NRC PDR

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

SEP 2 9 1980

Mr. & Mrs. Frank Savini 8170 Park Drive Harrisburg, Pennsylvania 17111

Dear Mr. & Mrs. Savini:

Your letter to the Nuclear Regulatory Commission about the effects of the accident at the Three Mile Island nuclear station 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 Pactor 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 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.

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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.

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 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.

On March 27, 1980, the Greater Harrisburg Board of Realtors, Inc., released a report entitled "Three Mile Island Nuclear Accident Community Impact Study on Real Estate." The study concludes that "after a full and thorough analysis of all available and pertinent market data, it is quite clear that the March 28, 1979 nuclear accident had no immediate impact during any part of 1979 or the year as a whole as to real estate sales, values, or general marketing time because, despite the mortgage crunch, high interest rates, the gasoline shortage and increased prices in gasoline, the real estate market in the 20-mile radius of TMI held up better than did the national market as a whole. There was no substantial increase on properties 'on the market' during any part of 1979 after the TMI accident including the 0-5 mile radius."

Mr. & Mrs. Frank Savini

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.

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Sincerely,

0 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 June 12, 1980 3. Memorandum and Order
 - of June 12, 1980

 - Summary of NUREG-0558
 Order and Notice of Hearing of August 9, 1979