



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

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POOR QUALITY PAGES

AUG 11 1980

Miss Jessie A. Martin  
1113 East King Street  
Lancaster, Pennsylvania 17602

Dear Miss Martin:

Your letter to the Nuclear Regulatory Commission expressing your concerns about nuclear energy was referred to me for response.

For more than four decades, the effect of radiation on men and animals has been thoroughly studied. 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 radiation exposures to those well below nationally and internationally accepted levels of radiation protection.

In its Statement of Policy and Notice of Intent to Prepare a Programmatic Environmental Impact Statement of November 21, 1979, the Commission stated that the staff would prepare a programmatic environmental impact statement on the

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decontamination and disposal of radioactive wastes resulting from the accident at Three Mile Island Unit 2. The statement emphasizes the Commission's intention to coordinate its actions on this matter with the President's Council on Environmental Quality and to provide the opportunity for public comments. The programmatic environmental impact statement will focus on the environmental issues and alternative methods associated with the performance of these clean-up activities.

You expressed a concern about management of the cleanup operation at TMI. While it is outside the authority of the NRC to physically manage decontamination operations at TMI-2, we intend to fully implement the regulatory process in determining the acceptability of those operations as conducted by the licensee. Presently, 15 Commission professional representatives are at the TMI site. Their task is to review all proposed cleanup plans, including the review and approval of detailed operating procedures, and to maintain surveillance of those operations that NRC has authorized. No future actions can be taken at the site without the NRC's review and approval.

With regard to your comments concerning the possible future operation of TMI-1, the Commission has ordered that a public hearing be conducted to determine whether the facility should be operated and, if so, under what conditions the restart would take place. Prior to start of the hearings, the NRC staff will conduct a review of technical information concerning the restart of Unit 1. As part of this review, the NRC staff will conduct meetings with the licensee in the presence of the public, and the public will be given the opportunity to raise questions and to make statements. During the hearing, the technical issues that are appropriate to assure the public health and safety will also be addressed. In addition, the Atomic Safety and Licensing Board has indicated that NRC should consider the psychological impact of future operation on the nearby communities. A copy of the Commission Order that outlines the issues to be considered is enclosed for your information.

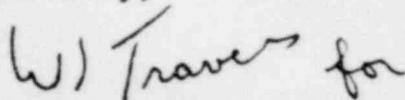
As for Unit 2, the licensee has not yet submitted to the NRC a proposal for overall plant recovery, although the licensee is conducting feasibility studies. It is not possible at this time to determine when such proposals for recovery may be submitted or how much time will be needed for the required reviews and approvals in connection with Unit 2's recovery. I would note, however, that the licensee's authority to operate Unit 2, except for those actions necessary to keep the reactor shut down, was suspended by Order of July 20, 1979.

Miss Jessie A. Martin

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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,

Handwritten signature in cursive script that reads "W. Travers for".

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

Enclosure: Order and Notice of Hearing  
of August 9, 1979