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

OCT 28 1980

Mr. & Mrs. Carroll Hughes
621 South Broad Street
Lititz, Pennsylvania 17543

Dear Mr. & Mrs. Hughes:

Your letter to the Nuclear Regulatory Commission about the release of krypton-85 from 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 reactor building atmosphere. In a separate Memorandum and Order, also issued on June 12, 1980, the Commission discussed rationale for its decision. Actual venting

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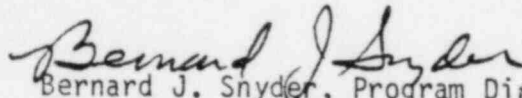
operations began on June 28, 1980, and were completed on July 11, 1980. The doses resulting from the purge were well within those predicted in section 7.1 of volume 1 of NRC's final environmental assessment. Copies of both Commission issuances are also enclosed.

Specific questions about the isotope krypton-85 and its properties are addressed in the NRC report "Answers to Questions About Removing Krypton from the Three Mile Island, Unit 2 Reactor Building" (NUREG-0673), a copy of which is enclosed.

You also ask that Three Mile Island be converted to a coal-fired plant. The decision about what kind of generating facility TMI eventually becomes or, for that matter, whether the facility will ever again be used to generate electricity hinges on at least two conditions. First, before any decision is made, the facility will have to be cleaned of all radioactive contamination resulting from the accident. Plans for this work are discussed in NRC's "Draft Programmatic Environmental Impact Statement" (NUREG-0683), a copy of which is also enclosed for your information. Second, the licensee, Metropolitan Edison, would then have to propose that the plant be converted to coal. NRC cannot make that decision for a utility.

I am pleased to provide you with this information.

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 June 12, 1980
 3. Memorandum and Order of June 12, 1980
 4. NUREG-0673
 5. NUREG-0683