

September 23, 1992

Docket Nos. 50-254 and 50-265  
 License Nos. DPR-29 and DPR-30  
 EA 92-148

Commonwealth Edison Company  
 ATTN: Mr. Cordell Reed  
 Senior Vice President  
 Opus West III  
 1400 Opus Place  
 Downer's Grove, IL 60515

Dear Mr. Reed:

SUBJECT: NOTICE OF VIOLATION  
 (NRC INSPECTION REPORT NO. 50-254/92020(DRSS);  
 50-265/92020(DRSS))

This refers to the special safety inspection conducted during the period of July 29 through 30, 1992, at the Quad Cities Nuclear Station. During this inspection violations of NRC requirements were identified, and on August 28, 1992, an open enforcement conference was held in the Region III office. The report documenting the inspection was sent to you by letter dated August 14, 1992. The report summarizing the conference was sent to you by letter dated September 2, 1992.

On July 16, 1992, a package of radioactive material containing cutting equipment was shipped from Quad Cities to the Millstone Nuclear Power Station. On July 20, 1992, you were notified that Millstone personnel had found radiation levels from 200 to 1500 millirem/hr on a one foot square section of the bottom of the package prior to unloading. Subsequently, you notified this office of the radiation levels in excess of Department of Transportation (DOT) limits.

During packaging of the cutting equipment at Quad Cities, a radiation protection technician (RPT) identified a 1000 millirem/hr hot spot on the cutter dump bucket which could not be removed. The bucket was subsequently loaded into the package with the hot spot placed against the bottom. Another RPT, who had not been informed of the hot spot during shift turnover, performed two surveys of the package as it was being transferred to an open transport exclusive use vehicle for shipment. These surveys found maximum radiation levels of 90 millirem/hr. The package was placed on the vehicle in a configuration that fortuitously would not allow personnel access to the hot spot but at the same time made its detection by a survey somewhat more difficult. The final departure survey was performed with the

100002

9209290010 XA

10/5  
record copyIF06  
11

The response directed by this letter and the enclosed Notice 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,

*[Faint signature]*  
A. Bert Davis  
Regional Administrator

Enclosure: Notice of Violation

- cc w/enclosure:
- DCD/DCB (RIDS)
- D. Galle, Vice President -  
BWR Operations
- T. Kovach, Nuclear  
Licensing Manager
- R. L. Bax, Station  
Manager
- Resident Inspectors LaSalle,  
Dresden, Quad Cities
- Richard Hubbard
- J. W. McCaffrey, Chief  
Public Utilities Division
- Robert Newmann, Office of Public  
Counsel, State of Illinois Center  
Licensing Project Manager, NRR

RIII	RIII	RIII	D:OE	RIII	RIII
DeFayette/pb	Norelius	Greenman	Lieberman	Paperiello	Davis
09/23/92	09/22/92	09/23/92	09/ /92	09/23/92	09/23/92

\*Headquarters concurrence received during telecon 9/22/92 between B. Summers, OC and C. Weil, RIII; *see 9/22/92 FRx*

Commonwealth Edison Company

DISTRIBUTION:

SECY  
CA  
JSniezek, DEDR  
JLieberman, OE  
LChandler, OGC  
JGoldberg, OGC  
TMurley, NRR  
JPartlow, NRR  
Enforcement Coordinators  
RI, RII, RIV, KV  
FIngram, GPA/PA  
DWilliams, OIG  
BHayes, CI  
EJordar, AEOD  
JLuehman, OE  
Day file  
EA File  
DCS  
State of Illinois  
RAO:RIII  
SLO:RIII  
PAO:RIII  
IMS:RIII

OE	RA:RIII	D:OE	DEDR
JLuehman	ABDavis	JLieberman	JSniezek
09/ /92	09/ /92	09/ /92	09/ /92

September 23, 1992

Docket Nos. 50-254 and 50-263  
License Nos. DPR-29 and DPR-30  
EA 92-148

Commonwealth Edison Company  
ATTN: Mr. Cordell Reed  
Senior Vice President  
Opus West III  
1400 Opus Place  
Downer's Grove, IL 60515

Dear Mr. Reed:

SUBJECT: NOTICE OF VIOLATION  
(NRC INSPECTION REPORT NO. 50-254/92020(DRSS);  
50-265/92020(DRSS))

This refers to the special safety inspection conducted during the period of July 29 through 30, 1992, at the Quad Cities Nuclear Station. During this inspection violations of NRC requirements were identified, and on August 23, 1992, an open enforcement conference was held in the Region III office. The report documenting the inspection was sent to you by letter dated August 14, 1992. The report summarizing the conference was sent to you by letter dated September 2, 1992.

