

ILLINOIS POWER COMPANY

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Q37-82(05-21)-L

500 SOUTH 27TH STREET, DECATUR, ILLINOIS 62525

April 21, 1982

DESIGNATED ORIGINAL

Certified By

Maria Pearson

Mr. James G. Keppler, Director
Office of the Director, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 61037

Dear Mr. Keppler:

This letter is written in response to your Confirmation of Action Letter dated January 27, 1982 regarding the Illinois Power stop work order related to electrical activities.

Considerable progress has been made in addressing the concerns discussed in your letter. Attachment (1) to this letter elaborates further on the details of our efforts to date and those underway for completion in the near future. Attachment (2) to this letter provides a tentative schedule for resumption of electrical work in a controlled incremental manner.

I trust that this response satisfactorily addresses the concerns of the Nuclear Regulatory Commission related to our electrical work activities.

Sincerely,

W.C. Gerstner For

W.C. Gerstner

Executive Vice President

Attachments

cc: H. Livermore, Resident NRC Inspector
Director-Quality Assurance

APR 27 1982

RESPONSE TO NRC CONFIRMATION OF ACTION LETTER
(CAL) DATED JANUARY 27, 1982

*1.A "Continue the stop work as specified in the memorandum dated January 19, 1982 (i.e., no cable tray installation, no safety-related cable pulling in any cable tray where reinspection identified deficiencies which would be a hazard to the cable pulled, and no cable to be pulled which would interfere with reinspection of tray or hanger) with the following clarifications..."

- Project Management issued letter to modify and clarify the stop work to reflect the conditions of the CAL and the areas of remedial work that could proceed as agreed upon by NRC.
- A general recovery plan was developed and submitted to the NRC via W.C. Gerstner letter of Feb. 23, 1982.
- Based on further review of Ad Hoc Task Force comments, NRC unofficial comments to the general recovery plan, and further IP/BA QA review, the plan for STOP WORK recovery has been modified and now contains the following sections:
 1. Cable Tray Remedial Work
 2. Cable Tray Attachments
 3. Cable Tray Work
 4. Conduit Work
 5. Cable Pulling
 6. Cable Terminations

*1.B. "Prior to the pulling of any Class 1E cable, do the following:

- (1) "conduct a complete inspection of the cable tray,"
 - (a) "document all nonconforming conditions as part of the NCR and DR system,"
 - (b) "and correct and repair all nonconforming items;"
- (2) "...and inspect each cable tray attachment to the hanger,"
 - (a) "identify each incomplete or nonconforming attachment whose completion or repair could adversely affect the cable pull or installed cable,"

- (b) "document each instance as part of the NCR and DR system, and "
 - (c) "Complete or repair the attachment."
 - (3) "Any decision not to repair an identified nonconforming item in the cable tray or attachments prior to cable pulling must be evaluated, justified and documented prior to pulling cable."
 - All procedures and instructions associated with cable tray and attachment installations were reviewed and revised to reflect the following:
 - The procedure (BAP 3.3.1) for installing raceways has been revised to only cover exposed conduit and a new procedure (BAP 3.3.10) created to cover cable tray installation.
 - The procedure (BAP 3.3.6) for installing hanger/supports has been revised to only cover the hanger/supports and the installation of the cable tray attachments is covered by a new procedure (BAP 3.3.11).
 - A new procedure (BAP 3.3.9) was created to cover the protection of cable in tray when repairs/work to cable tray/attachments are required.
 - The procedures/instructions also incorporate measures to make repairs or complete the incomplete work in accordance with NCR/DR dispositions and to ensure protection of cable already pulled.
 - Corresponding Job Instructions and Quality Control Instructions were revised or created to cover the above associated BAPs.
 - A complete reinspection of existing cable tray and attachments will be made in accordance with the new/revised procedures.
 - The procedures/instructions incorporate requirements to document any and all nonconforming conditions (including incompletions) as part of the NCR/DR system.
- *2.A. "Place the appropriate control tags on all nonconforming items which are installed or in storage which are identified in nonconformance reports, deviation reports, GIRs and IP QA Surveillance Reports."

