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Mrs. Charles Glantz
223 Berk Street
Easton, Pennsylvania 18042

Dear Mrs. Glantz:

Your letters to the Nuclear Regulatory Commission and to Mr. Vollmer expressing your concerns about nuclear energy were referred to me for response. I regret that this answer has been delayed for so long. 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.

Information about the accident made available to the public was confusing for a number of reasons. Some problems were attributable to the sources of information, some to the way in which information was made available to the press, and some to how the press reported the information it obtained. NRC's information was not always complete nor, in some instances, wholly accurate.

We recognize the importance of making complete and accurate information available to the public. Consequently, we have made specific plans for providing information to the public for such potentially serious accidents as occurred at Three Mile Island. These plans include making the availability of public information part of NRC's and the utilities' emergency response planning. Under this policy, the utilities must provide offsite locations for newscenters. We also plan to appoint a senior NRC official responsible for coordinating NRC information activities during an emergency. By centralizing the gathering and dissemination of NRC's information, we will provide the public with relevant and timely information.

With regard to your concern about the purging of the radioactive krypton gas from the reactor building of TMI Unit 2, 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.

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- 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.

Section 7 of volume 1 provides the detailed information you requested on radioactive doses from the release.

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 venting operations began on June 28, 1980, and were completed on July 11, 1980. The 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 release of contaminated water, except for releases to the Susquehanna River of liquids containing only low or nondetectable levels of radioactivity, such releases are not currently permitted. The Commission authorized use of the EPICOR-II water treatment system for processing the waste water stored in tanks in the auxiliary building. We do not currently permit the discharge of water processed by the EPICOR-II system. The disposal of the water processed by EPICOR-II is addressed in the programmatic environmental impact statement (PEIS) on the decontamination and disposal of radioactive waste at Three Mile Island. Copies of the PEIS are being made available for public comment.

As a result of releases containing only low or nondetectable levels of radioactivity, the levels of radioactivity in the Susquehanna are indistinguishable from existing background levels at public water supply intakes from the river. These levels have been confirmed by independent measurements made by the NRC, the Environmental Protection Agency, and the Commonwealth of Pennsylvania.

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 reported 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). Also enclosed for your information is the summary of NUREG-0558.

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Regarding your comments about the management of nuclear waste, the goal of the U.S. Nuclear Waste Management Program is to provide assurance that existing and future nuclear waste from military and civilian activities, including spent fuel from the once-through nuclear power cycle, can be isolated from the biosphere so as to pose no significant threat to public health and safety and to the environment. The NRC is responsible for providing the framework of criteria and regulations that will ensure that the disposal methods developed for all types of radioactive waste are consistent with the achievement of this goal of safe, long-term waste disposal.

The NRC's authority to license and regulate the storage and disposal of radioactive wastes is derived from three statutes: the Atomic Energy Act of 1954, the Energy Reorganization Act of 1974, and the National Environmental Policy Act of 1969. To implement this authority and to provide guidance to the U.S. Department of Energy (DOE), the industry, and the public, the NRC is developing new or revised regulations for such storage and disposal. These regulations will require conformance with a fixed set of minimally acceptable performance standards for waste management activities while providing for flexibility in the technological approach.

The DOE's responsibilities concerning radioactive waste disposal are limited to high-level wastes and only those low-level wastes produced as part of DOE's programs. Their responsibility does not include commercially generated low-level wastes.

With regard to your comment about phasing out nuclear power plants, NRC's primary responsibility consists in the licensing, inspection, and enforcement of regulations for nuclear power plants in the interest of public health and safety and for the protection of the environment. Changes in NRC's regulatory responsibilities can stem from the public's will and the resulting Congressional action.

With respect to alternative methods of energy production, such as solar, wind, and geothermal, the DOE is the federal agency responsible for their research and development. NRC considers these alternative methods of energy production in its assessment of the environmental impact of each nuclear power plant as part of the agency's overall review of each utility's application for a construction permit or an operating license. To date, we have determined that alternative methods of energy production are neither technically nor economically feasible to provide the required amount of power at the time it is needed.

Regarding utility rates, the Pennsylvania Public Utility Commission (PUC), in a decision and order of June 15, 1979, ruled that costs of damages caused by the accident at Three Mile Island would not be included in the present rate base for customers of Metropolitan Edison and the Pennsylvania Electric Company. These customers will, however, be responsible for costs associated with purchasing power to replace power that the TMI facility would have provided. The Pennsylvania PUC reaffirmed this decision in an order of May 23, 1980.

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In the same order, it also ruled that TMI Unit 1 be removed from the Metropolitan Edison and Pennsylvania Electric Company rate bases. As a result, their customers will be free of all maintenance, interest, and capital cost expenses associated with Unit 1. Should Unit 1 be returned to service, costs associated with its operation would, of course, become part of the rate structure.

While we are, of course, concerned about financial impacts on consumers, the NRC's primary responsibility is the assurance of public health and safety. State public utility commissions and the Federal Energy Regulatory Commission have primary responsibility regarding the rates that consumers pay for electricity. They should be able to provide information for your use.

With regard to your comments concerning the permanent shutdown of TMI, the Commission has ordered that a public hearing be conducted to determine whether TMI-1 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 also 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.

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.

Sincerely,

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

Enclosures:
1. NUREG-0662, vols. 1 & 2
2. Order for Temporary Modification of License of 6/12/80
3. Memorandum and Order of 6/12/80
4. Summary of NUREG-0558
5. Order and Notice of Hearing of 8/9/79

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