



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

APR 3 1980

Anna E. Wasserbach, Chairman
N.Y. Federation for Safe Energy
Box 2308 W. Saugerties Rd.
Saugerties, N.Y. 12477

Dear Ms. Wasserbach:

Your letter to Commissioner Hendrie regarding the accident at Three Mile Island was referred to me for response. I regret that this answer to your letter has been delayed. The accident and its consequences have created a substantial increase in the agency's workload, which has prevented me from responding to you as promptly as I would have liked to.

In response to your concern about "classifying the accident at Three Mile Island as not extraordinary," Extraordinary Nuclear Occurrence (ENO) is a term defined in the Atomic Energy Act of 1959, as amended (the Act), that identifies those nuclear accidents where compensation to people for damage or injuries will be on a no-fault basis. In the event of a nuclear accident resulting in minor damages, these no-fault provisions would not apply and normal legal procedures would be followed for persons submitting damage claims.

The NRC was given the authority in the Act to determine whether or not an accident can be classified as an ENO. The Act defines an ENO as an event that causes a discharge of radioactive materials in amounts causing offsite radiation levels which the Commission determines to be substantial and which the Commission determines has resulted or will result in substantial damages to offsite persons or property. The Commission was required by the Act to establish specific criteria in its regulations for making the ENO determination. Although the accident at TMI was not a normal occurrence and would be considered extraordinary in everyday language, a panel of senior NRC staff officials recommended that the accident does not meet specific criteria for an ENO set forth in the regulations. This recommendation is advisory, only the Commission will make the final determination of whether the TMI accident constitutes an ENO.

You make the point that "there is no proof that people offsite did not receive radiation exposure equivalent to 4,000 chest X-rays" (20 rem). The small dose of radiation that was received by people in the area came from radioactive gases that escaped from the auxiliary building. The average dose of radioactivity received by the population within 50 miles of Three Mile Island was

approximately 4 millirems. The maximum exposure to any individual was less than 100 millirems, which is less than the yearly dose each person receives as a result of natural background radiation. Doses at these levels result in less than one health effect over the lifetime of all people in this area. Natural background radiation received by people in the Harrisburg, Pennsylvania, area is approximately 125 millirems per year. To put these doses into perspective, note that a traveler flying round trip in a jet between New York City and Los Angeles receives 5 millirems from cosmic rays in the natural background.

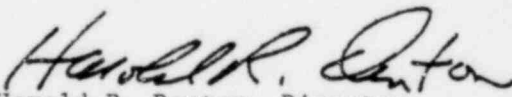
A team of investigators from the Nuclear Regulatory Commission, the Environmental Protection Agency, and the Department of Health, Education and Welfare calculated the doses to the people living within 50 miles of the Three Mile Island site and estimated the number of new cancers that would result from the exposure to the radioactivity that leaked out of the plant. The team published their work in a report entitled, "Population Dose and Health Impact of the Accident at the Three Mile Island Nuclear Station" (NUREG-0558). They concluded that the offsite collective dose associated with radioactive material released from March 28, 1979, to April 7, 1979, represents minimal risks (that is, a very small number of additional health effects to the offsite population). Enclosed for your information is a summary of NUREG-0558.

With regard to your concern about the economic impacts of the accident, NRC and the State of Pennsylvania have authorized several studies on this topic. Although final reports on these studies are not yet available, the general impression is that local businesses did suffer losses in the few weeks immediately following the accident, but have since recovered. When reports on these studies are completed, they will be available for purchase on your request from:

Publication Sales Manager
Document Management Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Thank you for expressing your concern about the ENO ruling regarding the Three Mile Island accident.

Sincerely,


Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Encl: Summary of NUREG-0558