September 2, 1988

Mr. A. Bert Davis
Regional Administrator
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Dresden Station Units 2 and 3
Response to Notice of Violation
Concerning Chainfall Rigging Practices
NRC Docket Nos. 50-237 and 50-249

References (a): July 29, 1988 Notice of Violation 237/88011; 249/88013, Item A Concerning Examples of Improper Rigging Practices (Level V)

> (b): May 25, 1988 Notice of Violation 237/88006; 50-249/88007 Concerning Rigging Damage to N<sub>2</sub> Line (Level IV).

Dear Mr. Davis:

Enclosed is the Commonwealth Edison Company (CECo) response to the Reference (a) Notice of Violation (NOV). We understand the significance of the issues identified and acknowledge that the examples cited in the NOV do not constitute acceptable work practices.

Based upon our review of the violation, however, we disagree with the conclusion that the examples cited in this violation constitute a recurring problem associated with untimely and ineffective corrective action on the control of rigging activities. Effective corrective action has been in place since May 25, 1988 and has prevented recurrence of any subsequent events similar to the previous Reference (b) violation. The basis for our assessment is discussed further in the enclosure.

IEU1

Although this response was originally due to be submitted by August 29, 1988 an extension to September 6, 1988 was approved by M.A. Ring of your staff on August 26, 1988 during discussions with C.M. Allen of CECo Nuclear Licensing.

Please contact this office should further information be required.

Very truly yours,

Henry E. Bliss

Nuclear Licensing Manager

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cc: B. L. Siegel - Project Manager, NRR

S. G. DuPont - NRC Senior Resident Inspector, Dresden

#### COMMONWEALTH EDISON COMPANY

#### RESPONSE TO NOTICE OF VIOLATION

## SEVERITY LEVEL V

## VIOLATION (As stated in the July 29, 1988 NOV Item A)

10 CFR 50, Appendix B, Criterion XVI, as implemented by CECo Topical Report CE-1-A, "Quality Assurance Program for Nuclear Generating Stations," and CECo Corporate Quality Assurance Manual, Nuclear Generating Stations, "Quality Requirement Section 16.0," requires that corrective actions identified from nonconformances, incidents and deviations are verified for satisfactory completion to preclude repetition.

Contrary to the above, the corrective actions taken to resolve a previous violation involving the control of rigging activities were not timely enough or effective in preventing further chainfall rigging violations.

## BACKGROUND

A rigging event occurred on April 29, 1988 when mechanical maintenance personnel inadvertently placed a sling and come-along assembly over the 1-1/2-inch Primary Containment Nitrogen Inerting Makeup System supply while rigging from a 16-inch Containment Cooling Service Water line. As a result the 1-1/2 inch line ruptured. An investigation of the event (LER 88-006-0) determined that the root cause of the event was personnel-error due to inattention to detail during the rigging operation. A contributing factor involved a rigging procedure deficiency. On May 5, 1988 (the first tailgate session after the event) the event was discussed with mechanical maintenance department personnel. This discussion stressed the importance of attention to detail and exercising caution when conducting rigging operations.

On May 9, 1988, NRC resident inspectors exit meeting was held with station management during which the April 29, 1988 event was discussed. The resident inspectors expressed concern with the station's practice of rigging from permanent plant equipment without proper evaluation. The station agreed to implement a procedure change to incorporate such an evaluation.

On May 25, 1988, approximately two weeks after the exit meeting, the station approved Maintenance Memorandum #40 to provide interim guidance for rigging operations. This guidance included a requirement to perform a rigging evaluation when rigging from plant equipment. The station also issued Licensee Event Report #88-006-0 which delineated corrective actions resulting from the April 29, 1988 event and completion schedules.

Also on May 25, 1988, the NRC issued Notice of Violation (NOV) 237/88006-01; 249/88007-01 for the April 29, 1988 event. The NOV was received at the Station on May 31, 1988, six days after the station had implemented effective interim corrective actions.

There have been no improper rigging events subsequent to the May 25, 1988 issuance of Maintenance Memorandum #40. Improper work practices associated with two later observations by the resident inspectors originated and occurred prior to May 25, 1988 as discussed below.

