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DCO

February 5, 1991

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

Subject: Quad Cities Nuclear Power Station Units 1 and 2  
Response to two Emergency Preparedness Exercise  
Weaknesses Inspection 50-254/90022; 50-265/90021  
NRC Docket Nos. 50-254 and 50-265

Reference: L. Robert Gregor letter to Cordell Reed dated  
December 21, 1991 transmitting NRC Inspection  
Report 50-254/90018; 50-265/90018

Mr. Davis:

Enclosed is Commonwealth Edison Company's (CECo) response to the subject Exercise Weaknesses which were transmitted with the referenced letter and Inspection Report. The two exercise weaknesses concerned an inadequate response to the on-site medical emergency, and inadequate analyses by the Technical Support Center's dose assessment staff as well as untimely notification of the State officials regarding these analyses.

CECo recognizes the importance of emergency preparedness exercises and protecting the health and safety of the public. These were given foremost consideration in developing the corrective actions identified to address the exercise weaknesses, and to ensure preventing recurrences.

Additionally, we have included our actions to address the improvement items discussed in the referenced inspection report.

If your staff has any questions or comments concerning this letter, please refer them to Rita Račtke, Compliance Engineer at 708/515-7284.

Very truly yours,

T. J. Kovach  
Nuclear Licensing Manager

cc: L.N. Olshan, Project Manager - NRR  
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NRR Document Control Desk

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## Discussion

The Technical Support Center did not adequately analyze the release from the plant or inform State officials in a timely manner due to several contributing factors.

The commencement of an abnormal release began just prior to noon, but was not reflected on the NARS form transmitted at 1205. This occurred due to a lack of direction to the NARS communicator as to where to obtain information required for completion of the NARS form.

The Environs group did not recognize the existence of significant radiiodine and cesium components of the release. This was caused by the transmittal of unitless scenario release rate data from the controller to the Chemist and on to the Environs Director, who subsequently made an incorrect assumption as to the units involved. Release data would normally be communicated from the Chemist to the Environs Director via an isotopic analysis printout. These printouts include a description of the units involved.

Appropriate communication of changes in the affected downwind sector which occurred during a release was not transmitted to the involved States. This was primarily due to a lack of direction to the NARS communicator as to the appropriate source of this information.

## Corrective Actions

- 1) Significant revisions to the Generating Station Emergency Plan are to be implemented by March 1, 1991. One change to be incorporated by this GSEP revision will be the reporting chain for the NARS Communicator. Rather than reporting to the TSC's Technical Director, the NARS Communicator will be working for the Assistant Station Director, a newly developed position. Therefore, an appropriate NARS Communicator procedure revision will ensure that this communicator knows that the Environs Director and his staff can provide the most recent release information for the NARS form. The Environs Director procedure revision will ensure that the Environs Director reviews the appropriate portions of the NARS form prior to transmission to State officials. The Assistant Station Director procedure will include ongoing verification that the most recent release information is included on the NARS form. These procedure revisions will be completed by March 1, 1991.
- 2) Commonwealth Edison will ensure that controllers are aware of the necessity to transmit all scenario data to participants with the appropriate units described. This instruction will be added to the controller guidance for all exercises after March 1, 1991.
- 3) Health Physicists at the Quad Cities Station will receive cross-training with Chemists on the appropriate units and interpretation of information provided on isotopic analyses of gaseous effluents. This training will be completed during the annual 1991 training cycle.

## Response to Exercise Weaknesses

### Exercise Weakness 1

Overall response to the on-site medical emergency was inadequate with respect to the following: the initial medical and contamination assessments of the victim; contamination control techniques demonstrated by the responders; and on-scene command and control. (Weakness No. 50-254/90018-01)

### Discussion

Commonwealth Edison's review identified that these concerns were primarily due to inadequate preparation and control of the drill location and simulated events, which resulted in an insufficient response by drill participants. Based on this review, it is not appropriate to make programmatic changes at this time. We have, however, come to realize the importance of devoting adequate resources and attention to detail when developing medical drill scenarios, whether they are to satisfy the annual medical drill requirement or are part of an emergency exercise.

### Corrective Actions

- 1) The major corrective action for the identified weakness was to conduct a remedial medical drill on January 29, 1991. This drill was observed and evaluated by a representative of NRC Region III and by representatives of Commonwealth Edison's Corporate Emergency Preparedness staff. The conduct of this drill accurately demonstrated our ability to respond effectively to a contaminated injured person.
- 2) Quad Cities Station has arranged for Radiation Management Consultants to conduct first aid training during 1991 for station first responders. This training emphasizes the appropriate handling of a contaminated injured person.
- 3) In the future, Commonwealth Edison will set up and control medical drills that are conducted as a portion of an Emergency Exercise to the same extent as our annual medical drills.

### Exercise Weakness 2

The Technical Support Center's dose assessment staff did not adequately analyze the following items, and then did not inform State officials of these items in a timely manner: commencement of an abnormal release; existence of significant radiiodine and cesium components in the simulated release; and the changes in affected downwind sectors to include portions of Iowa in addition to the Illinois portions of the Emergency Zone. (Weakness No. 50-254/90018-02).

- 4) Technical Support Center Environs group members will be trained on non-station sources of release information available to them during an event (e.g. Illinois Department of Nuclear Safety, EOF). This training will be completed during the annual 1991 training cycle.
- 5) The station GSEP organization is changing as a result of revision 7 to the Generic GSEP Manual. The new organization includes the position of Chemistry Director, who will be better able to interpret the information regarding isotopic analyses of gaseous effluents. The Chemistry Director will implement procedures which contain appropriate steps to ensure that he/she will provide scenario data to the Environs and Radiation Protection Directors and can confirm that the data is correctly interpreted and applied. The procedures are to be in place by March 1, 1991.
- 6) Revisions to the procedure that provides direction on completion of the NARS form will be made that inform the communicator that even after a wind shift, previously affected sectors should continue to be listed on the form. In addition, a note will be added to the Environs Director procedure to make him/her aware that previously affected sectors should continue to be reflected when providing updated information to the states. These procedure revisions will be completed by March 1, 1991. Finally, Commonwealth Edison's training of Environs personnel is being upgraded to include more detailed instruction on the handling of wind shift information.

In addition to the two Exercise Weaknesses previously addressed, two Improvement Items were identified that involved ENS communications. These items were:

- Persons used as communicators to the NRC should be reminded of the requirements to maintain open line communications upon request.
- Persons completing Event Notification Worksheets (ENW) used by these communicators should ensure that all relevant portions of these forms are completed, so that the communicator is adequately knowledgeable of onsite conditions.

Corrective actions for these items included individual discussions with the SCRE and communicator involved in the exercise. The Station EP Coordinator stressed to them that an open line communication request can be expected at any time and that as much information as is available should be provided via the Event Notification Worksheet.

In addition, a letter will be developed and sent to those individuals presently used as ENS Communicators and SCREs that will stress the same concerns as above. Finally, procedures and lesson plans will be reviewed, and revised, as appropriate, to reinforce the importance of these two issues. Procedure revisions would be complete by March 1, 1991 and lesson plans revisions would be complete by July 1, 1991.