- A complete audit of the NCR system was accomplished by BA QA which included verifying the placement of tags on nonconforming items as well as other items, such as proper closure, etc.
 - Since the DR system requires placement of tags on all nonconforming items, IP QA is conducting a surveillance of those open DRs to verify placement of tags on the nonconforming items. (est.: April 28, 1982)
 - BA QC conducted a review of all open electrical GIRs and has transferred all nonconforming conditions to NCR/DRs and placed appropriate tags on the nonconforming items.
 - IP QA reviewed all open surveillance findings associated with Surveillance Reports and initiated NCRs for nonconforming items which were not previously identified on an NCR/DR. BA QC attached appropriate tags to these nonconforming items.
 - IP QA is currently developing a nonconformance program for use during the startup and operating phase. This program will include requirements for tagging of nonconforming items. (est: July 1, 1982)
- *2.B. "Develop a procedure which clearly assigns status of all adverse findings on NCRs, DRs or GIRs."
- The procedures/instructions identified previously in 1.B were revised to delete the use of GIRs and to clearly include requirements to document all nonconforming conditions on NCRs or DRs.
 - The procedures (BAP 1.0 and 1.0.1) for NCRs and DRs are being reviewed and revised as necessary to ensure that such requirements are clear.
 - The procedures/instructions for cable pulling and terminations (BAP 3.3.2 and 3.3.3) are also being revised and will incorporate the requirements to document all nonconforming conditions on NCRs or DRs. (est: July 15, 1982)
- *2.C. "Review all previous GIRs and IP QA Surveillance Reports and CARs to determine if adverse findings should be documented on NCRs or Deficiency Reports."

- BA QC conducted a review of all open electrical GIRs and has transferred all nonconforming conditions to NCR/DRs.
- IP QA conducted a review of all open IP QA surveillance findings associated with surveillance reports and initiated NCRs for nonconforming items which were not previously identified on an NCR/DR.
- BA QA conducted a review of all open Corrective Action Requests (CARs) for any nonconforming items not previously identified on NCR/DRs and initiated the appropriate document.

*3. "Conduct repair activities according to approved procedures which assure that such repairs are properly controlled (including QA/QC involvement) to assure that damage to cables in trays does not result from the repair activity."

- The Ad Hoc Task Force reviewed all electrical activities and recommended that numerous procedures/instructions be revised to incorporate proper controls on repair activities. Most of their recommendations were included.
- The following procedures/instructions have been created or revised:

BAP 3.3.1	Exposed Conduit Installation
BAP 3.3.6	Electrical Raceway Supports
BAP 3.3.9	Cable Protection
BAP 3.3.10	Cable Tray Installations
BAP 3.3.11	Cable Tray Attachments

E-003	Electrical Hanger Drawings (EHDs)
E-008	Electrical Drawing Review
E-012	Conduit Raceway Cards/Inspection Release Packages
E-013	Cable Tray Installation Travelers
E-014	Cable Tray Attachment Travelers
E-015	Electrical Hanger Travelers

QCI-102	The Conduct of Inspections
QCI-400	Cable Tray Installation Inspections
QCI-401	Raceway Hanger/Support Fab/Installation Inspection
QCI-403	Cable Tray Attachment Installations
QCI-405	Exposed Conduit Installation
QCI-407	Cable Protection Inspection

- The following procedures are being reviewed and revised:

BAP 1.0	Nonconformances
BAP 1.0.1	Deviation Reports
BAP 3.3.2	Cable Installation
BAP 3.3.3	Cable Termination
QCI-406	Class 1E Electrical Cable Installation
QCI-408	Class 1E Cable Termination

- As previously described, these procedures/instructions include measures which assure that repairs are properly controlled and that damage to the cables in the tray does not result from the repair activity.

*4. "Develop a plan for increase Illinois Power QA and construction management involvement in the contractor's construction management and QA/QC program including..."

