to the documentation form relating to the weldment of the traveler and also enter traveler information on the pink copy, sign and date it. Unused welding material and the pink copy of Form JV200 shall be returned to the issuing WMFCC attendant for documentation of the welding materials returned."

Contrary to the above, measures did not assure that special processes were properly controlled. For example:

- a. Weld filler material heat/lot number was not recorded on travelers for electrical penetrations 1EE-01E, 1EE-02E, 1EE-03E, 1EE-05E, 1EE-06E, 1EE-07E, 1EE-14E, and 1EE-18E.
- b. The Technical Services inspector did not enter traveler information, sign and date Weld Material Field Requisition Serial Nos. 051477, 051478, 051458, 051439, 051399, and

051400. Welder V-16 was issued weld filler metal on these requisitions between November 25, 1980 and December 1, 1980, and during this period he performed welding on the above electrical penetrations.

6. 10 CFR 50, Appendix B, Criterion X states, in part, "A program for inspection of activities affecting quality shall be established and executed...to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity."

The Clinton Power Station QA Manual, Chapter 10, Paragraph B.8 states "In-process and/or final inspections shall verify that the specified requirements have been met."

Contrary to the above, a program for inspection of activities affecting quality was not properly executed as demonstrated by the fact that N findings had not been identified by quality control inspections. Examples of missed nonconforming conditions are:

- a. Conduit installation bushings were not installed in conduits C0843*, C0884, five conduits used to extend cables (drop-outs) from cable trays into panel E22-S004* (both ends), five drop-outs in tray end at trays 16351E-K1E and 16352E-K1E (two have cable installed), and three drop-outs in tray 10702F-K3E per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.j.

*Indicates that cables have been installed.

- b. The 21 cables extending from cable trays into the 4160V switchgear 1A1, and the 17 cables extending from cable trays into the HPCS panel E22-S004, were not installed in conduit per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.
- c. A metal plate was stored on top of electrical cables in cable tray 19122E-C3E and the sharp edge of a cable tray cover was resting on electrical cables in tray 16336B-C1E which is contrary to the requirements of Electrical Specification, K2999, Paragraph 801.4.
- d. Coiled electrical cables 1LV14M, 1LV14K, 1LV14J, and 1RP35B inside panel H13-P702 and four coiled electrical cables in tray 10702E-C3E were not properly supported in accordance with Baldwin Associates Procedure BAP3.3.2, "Cable Installation," Paragraphs 5.8.3.e and 5.8.4.
- e. The minimum bend radius was violated for cable 1HP02F in cable tray 10702F-K3E at conduit C0843 and for an unidentified 2C/12 cable in tray 10702E-C3E per the requirements of the Electrical Specifications, K2999, Paragraph 1002.2, S&L standard STD-EA-12 Paragraph 3.9, and Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.2.c.

- f. Electrical cables were not properly supported in risers 10R167, 10R168-C3E, and 10R138-C2E in accordance with Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.3.c and 5.8.4 and S&L Standards STD-EA-122 and STD-EB-200, Paragraph 3.
 - g. The ends were not sealed on electrical cables 1SX53J and 1VQ25 in motor control center 1A2, Section 1AP73E, as required by Baldwin Associates Procedures BAP 3.3.2, "Cable Installation," Paragraphs 5.5.1c, 5.8.3.b and 5.8.4.
 - h. Two cable jackets were damaged in cable tray 16358B-C1E at riser 16R102-C1E and were not identified during the post-pull inspection in violation of Baldwin Associates Procedure BAP 3.3.2, "Cable Installation," Paragraph 5.8.4.
 - i. Three coiled cables (each approximately 100' long) were not properly stored and identified outside east battery room, Aux Bldg. 781', and cable 1HP05A was not properly stored in Control Bldg. 781', in accordance with Baldwin Associates Storage and Maintenance Procedure BAP 2.2.4, Paragraph 5.2.2 and Cable Installation Procedure BAP 3.3.2, Paragraph 5.5.1.d.
7. 10 CFR 50, Appendix B, Criterion XIII states, in part, "Measures shall be established to control the handling, storage, shipping, cleaning and preservation of material and equipment in accordance with work and inspection instructions to prevent damage or deterioration."

