



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

OFFSITE DOSE CALCULATION MANUAL

REVISION 3 THROUGH TCN-4

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-440

1.0 INTRODUCTION

By letter dated March 9, 1988 (Reference (a)), the staff documented acceptance (with certain caveats) of Revision 2 of the Offsite Dose Calculation Manual (ODCM) for the Perry Nuclear Power Plant Unit No. 1 (Perry). With reference (b), the licensee submitted a complete Revision 3 to the ODCM that also included TCN-1 and 2. With reference (c) the licensee provided a response to the NRC comments of reference (a) and stated that revised ODCM pages addressing these comments would be submitted with the next Semiannual Radioactive Effluent Release Report. With reference (d) the licensee submitted pages of TCN-3 and TCN-4 bringing the Perry ODCM up to date as of December 31, 1988. The purpose of this Safety Evaluation is to document acceptance of the ODCM for Perry through Revision 3, TCN-4.

2.0 EVALUATION

The Revision 3 ODCM for Perry updated through TCN-4 has been reviewed for us in its entirety by our contractor, EG&G Idaho, Inc. Their discussion and comments are contained in their detailed letter evaluation SIM-53-89 accompanying reference (e) (attached).

Our contractor has evaluated the licensee's submittals, references (b), (c), and (d) against each of the discrepancies and suggestions identified in reference (a). Our contractor included, in general, that the licensee's ODCM updated through TCN-4 to Revision 3 meets all of the criteria of NUREG-0133 and other NRC guidance. However, the contractor identified two areas for the licensee's further consideration.

The first involved the licensee's response to Major Discrepancy (#2) of the contractor's Technical Evaluation Report (TER) enclosed with Reference (a). The contractor suggests that the licensee include in the ODCM values for the term flow rate, F , and should reference or justify the values for the mixing ratio, M_p .

The second involved the licensee's response to Additional Discrepancy (#9) from the TER in Reference (a). It appears that a previous milk control location was deleted in TCN-3. The licensee should address the contractor's

comments on establishing a new milk control location and revise the ODCM, if necessary.

3.0 CONCLUSION

In all other respects, the staff agrees with the contractor that the methodology used in the licensee's ODCM, Revision 3 updated through TCN-4, meets the criteria of NUREG-0133 and other NRC guidance. Therefore, except as noted above, we conclude that the licensee's revision to the ODCM is acceptable.

4.0 REFERENCES

- (a) March 9, 1988 letter from T. G. Colburn, NRC, to A. Kaplan, CEIC.
- (b) August 30, 1988 letter from A. Kaplan, CEIC, to NRC Document Control Desk.
- (c) September 20, 1988 letter from A. Kaplan, CEIC, to NRC Document Control Desk.
- (d) March 1, 1989 letter from A. Kaplan, CEIC, to NRC Document Control Desk.
- (e) April 26, 1989 letter from F. B. Simpson, INEL, to W. Meinke, NRC.

Attachment as stated

Principal Contributors: W. Meinke
T. Colburn

Dated: June 5, 1989