



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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JUNE 22 1979

Docket No. 50-254/265

LICENSEE: Commonwealth Edison Company
FACILITY: Quad Cities Station Unit Nos. 1 and 2
SUBJECT: SUMMARY OF MEETING WITH COMMONWEALTH EDISON

A meeting was held with representatives of Commonwealth Edison Company (CECo) in Bethesda, Maryland on June 6, 1979. The purpose was to discuss the proposed Quad Cities Appendix I Technical Specifications and related matters. A list of attendees is enclosed.

A draft of their Offsite Dose Calculation Manual (ODCM) had been submitted and reviewed prior to the meeting. ODCM contains a description of models and techniques for determining offsite doses resulting from Station operation. In our review, the staff had identified a number of items to be discussed and clarified.

Their use of historical and real time meteorological data in the ODCM was unclear. CECo explained that historical met data are used to show Station compliance with Tech Spec limits. Real time data are used to calculate doses for reporting purposes. For 10 CFR 50 limits, doses will be calculated for all nuclides, all organs, and all 16 wind sectors to determine the most critical dose. CECo agreed to provide a synopsis in the next ODCM draft to better describe use of the ODCM and their use of historical dispersion data for dose calculations.

The ODCM gaseous pathway equations do not include C-14, H-3, or ground shine. CECo did not include these isotopes and pathways because of their minor significance to individual doses. The staff agrees with this decision.

Gaseous and liquid releases paths from the two units at the Station are commingled to a great extent. Appendix I release limits are, however, defined on a per unit basis, so there is the problem of relating the contributions of each unit to doses resulting from plant operation. For the purpose of showing compliance with Appendix I, the staff may require some changes in the monitoring of plant releases. This will be discussed further at a subsequent meeting.

There was a discussion of the Commission's assumptions used for calculating doses to individuals in the public resulting from noble gas releases. It was agreed that the shielding and occupancy factor of 0.5 should be dropped from beta shine dose.

The staff questioned the choice of seasonal adjustment factors for milk cow grazing. CECo agreed to provide a basis for the milk grazing factor used and to verify this factor periodically. The periodic verification method will be discussed further at a later date.

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CECo suggested that further guidance should be provided by staff before CECo could describe in their ODCM how they would comply with 40 CFR 190. The staff replied that further guidance is believed to be forthcoming.

In response to staff questions, CECo explained more fully the condenser cooling and radwaste release systems at Quad Cities. These are more complicated than at some other stations. The staff might have a problem with the hydrology model used for liquid effluent dilution. Probably the model need not be modified, but likely the credit for dilution by mixing in the river will have to be reduced. Staff agreed to consider further their proposed hydrology model.

Regulatory Guide 1.109 recognizes that some radioiodine emitted as a result of plant operation is not in a form which will deposit on grass. In this case, a non-deposition factor is included in the equation for calculating doses resulting from iodine in meat, milk and vegetables. The staff pointed out that the factor of 0.5 is used in Regulatory Guide 1.109 to calculate long term average doses. On the long term, the factor is appropriate. However, when a plant has a problem which causes higher than usual releases, the percentage of depositable iodine species increases dramatically. Therefore, a factor of 1.0 is appropriate in the ODCM. CECo said that the factor of 0.5 is appropriate, and they would appeal if the Staff disallows the credit.

Gaseous effluents at Quad Cities are monitored to assure that 10 CFR 20 limits are not exceeded. Setpoints for alarm and isolation are established by assuming the composition of the effluent gases to be that given in Table 3-3 of NEDO-10871, "Technical Deviation of BWR 1971 Design Bases Radioactive Material Source Terms". Staff will require that CECo provide support that the composition assumed for fixing setpoints is representative of actual releases from the plant or is conservative. The Staff will review the information in NEDO-10871.

A process control program (PCP) for solid wastes at Quad Cities was not described in the CECo submittal. The Staff emphasized that such a QA program needs to be implemented, and pointed out that a solid waste process control program is included in Standard Tech Specs. At present the Station uses a concrete solidification process that affords little assurance of a water-free, monolithic product before shipping offsite. After considerable discussion of the elements of such a program, CECo agreed to consider such a program for proposal in their next Appendix I submittal.

There was little time left for discussion of the actual proposed Tech Specs. It was agreed that we would meet again in 3-4 weeks, subject to vacation plans of participants (we have since agreed to meet the week of July 9, 1979).

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Attendees

CECo

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R. Flessner
J. Golden
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NRC

R. Bevan
S. Bland
R. Lo
R. Emch
L. Barrett