Baldwin Associates Storage and Maintenance Procedure BAP 2.4, Paragraph 6.2.2, states "Quality Control shall verify storage conditions at the intervals specified on the SMIR (Storage and Maintenance Instructions and Record) and shall initial the SMIR when items and materials are stored in accordance with the SMIR and Sections 5.1/5.2 of this procedure." SMIR for motor-operated valves specifies that storage conditions shall be verified monthly.

Contrary to the above, as of January 22, 1982, Quality Control has not verified the storage conditions at the monthly interval specified on the SMIR since September 29, 1981 for motor-operated valves 1E12-F037A, 1E12-F037B, 1E12-F040, 1E12-F042A, 1E12-F042C, 1E12-F048A, 1E12-F048B, and 1E12-F049.

8. 10 CFR 50, 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 Clinton Power Station QA Manual, Chapter 15, Paragraphs B.2 and B.4 states, "Nonconforming items shall be clearly identified. Measures shall be established which control further use or installation of nonconforming items pending disposition."

Contrary to the above, the licensee failed to document the following known nonconforming conditions on a Nonconformance Report or a Deviation Report as of January 14, 1982:

- a. Baldwin Associates Interoffice Memorandum QCE-81-043, dated November 5, 1981, states, in part, "The following listed items are discrepancies found during the reinspection that should have been identified during the original inspection.
 - (1) Tray connections bought off by QC inspectors do not reflect the accurate configuration.
 - (2) The revising of Raceway Packages by Engineering to delete tray sections with discrepancies have not been addressed in a subsequent package, (also see Corrective Action Request, CAR-079).
 - (3) Unknown connections of tray to hanger, i.e., the connection detail used cannot be verified against approved details specified in the E05 drawings.
 - (4) Tray spotwelds (manufacturers) were not galvanized (showing evidence of rust).
 - (5) Technical Services signed off 'no weld' on connections where welds were made.
 - (6) Weld burn through in trays.
 - (7) Broken spotwelds in tray, especially at field cuts.
 - (8) Sharp edges on tray not removed or covered by protective edging.
 - (9) Z clips not attached to tray (not making physical contact).
 - (10) Identification numbers hidden, located at the wrong place and damaged."
- b. Illinois Power Company QA Surveillance Finding No. C-181, dated December 11, 1981 documents that incorrect attachments were used for raceway-to-hanger connections identified in Raceway Inspection Release Travelers No. R-T-087 and No. R-T-090. This involved 14 raceways and 10 hangers.
- c. Baldwin Associates QC inspectors identified seven items of noncompliance on QC Raceway Installation Inspection Checklist, Release No. R-T-004, R/2, dated December 24, 1981. This was a reinspection of the subject release number.