"a) Review of all inspection/installation procedures and instructions to assure consistency with SAR commitments and specifications;"

- IP QA is now in the in-line process for reviewing and approving BA Procedures, Job Instruction, Quality Assurance Procedures, Technical Services Procedures, and Quality Control, Quality Assurance and Technical Services/Instructions prior to their issuance. Applicable BA and IP procedures have been issued/revised to reflect this in-line review and approval.
- IP QA procedure QAI-205.01, Rev.0 is being used during IP QA reviews and reflects the requirement that reviews should be made against SAR and specification requirements.
- The above described review and approval has been implemented on the electrical procedures/instructions discussed in other sections of this response and on any new or revised procedure/instruction issued since February 23, 1982.
- A plan/schedule is being generated to cover the IP QA review of existing BA procedures/instructions. Comments generated as a result of these reviews will require resolution, and if necessary, revisions will be processed prior to IP QA approval. (est: July 15, 1982)

4. "b) periodic review inspections to confirm findings;"

- The IP QA surveillance program is being revised to include "overinspection" of work in the field to confirm the first line inspection findings. Personnel performing overinspection work will possess the related education and experience to provide credible overinspections in the various work disciplines (i.e., mechanical, electrical, etc.) Personnel performing overinspection work will have been previously qualified to the requirements of ANSI N45.2.6 or will be trained and qualified by IP to these requirements. (est: May 31, 1982)
- IP QA has increased the use of Notification Points for installation, inspection and testing activities. Numerous notification points have been issued for electrical work.
- IP QA surveillance program has been revised to place greater emphasis on observing inspections in the conduct of electrical work, on reviewing mechanical and electrical work travelers prior to release to the field, and on turnover activities.

4. "c) other action to increase assurance of IP QA and construction management awareness of adverse findings and construction activities."

- IP QA utilizes audits, surveillances, and reviews to evaluate the effectiveness of the QA program implementation. These activities are covered by QAIs and are ongoing activities.

IP QA has issued QAI-102.03 which pulls together the various "indicators". (i.e. surveillance, audits, reviews, inspections, etc.) on a periodic basis (at least annually) and results in a report to management on QA program effectiveness. (1st report est: May 3, 1983)

- A Management Corrective Action Request (MCAR) system has been established to advise/alert top level management of responsible organization of the need for immediate corrective action and attention to adverse findings. The MCAR will be issued by the IP Director-QA, and is never used in lieu of NCRs, DRs, CARs, etc., but will in many cases

supplement them in ensuring that management awareness/involvement in the conditions identified in those documents.

Other actions have been or are being taken to provide more attention to ensuring that prompt and adequate corrective action is taken in response to discrepant conditions. These actions include:

- o IP QA is conducting in-line review and approval of NCRs.
 - o IP QA is conducting monthly surveillance of DRs to assess adequacy of content, disposition, and corrective action.
 - o IP QA has started trending IP construction surveillance findings and is developing a trend analysis program. (est: July 1, 1982)
- The BA Manager of Quality and Technical Services is required to prepare and submit a written report to the IP Executive Vice President on the 2nd and 4th Monday of each month. This report is a summary of quality-related problems encountered or pursued by the QC, QA or Technical Services groups.
 - Meetings are being held during the 2nd and 4th week of each month between the BA Q&TS Manager, BA Tech Services Manager, IP Executive Vice President, IP Director-QA, and the IP QA Supervisors to discuss matters of importance between the organizations and within the respective organizations.
 - An agreement has been established whereby the BA Manager of Q&TS will discuss with and obtain concurrence from the IP Executive Vice President on any contemplated Q&TS personnel terminations, promotions, or transfers prior to initiation of any action.
 - IP QA is increasing its involvement in the conduct of training programs and the evaluation of training programs.
 - A project policy has been issued by IP Executive Vice President concerning intimidation of BA QA, QC and TS personnel and IP QA personnel.

