



THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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MURRAY R. EDELMAN
VICE PRESIDENT
NUCLEAR

April 4, 1983

PY-CEI/NRR-0034 L

Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
SER Outstanding Issue No. 19 -
Emergency Planning Submittals

Dear Mr. Youngblood:

In a letter dated March 4, 1983, we described our plans to respond to NRC questions concerning the PNPP Emergency Plan. In that letter we committed to provide a submittal describing PNPP's Emergency Offsite Dose Calculation Program. This letter forwards the subject submittal.

In the process of developing this submittal, we identified two NRC questions which need further clarifications. Accordingly, revised responses to Round 1 Question M.4 and Round 2 Question I.2 are also submitted.

If you have any questions regarding these submittals, please feel free to contact us.

Very truly yours,

Murray R. Edelman
Vice President
Nuclear Group

MRE:kh

cc: Jay Silberg, Esq.
John Stefano
Max Gildner

Attachment

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E PDR

M.4 Describe the method(s) established for periodically estimating total population exposure.

In response to Question M.4 in the NRC Round 1 questions:

Population doses will not be calculated during the course of the accident because this parameter is not used as the basis of any emergency actions. After the emergency is over, however, the population dose can be estimated by treating the accident as a batch release. Dose to the population can then be calculated according to the same methodology used in R.G. 1.121 reports.

I.2 Provide for relating the containment source term to off-site doses based on containment leakage including plots which show the containment radiation monitoring reading versus time following an accident for release of gap activity and increasing percentages of fuel inventory. This information should be used as the basis for EALs.

Response:

In regards to Question I.2 in the NRC Round 2 questions:

Theoretical curves of gross gamma dose rate versus time are being generated for the high-range containment monitors. These curves differ in the amount of fuel inventory released. The following plots will be provided:

- 1) 100% coolant release no fuel damage,
- 2) 10% gap activity release, 1% fuel inventory release,
- 3) 100% fuel damage, potential core melt.

The analysis needed to provide these curves is presently underway. Completed work will be furnished by May 15, 1983.