



**Commonwealth Edison**

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July 2, 1984

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Byron Generating Station Units 1 and 2  
Offsite Dose Calculation Manual  
NRC Docket Nos. 50-454 and 50-455

References (a): February 2, 1984 letter from B. J.  
Youngblood to D. L. Farrar.

(b): May 8, 1984 letter from T. R. Tramm  
to H. R. Denton.

Dear Mr. Denton:

This letter provides changes to and additional information regarding the Commonwealth Edison "Offsite Dose Calculation Manual" (ODCM) pertaining to Byron Station.

In reference (b), Commonwealth Edison committed to revision of the Byron site-specific portions of the ODCM prior to fuel load at Byron 1. Company-wide portions of the ODCM will be revised by the end of 1984 to address generic issues identified during NRC reviews on several Commonwealth Edison plants. We understand that this approach is acceptable to the NRC.

Enclosed is Revision 11 to the ODCM. It incorporates changes necessary to address NRC questions regarding the Byron site-specific portions. Additional copies will be provided under separate cover.

Attachment A to this letter contains responses to each of the NRC comments contained in reference (a). Several of the ODCM changes discussed will be included in the forthcoming general revision; others are included in the enclosed ODCM revision.

A009  
1/1

H. R. Denton

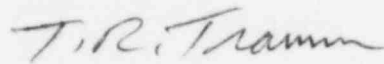
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July 2, 1984

Please address further questions regarding this matter to this office.

One signed original and fifteen copies of this letter and the attachment are provided for your review.

Very truly yours,



T. R. Tramm  
Nuclear Licensing Administrator

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ATTACHMENT A

RESPONSE TO NRC  
FEBRUARY 2, 1984 COMMENTS  
ON THE PROPOSED OFFSITE DOSE  
CALCULATION MANUAL FOR BYRON UNITS 1 & 2

Submitted by:  
Commonwealth Edison Company

COMMENT

RESOLUTION

- 1 Agree in part. In response to the comment, we will list all generic tables and figures at the front of the ODCM. In addition, the listing at the front will specify where a user can find station-specific table and figure listings. We prefer not to provide a complete listing of tables and figures in one place because we believe it would include many pages of listings relevant only to stations other than the one at which a particular user is located.
- 2.a Agree. The definitions of the cited parameters will be clarified in the text of Subsection 2.1.1.
- 2.b. Agree. The definitions of the cited parameters will be clarified in the text of Subsection 2.2.1.
- 2.c Agree. Text will be modified.
- 2.d. Agree in part. The dose limits in Subsections 2.1.1.1.2 and 2.1.1.1.3 will be deleted. However, the formulas will be kept to allow calculation of these doses when necessary.
- 2.e. Agree. The typo will be corrected.
- 2.f. Agree. The term " $f_f$ " will be renamed " $f_a$ " and defined.
- 3.a. Agree. Clarification will be added at the top of Page 3.1-1.
- 4.a. Agree. No potable water intake has been identified between the plant location on the Rock River and the confluence of the Rock River with the Mississippi River, 115 miles downstream of the plant. For 10CFR50 compliance evaluation purposes, Mississippi River water is treated as potable. This treatment is clarified in a footnote to Table 7.2-1. References are provided.
- 5.a. Agree. The requested information will be added. Also, the parameter K will be deleted from Table 7.1-3 because the value of K is given in the text following Equation 2.18, page 2.1-18, Revision 5.
- 6.a. Agree. The requested information has been added.
- 6.b. Agree. The boundaries in the ODCM are the correct boundaries and are in agreement with those shown in the ER and FSAR. The statement quoted by the reviewer from the 12/16/83 proof and review copy of the RETS is in error. The RETS will be corrected.

COMMENT

RESOLUTION

- 6.c. Agree. The Elevated (Stack) Release data is provided for reference purposes only and is not to be used for routine dose calculations. A footnote to this effect has been added to each page of Tables 7.2-6, 7 and 8. Clarification has been provided regarding the point from which distances are measured.
- 6.d. Agree. A metric scale has been added to Figure 7.2-1.
- 6.e. Agree. Clarification will be added as Section 2.1.3.
7. Agree in part. Subsequent to this review, Commonwealth Edison Company submitted revised Radiological Environmental Monitoring Technical Specifications for Byron (Technical Specifications Section 3/4.12). These revised specifications conform to the intent of Revision 1 (November 1979) of the Branch Technical Position (BTP) on radiological environmental monitoring. Section 8.4 of the ODCM has been revised to conform to the revised proposed Technical Specifications. The revised Section 8.4 is in accord with the reviewer's comments except as noted below:
- 7.b(ii) The revised program does not require cattle feed sampling. The revised program does not require control locations for vegetables. In these two respects, the revised program is in agreement with the BTP, but in disagreement with the reviewer's comments.
- 7.c Compass headings have been added to the sampling location figures. Sector lines and concentric circles have been omitted to avoid clutter.
- 7.d(vi) The revised program does not require hourly compositing of surface water samples.
- 7.e The LLD's are now in agreement with the BTP except as follows:
- (a) The station's requirements for Ba-140 and Zr-195 are more stringent than those of the BTP.
  - (b) The station's LLD for I-131 in airborne particulate or gas samples is  $0.10 \text{ pCi/m}^3$  instead of the value  $0.07 \text{ pCi/m}^3$  in the BTP.