

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

JUL 3 1 1980

Ms. Miverene E. Winfree Route 1 Willow Street, Pennsylvania 17584

Dear Ms. Winfree:

Your letter to the Commission about the release of radioactive water and gases from the Three Mile Island nuclear station has been referred to me for response. I regret that this answer has been delayed for so long.

Except for releases to the Susquehanna River of liquids containing only low or nondetectable levels of radioactivity, the release of contaminated water is not currently permitted. Before such releases take place, NRC will evaluate the impact and the evaluation will be made available to the public. By this course of action, we will assure that a thorough assessment is completed prior to release of the contaminated liquids and that the health and safety of the offsite population will be protected.

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.

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, 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 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, the Commission discussed rationale for its decision. Actual venting operations began on June 28, 1980. Copies of both Commission issuances are also enclosed.

We 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

Order for Temporary Modification of License of June 12, 1980

3. Memorandum and Order of June 12, 1980