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Docket 50-289

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SEP 29 1980

Ms. Bonnie Printz
RD #2, Box 297
Seven Valleys, Pennsylvania 17360

Dear Ms. Printz:

Your letter to President Carter about the release of krypton-85 from the Three Mile Island nuclear station and the long-term health effects of radiation was referred to me for response.

Metropolitan Edison Company submitted to NRC a "Safety Analysis and Environmental Report" (November 13, 1979) in which it evaluated alternative methods for the disposal of the krypton gases, such as purging and cryogenic processing, and selective absorption. NRC also evaluated alternative methods for disposal of the krypton gas to determine what effect decontamination would have on workers, on the public health and safety, and on the environment. Based on its evaluation, NRC issued an environmental assessment (NUREG-0662 and two addenda) for public comment on March 26, 1980, and received approximately 800 comments. These comments were considered in the staff's preparation of the "Final Environmental Assessment for Decontamination of the Three Mile Island Unit 2 Reactor Building Atmosphere" (NUREG-0662), vols. 1 and 2, copies of which are enclosed for your information.

From this process have emerged the following NRC staff conclusions:

- The potential physical health impact on the public of using any of the proposed strategies for removing the krypton-85 is negligible.
- The potential psychological impact is likely to grow the longer it takes to reach a decision, get started, and complete the process.
- The purging method is the quickest and the safest for the workers on Three Mile Island to accomplish.
- Overall, no significant environmental impact would result from use of any of the alternatives discussed in the assessment.

On June 12, 1980, the Commission issued an Order for Temporary Modification of License, authorizing controlled purging of the krypton-85 from the reactor building atmosphere. In a separate Memorandum and Order, also issued on June 12, 1980, the Commission discussed rationale for its decision. Actual purging operations began on June 28, 1980, and were completed on July 11, 1980. The

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doses resulting from the purge were well within those predicted in section 7.1 of volume 1 of NRC's final environmental assessment. Copies of both Commission issuances are also enclosed.

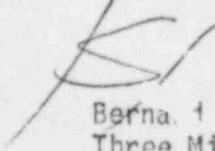
With regard to your concern about the effects of radiation, the effect of radiation on men and animals has been thoroughly studied for more than four decades. Numerous major biological research programs (including studies of genetic effects) have been completed and others are in progress, all of which have been well documented. While the relationship between ionizing radiation dose and adverse biological effects among humans is not precisely known for all levels of radiation, the principal uncertainty exists at very low dose levels where natural sources of radiation and the variations in these sources are comparable to other doses. The most important biological effects that radiation can cause are cancer, hereditary diseases, miscarriages, and abnormalities that may occur to a fetus. These effects are identical to those that occur among humans from other causes. It is this last point in combination with other complicating factors--such as magnitude and variations (1) in normal incidence of diseases, (2) in doses from natural radiation sources, (3) in radiation doses from man-made sources other than the nuclear industry, and (4) in exposures to nonnuclear cancer-producing agents--that is responsible for much of the uncertainty in the dose-risk relationship at low dose levels.

In lieu of precise knowledge of the relationship between low-level radiation and biological effects, radiation experts assume that ionizing radiation has an effect on the human body that remains directly proportional to the dose, even at very low levels, and that there is therefore no threshold below which radiation can be ignored. They therefore assume that any dose of radiation, no matter how low, may be harmful.

Several federal agencies, principally the Environmental Protection Agency, the Occupational Safety and Health Administration, and the Nuclear Regulatory Commission, are responsible for regulating exposures from radiation or radioactive material. In all cases, the staffs of these agencies set regulations to limit exposures to those well below nationally and internationally accepted levels of radiation protection.

I appreciate your concerns and assure you that every effort is being made to ensure the continued protection of the health and safety of the public, not only at Three Mile Island, but also at all nuclear power plants.

Sincerely,



Bernard J. Snyder, Program Director
Three Mile Island Program Office
Office of Nuclear Reactor Regulation

OFFICE	Enclosures:	1. NUREG-0662, vols. 1 & 2			
SURNAME		2. Order for Temporary Modification of License of 6/12/80			
DATE		3. Memorandum and Order of 6/12/80			

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NRC

POOR ORIGINAL

Bonnie Printz
R.D.#2 Box 297
Seven Valleys, Pa. 17360

June 26, 1980

Dear *President Carter*:

Met-Ed has absolutely no credibility with me. Venting krypton gas into my air does not relieve any anxiety. Quite the contrary. Other systems of removing the krypton would take more time and cost more money. The bottom line is not human life and the possible long term health hazards for area residents from age 0 - 110. Has anyone seriously addressed the accumulative effects of all this low level radiation on adults and on our young children? My health is extremely precious to me. What can I accomplish without it?

BRAVO to Steven Sholly, spokesman for THE THREE MILE ISLAND LEGAL FUND & to Don Hossler, President of PEOPLE AGAINST NUCLEAR ENERGY (PANE), of Middletown, for attempting to have the venting of krypton gas delayed, until a public hearing can be held, and injunction, if the NRC does not respond.

BRAVE for these two organizations for taking the responsibility to stop this dangerous venting which is unnecessary and a health hazard. BRAVE for speaking for all the people against the venting who must spend their time just surviving in extremely inflationary times. BRAVO for speaking for all the children, aged and people who do not have the finances or mobility to evacuate their homes and property, and animals, yet again, and who must stay during the possible venting, in silence.

I appeal to area lawyers to aid local anti-nuclear groups in their decision-making processes. I appeal to area Doctors to assess area health hazards and to make their voices heard. And finally I appeal to citizens with financial security to donate some of their time and other resources so that our voices can be heard in the courts of law.

Is the TMI clean-up any less serious because it contaminates our air, instead of our land, as in the Love Canal region of N.Y. state? Our health is not always a renewable resource. Just ask the people at Love Canal!

P.S. Since you feel that there is no health threat to venting krypton gas, perhaps, you, your wife and Amy would like to stay on-site during the 80-40 day venting period!

Sincerely,

Bonnie Printz

President Jimmy Carter, Washington, DC
Congressman Goodling, York, Pa.

Don Hossler, President of People Against Nuclear Energy (PANE), Middletown, Pa.

John Clugston, Western Division Manager, Met-Ed, c/ Middletown, Pa.

York Daily Record, Letter to the Editor, York, Pa.