On July 16, 1992, a package of radioactive material containing cutting equipment was shipped from Quad Cities to the Millstone Nuclear Power Station. On July 20, 1992, you were notified that Millstone personnel had found radiation levels from 200 to 1500 millirem/hr on a one foot square section of the bottom of the package prior to unloading. Subsequently, you notified this office of the radiation levels in excess of Department of Transportation (DOT) limits.

During packaging of the cutting equipment at Quad Cities, a radiation protection technician (RPT) identified a 1000 millirem/hr hot spot on the cutter dump bucket which could not be removed. The bucket was subsequently loaded into the package with the hot spot placed against the bottom. Another RPT, who had not been informed of the hot spot during shift turnover, performed two surveys of the package as it was being transferred to an open transport exclusive use vehicle for shipment. These surveys found maximum radiation levels of 90 millirem/hr. The package was placed on the vehicle in a configuration that fortuitously would not allow personnel access to the hot spot but at the same time made its detection by a survey somewhat more difficult. The final departure survey was performed with the

package on the vehicle and the highest surface radiation reading recorded at that time was 125 millirem/hr.

It should be noted that during your subsequent investigation of this event, your staff identified that Millstone personnel had also detected a 2 square inch area on the side of the box with a radiation level of 200 to 220 millirem/hr. Nonetheless, even with the two areas of high radiation on the surface of the package, radiation levels in the normally occupied space of the vehicle were below DOT limits. The root cause of your staff's failure to identify the areas of high radiation was personnel error by the second RPT in performing an inadequate departure survey of the package. However, poor communication between the two RPTs who covered the job was also a contributing factor. Specifically, the first RPT did not inform the second RPT about the hot spot on the bucket and the second RPT neither questioned the first RPT about any abnormal readings nor reviewed the records of the completed surveys. Additionally, the hot spot would have been partially shielded and located away from the bottom of the package if the standard practice of loading the bucket into the device had been used.

Violations A and B, which are described in the enclosed Notice of Violation (Notice), concern a failure to conduct appropriate surveys to ensure that the external radiation levels of a package containing radioactive materials were within the DOT allowable limit prior to shipment, and the shipment of the package in an open transport exclusive use vehicle with external radiation levels exceeding the allowable limit.

Due to the external radiation level on the bottom of the package, which was more than five times the allowable limit, the violations would normally have been classified as a Severity Level II problem. However, the potential for personnel receiving a significant exposure was minimal due to the configuration of the shipment and DOT radiation level limits for the normally occupied space of the vehicle were not exceeded. Therefore, in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," (Enforcement Policy) 10 CFR Part 2, Appendix C, the violations have been classified in the aggregate as a Severity Level III problem.

We acknowledge that you promptly sent personnel to Millstone to investigate the event when you were notified on July 20, 1992. However, we are concerned that your staff's confirmatory surveys at Millstone were limited to the bottom of the package. Knowing by that time that an inadequate departure survey had been performed, your staff should have surveyed the entire package surface to not only confirm the existence of known areas of high radiation but also to assure themselves that other radiological problems had not been missed. Nevertheless, we found your long-

term corrective actions were more thorough and extensive.

Those actions included counseling and disciplinary action for the involved RPTs, revision of your "Surveying Radioactive Materials Shipments" procedure and training on the changes, revision of "Continuing Training Program" lesson plans to incorporate the specifics of the event and its corrective actions, transmission of a "Lessons Learned Initial Notification" to the other Commonwealth Edison stations, and training sessions with radiation protection personnel.

In accordance with the NRC Enforcement Policy a civil penalty is considered for a Severity Level III problem. However, after consultation with the Director, Office of Enforcement, and the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, I have decided that a civil penalty will not be proposed in this case. In reaching this decision, the staff considered the adjustment factors in the NRC Enforcement Policy.

