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Mr. Andrew C. Burger  
1000 Briarcliff Road  
Middletown, Pennsylvania 17057

Dear Mr. Burger:

Your letter to Mr. Collins, a copy of which was sent to Chairman Ahearne, 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

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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. I am also enclosing a copy of "Answers to Questions About Removing Krypton from the Three Mile Island, Unit 2 Reactor Building" (NUREG-0673), which should answer your questions about the purge operations.

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

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