- A letter of instruction has been issued by IP Executive Vice President to all organizations endorsing the IP QA Notification Points program and directing compliance to the program.
 - A Project Policy has been promulgated in the IP Construction QA Manual specifying rights of personnel to access management higher in the organization when concerns related to quality matters are not satisfactorily resolved by immediate supervision.
- *5. "Develop a plan to clarify instructions and procedures to assure that all findings are formally documented, trended, and dispositioned (including corrective action to preclude recurrence) by qualified personnel."
- IP QA is revising, as necessary, all IP QAIs which govern documenting, trending, and dispositioning findings. (est: July 1, 1982)
 - IP QA is reviewing all BA procedures/ instructions which govern documenting, trending, and dispositioning findings. The results of these reviews will be submitted to BA Manager of Q&TS for resolution. (est: July 15, 1982)
- *6. "We further understand that the stop work order will stay in effect until your program for improved control over the electrical construction program as set forth in items 2, 3, 4, and 5 above, is approved by the Region III office."
- In addition to those items discussed in response to items 2, 3, 4 and 5 above, the following actions have been or are being taken:
 - IP Executive Vice President responsibilities have been realigned to give added emphasis to Quality.
 - Organizational changes have been made to enhance the effectiveness of QA activities.
 - o The IP Director-QA now reports directly to the IP Executive Vice President.

- o The IP Executive Vice President now provides project direction to the BA Manager of Q&TS.
 - o A new Manager of Q&TS has been appointed. This person is very familiar with the present programs.
 - o The IP QA organization has been reorganized into a more functional quality organization. This organization now includes Quality Engineering, Audits and Surveillances, Programs and Procedures, and Quality Control sections.
- The IP Executive Vice President has assembled a team to perform an overall assessment of the QA program and implementation as applied to mechanical, piping and other construction activities. This effort is currently in progress.
 - A consultant has been hired to perform an evaluation of project training and to assist with implementing any necessary changes to enhance our training programs.
 - A "Quality Report" program, using a suggestion form, has been implemented and is being administered by the IP Executive Vice President and the IP Director-QA. This program provides a mechanism for all personnel to report concerns and identify problems related to quality.
 - The staffs of the IP and BA Quality organization, BA Project Engineering and IP Clinton Project Management Compliance are being increased. The larger staffs will allow IP and BA to:
 - a) Give more attention to identifying the root causes of discrepant conditions and track corrective action to insure it is completed in a timely fashion.
 - b) Review open NCR/DR/FCRs with added emphasis on expeditious closure.
 - c) Increase surveillance of construction activities.
 - Procedure BAP 1.2 has been revised to eliminate change-implemented Field Change Requests (FCRs).

TENETATIVE ELECTRICAL WORK RESUMPTION SCHEDULE WCG letter dtd. April 21, 1982
4/20/82

ACTIVITY	April		May		June			July				August								
	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	
1. <u>CABLE TRAY REMEDIAL WORK</u>																				
a. Release Procedures & Instructions	▼																			
b. Conduct Training	—																			
c. Issue Addenda to Travelers	—		→																	
d. Perform Remedial Repair Work	—		→																	
e. BA QA Surveillance of Work	—		→																	
f. IP QA Surveillance of Work	—		→																	
2. <u>CABLE TRAY ATTACHMENTS</u>																				
a. Release Procedures & Instructions	▼																			
b. Conduct Training	—																			
c. Prepare 150 Travelers	—																			
d. BA QA Review of Travelers	—																			
e. IP QA Review of Travelers	—																			
f. NRC Review of Travelers	—																			
g. Perform Work	—		→																	
h. BA QA Surveillance of Work	—		→																	
i. IP QA Surveillance of Work	—		→																	
j. NRC Review of Work	—		—																	

TENETATIVE ELECTRICAL WORK RESUMPTION SCHEDULE

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ACTIVITY	April			May			June			July			August						
	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23
6. <u>CABLE TERMINATIONS</u> (continued)																			
e. BA QA Surveillance of Work																			
f. IP QA Surveillance of Work																			