- d. Baldwin Associates QC inspectors identified on General Inspection Report IR No. R-T-001, dated December 29, 1981, that the cable tray hanger connection details for hangers H-12 through H-22 should be DV-48A and DV-9 per Field Change Request (FCR) No. 5247, approved June 25, 1980. Details DV-48A and DV-9 were used, plus details AB-213 and AB-214 which were not authorized. This was a reinspection of the subject release.
- e. Illinois Power Company QA Surveillance finding No. C-185, dated January 6, 1982, documents the fact that 11 Class 1E cables were pulled (utilizing three mechanical tuggers and only one tensiometer), without verifying that maximum cable pulling tension had not been violated. An NCR or DR had not been prepared as of the time of the NRC investigation on February 19, 1982.
- f. On or about December 22, 1981, Baldwin Associates QC management discharged a QC inspector who had apparently falsified one or more inspection reports by signing off on reports without making the required inspections. All of the inspections performed by the QC inspector are thereby made unacceptable or indeterminate. Although some reverification had been initiated, no NCR or DR had been issued regarding this matter by the time of an NRC investigation on January 12, 1982. Corrective Action Request (CAR) No. 078 was not prepared to document these circumstances until January 19, 1982.
- g. Baldwin Associates Construction and Subcontracts supervision were aware of but did not document on an NCR or DR the fact that the fire protection piping being installed on the south cable spreading room did not meet the separation criteria for Class 1E raceway and piping per the requirements of the Electrical Specifications, K2999, Paragraph 903.1.f.
- h. During a cable pull on January 6, 1982, Baldwin Associates Construction violated a Stop Work Order issued by a BA QC inspector. IP QA and BA QC supervision were aware that the Stop Work Order had been violated. As of February 2, 1982, neither an NCR nor a DR were prepared.
- i. The NRC identified 19 Nonconformance Reports that were improperly voided between July 31, 1981 and January 15, 1982. Examples are:
 - (1) Nonconformance Report (NCR) No. 4925, dated July 13, 1981, was prepared to document that the cross bracing

between hangers H8A and H7A could not be reinstalled due to interference of hanger E28-1000-03A-CC18.

Field Change Request No. 10605 was issued on August 7, 1981, to resolve the problem identified on the NCR. On October 7, 1981, the NCR was improperly voided in that the reason given for voiding the NCR was that FCR 10605 had been issued to resolve the problem.

By voiding the NCR, the tracking system to verify that the cross bracing was installed is negated and is removed from the trend analysis system.

- (2) Nonconformance Report No. 5326, dated September 1, 1981, was prepared to document that auxiliary steel AS-14 and hanger CC-9 were installed to drawing E26-1617-EIH, Revision A, and that Revision B to this drawing created hanger CC-41 and deleted AS-14 and CC-9.

The recommended disposition, as approved through IP Supervisor of Construction on September 10, 1981, was to use the existing AS-14 and CC-9 and to revise the applicable drawings to delete CC-41 and reinstitute AS-14 and CC-9. (Revert back to the Revision A condition.)

The NCR was voided because Revision B deleted the hanger. Revision B to the subject drawing was the reason the NCR was prepared.

By voiding the NCR, the tracking system to verify that the drawing was changed to reflect the Revision A conditions or, depending on the engineer's disposition, that auxiliary steel AS-14 and hanger CC-9 were removed and hanger CC-41 installed, has been negated. Also, the voided NCR is removed from the trend analysis system.

- (3) Nonconformance Report No. 5368, dated September 12, 1981, was prepared to document that the raceway was not grounded between routing points 10510 and 16423, which is a distance of 80'. Electrical Specification K2999 requires grounding at 60' maximum intervals.

The NCR was voided on October 3, 1981, because the Baldwin Associates Procedures do not establish criteria for grounding on Class 1E tray.

The approved drawings, specifications, codes, standards, and regulatory requirement establish criteria, not BA procedures. By voiding the NCR, the tracking system to verify that the grounding was installed per the specification requirements has been negated and the NCR would be removed from the trend analysis system.

- j. A Hold Tag applied by a BA QC inspector to a nonconforming cable (Ref. NCR6088) was improperly removed by the BA QC field supervisor so that termination of cables 1AP36F and 1AP36M could proceed. The Hold Tag was removed on or about January 7, 1982, without an approved disposition on the Nonconformance Report.
9. 10 CFR 50, Appendix B, Criterion XVI states, in part, "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations...are promptly identified and corrected. The identification of the significant condition adverse to quality, the cause of the condition...shall be documented and reported...."

Baldwin Associates Procedure BAP 1.0, "Nonconformances," Paragraph 4.1 states, in part, "Project Personnel have the responsibility to identify nonconforming conditions and report the conditions to Baldwin Associates...personnel who will initiate the proper paperwork to report the nonconformance." Paragraph 5.6 states, in part, "All necessary supporting documentation...shall be attached...and become part of the record file on the NCR."

