

TERRA



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

AUG 5 1980

Docket No. 50-320

Mr. Robert R. Finger
I.B.E.W. Local 1600
Trexlerstown, Pennsylvania 18087

Dear Mr. Finger:

This is provided in response to your letter dated July 1, 1980, in which you asked several questions related to radiation exposure in the vicinity of Three Mile Island. I hope the following information proves useful to you and your family.

While radiation exposure can affect the cells that comprise the human blood system, the radiation exposure necessary to cause any damage to blood is much higher than that measured in the vicinity of TMI since the accident. The average dose to people living within 50 miles of TMI as a result of the March 28, 1979, accident has been estimated to be 1.5 mrem. This compares to an average background dose of about 100 mrem per year to the people who live in the Harrisburg area. The maximum dose which could have been received by an individual as a result of the accident has been estimated to be about 83 mrem. A dose of this magnitude could have been received at a distance of 0.5 miles from TMI. Even this dose is, however, a very small one. As an example, this dose (83 mrem) is approximately equal to the increased annual background dose an individual would receive if he/she moved from Harrisburg to Denver. (Higher background doses, mainly from cosmic rays, are experienced at higher elevations.)

In closing, I should also mention that radiation exposure is not known to play any role in the incidence of viral infection. Accordingly, the NRC staff does not believe that the recent illnesses suffered by members of your family are likely to be related to radiation exposure.

Sincerely,

Original Signed by
H. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

8008140 612 H