Full mitigation of the base civil penalty was determined to be appropriate after weighing mitigation for your extensive corrective actions, and your good past performance in the transportation area with escalation for the prior opportunity to identify a potential problem that was provided by the survey completed by the first RPT. The remaining factors in the Enforcement Policy were considered and no further adjustment to the base civil penalty was considered appropriate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

The response directed by this letter and the enclosed Notice 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,

Original signed by  
A. Bert Davis  
Regional Administrator

Enclosure: Notice of Violation

- cc w/enclosure:
- DCD/DCB (RIDS)
- D. Galle, Vice President -  
BWR Operations
- T. Kovach, Nuclear  
Licensing Manager
- R. L. Bax, Station  
Manager
- Resident Inspectors LaSalle,  
Dresden, Quad Cities
- Richard Hubbard
- J. W. McCaffrey, Chief  
Public Utilities Division
- Robert Newmann, Office of Public  
Counsel, State of Illinois Center  
Licensing Project Manager, NRR

COPY TO  
 EPRI  
 RIII  
 DeFayette/pb  
 09/23/92

RIII  
 No. Julius  
 09/27/92

RIII  
 Greenman  
 09/23/92

D:OE  
 \*  
 Lieberman  
 09/ /92

RIII  
 Paperiello  
 09/27/92

RIII  
 Davis  
 09/27/92

\*Headquarters concurrence received during telecon 9/22/92 between B. Summers, OC and C. Weil, RIII, SAC 9/22/92 FRJ

Commonwealth Edison Company

DISTRIBUTION:

SECY

CA

JSniezek, DEDR

JLieberman, OE

LChandler, OGC

JGoldberg, OGC

TMurley, NRR

JPartlow, NRR

Enforcement Coordinators

RI, RII, RIV, RV

FIngram, GPA/PA

DWilliams, OIG

BHayes, OI

EJordan, AEOD

JLuehman, OE

Day File

EA File

DCS

State of Illinois

RAO:RIII

SLO:RIII

PAO:RIII

IMS:RIII

OE	RA:RIII	D:OE	DEDR
JLuehman	ABDavis	JLieberman	JSniezek
09/ /92	09/ /92	09/ /92	09/ /92



NOTICE OF VIOLATION

Commonwealth Edison  
Quad Cities Nuclear Station  
Units 1 and 2

Docket Nos. 50-254 and 50-265  
License Nos. DPR-29 and DPR-30  
EA 92-148

During an NRC inspection conducted on July 29 through 30, 1992, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C, the violations are listed below:

10 CFR 71.5(a) requires that licensees, who transport licensed material outside the confines of their plants or deliver licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Part 170-189.

- A. 49 CFR 173.475 requires, in part, that before each shipment of any radioactive materials package, the shipper ensure by examination or appropriate tests that external radiation levels are within allowable limits.

Contrary to the above, on July 16, 1992, a package containing radioactive materials (a contaminated shear cutter) was shipped without the shipper ensuring by appropriate surveys that external radiation levels were within allowable limits. Specifically, the departure survey conducted on July 16, 1992, failed to identify external radiation levels of 200 to 1500 millirem per hour on the surface of the package which exceeded the 200 millirem per hour allowable limit for an open transport exclusive use vehicle shipment.

- B. 49 CFR 173.441 requires, in part, that each package of radioactive materials offered for transportation in an open transport exclusive use vehicle shall be designed and prepared for shipment so that under conditions normally incident to transportation the radiation level does not exceed 200 millirem per hour at any point on the external surface of the package.

Contrary to the above, on July 16, 1992, a package containing radioactive materials (a contaminated shear cutter) was shipped from the Quad Cities Station in an open transport exclusive use vehicle with external radiation levels from 200 to 1500 millirem per hour on the surface of the package.

This is a Severity Level III problem (Supplement V).

*92090900H*

Pursuant to the provisions of 10 CFR 2.201, Commonwealth Edison Company (Licensee) is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region III, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, and a copy to the NRC Resident Inspector at the Quad Cities Station, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order or a demand for information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Where good cause is shown, consideration may be given to extending the response time. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Bert Davis  
Regional Administrator

Dated at Glen Ellyn, Illinois  
this 23<sup>rd</sup> day of September 1992