Contrary to the above, measures did not assure that conditions adverse to quality were promptly identified and corrected, and that all supporting documentation was attached to and became part of the record file on the NCR. For example:

- a. Nonconformance Report No. NCR 6093, dated January 6, 1982, and Corrective Action Request CAR 080, dated January 29, 1982, were issued to document that welding had been performed by an unqualified welder.

The licensee and contractor failed to disclose that the welder failed his "after-the-fact" welding qualification test and that he required additional training before he could pass the qualification test. This type of information is required to assist the engineer in resolving the nonconformance report.

- b. On January 13, 1982, NRC inspectors identified to an IP QA engineer and BA QC inspector that two installed electrical penetrations, IEE18E and IEE23E, had lost their inert gas pressure. As of January 22, 1982, the subject penetrations had not been repressurized nor had an NCR/DR been prepared to document the condition and to assure followup.

- c. Nonconformance Report NCR 3500, dated July 31, 1980, was prepared to document that 30 electrical hangers had welding performed on them after the final QC inspection had been completed. The additional welding resulted in two or more types of attachments being used on the same connection. (Example - Latest drawing revision indicates that Attachment DV-48A or DV-9 is to be installed. Actual installation indicates that all or part of Attachments DV-9, AB-213, and AB-214 were used).

An approved disposition was received on September 30, 1980, and as of January 22, 1982, NCR 3500 was still open. The longer the NCR remains open, the more safety related cables will be installed in the surrounding cable trays which will result in a larger probability that one or more cables will be damaged while completing the approved disposition on the NCR.

10. 10 CFR 50, Appendix B, Criterion XVIII states, in part, "A comprehensive system of planned and periodic audits shall be carried out...to determine the effectiveness of the program."

ANSI N45.2.12, Paragraph 3.5.1 states, "Auditing shall be initiated as early in life of the activity as practicable, consistent with the schedule for accomplishing the activity, to assure timely implementation of quality assurance requirements."

The Clinton Power Station QA Manual, Chapter 18, Section D, states, in part, "Baldwin Associates shall institute an audit program assuring that activities associated with construction and installation effort are in compliance with the Baldwin Associates quality assurance program and this manual."

Contrary to the above, Illinois Power QA and Baldwin Associates QA have not performed an audit or surveillance of the new Deviation Reports System, BAP 1.0.1, which was implemented on September 15, 1981 to assure timely implementation of quality assurance requirements and to determine the effectiveness of the new procedure.

This is a Severity Level III violation (Supplement II).

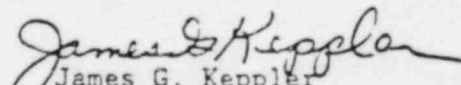
(Civil Penalty - \$50,000)

Pursuant to the provisions of 10 CFR 2.201, Illinois Power Company is hereby required to submit to the Director, Office of Inspection and Enforcement, USNRC, Washington, DC 20555, and a copy to the Regional Administrator, USNRC, Region III, within 30 days of the date of this Notice a written statement or explanation, including for each alleged violation; (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) the corrective steps which have been taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Illinois Power Company may pay the civil penalties in the cumulative amount of Ninety Thousand Dollars or may protest imposition of the civil penalties in whole or in part by a written answer. Should Illinois Power Company fail to answer within the time specified, this office will issue an Order imposing the civil penalties in the amount proposed above. Should Illinois Power Company elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer may: (1) deny the violations listed in this Notice in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties. Any answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate by specific reference (e.g., giving page and paragraph numbers) to avoid repetition. Illinois Power Company's attention is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalties due, which have been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282.

FOR THE NUCLEAR REGULATORY COMMISSION


James G. Keppler
Regional Administrator

Dated at Glen Ellyn, Illinois
this 5th day of October 1982