#### DISCUSSION

This violation is a result of two observations by the resident inspector of chainfalls connected to plant equipment. The first observation occurred on June 13, 1988 and involved a chainfall being slung over the 4-inch electrical power supply conduit to the containment cooling service water pump 3D-1501-44. This temporary rigging was used without a rigging evaluation on May 23-24, 1988 to remove the actuator and bonnet from condensate recirculation control valve FCV-3-3401 (work request D67904). During the May 5, 1988 tailgate, the need to exercise caution when using temporary rigging from permanent plant equipment was discussed; however, because the 4-inch conduit had been previously used for similar maintenance work, the mechanical maintenance personnel involved believed that the required rigging operation could be performed safely. The May 25, 1988 issuance of Maintenance Memorandum #40 established the requirement for rigging evaluations. This prompted the preparation of a rigging evaluation for additional work on the valve. The work involved the removal of the threaded valve internals which was accomplished on June 3, 1988. When the resident inspector observed the chainfall on June 13, 1988 he verified that: 1) the initial work performed in the May 23-24, 1988 timeframe was not evaluated as discussed at the May 9, 1988 exit meeting, and 2) for the subsequent work performed on June 3, 1988, an evaluation was in place. An additional evaluation was performed for the valve reassembly which took place on June 15, 1988. Subsequent to discussions with the resident inspector concerning the June 13, 1988 observation, the station performed an after-the-fact evaluation for the May 23-24, 1988 rigging activities. This evaluation confirmed that the 4-inch conduit could bear the rigging loads. This was further verified by a visual inspection of the conduit; no damage was observed.

The second observation occurred on June 15, 1988 and involved a chainfall being slung over a non-safety related 10" roof drainline near the Unit 3 feedwater regulating valve station, where major valve and piping modification work was being performed. Rigging used to support this modification work was attached to pad-eyes and beams that had been analyzed by Sargent and Lundy and determined acceptable for this application. The observed

chainfall had been initially rigged in late April or early May, 1988 for possible use in making minor alignments for final piping fit and would have subjected the drainline to minimal loads. Final pipe fitting had been completed on May 24, 1988 without the use of the chainfall. Because the chainfall was rigged in a location where it would not interfere with ongoing work activities, it had been decided to leave it stored there until the final outage cleanup. As no rigging was performed from the chainfall, this does not constitute an improper rigging event.

Commonwealth Edison disagrees with the NOV conclusion that these observations represent examples of inadequate or untimely corrective actions to prevent a recurrence of the April 29, 1988 event. The April 29, 1988 event root cause was <u>inattention to detail</u> in performing rigging operation. This issue was promptly addressed in the May 5, 1988 tailgate session. During the investigation of the April 29 event by station and NRC personnel, a second concern was identified i.e., the previous practice of rigging from plant equipment without evaluations. This is a related but separate concern from the root cause of the April event which involved inadequate care in actually conducting the rigging operation.

Commonwealth Edison agrees with this general concern as expressed by the resident inspectors at the May 9, 1988 Exit Meeting and which was restated in the NOV. Rigging from plant equipment without a proper evaluation does not constitute an acceptable work practice. The station addressed this issue on an interim basis in Maintenance Memorandum #40. As demonstrated by the rigging evaluation which was performed to support the June 3, 1988 rigging activities, this action was effective. Permanent corrective action was in place as of August 1, 1988 with Revision 4 of DMP 5800-3, "Safe Rigging Practices."

## CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

Both chainfalls were removed and properly stored. The Technical Staff performed a rigging evaluation for the temporary rigging suspended from the 4-inch conduit. The temporary rigging load was calculated and found to be within acceptable limits. The temporary rigging did not cause mechanical damage to the conduit.

## CORRECTIVE ACTIONS TAKEN TO AVOID FURTHER NONCOMPLIANCES

A Mechanical Maintenance tailgate was held on May 5, 1988 to review the April 29, 1988 event. Maintenance Memorandum #40 was issued on May 25, 1988. A formal station tailgate was held on June 16, 1988 to review the April 29, 1988 event and Maintenance Memorandum #40. DMP 5800-3, Revision 4 was approved on August 1, 1988 and tailgated with the Mechanical and Electrical Maintenance Departments on August 11, 1988.

# DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED FOR ALL ITEMS

Full compliance was achieved on May 25, 1988, with the implementation of effective corrective actions to assure that appropriate evaluations are performed prior to rigging activities. Station management has a heightened awareness of the need for prompt and aggressive corrective actions.