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

NOV 21 1979

The Honorable Marjorie S. Holt
United States House of
Representatives
Washington, D. C. 20515

Dear Congresswoman Holt:

I am writing in reply to your letter of August 21, 1979 to Mr. Carlton Kammerer regarding questions submitted to you from Mr. Walter A. Arseneault of August 15, 1979. I regret that this answer to your letter has been delayed.

I will respond to Mr. Arseneault's questions in the order in which they were posed.

Question 1. How much radioactive material has been released to the atmosphere since the Three Mile Island accident?

Approximately 14 million curies of noble gases (mainly xenon-133) and 15 curies of iodine-131 were released into the atmosphere in the first month following the accident. Since that time, the periodic releases that have been made are within the technical specification limits for normal facility operation.

The doses and health effects of these releases are discussed in detail in a report prepared jointly by the Nuclear Regulatory Commission, the Department of Health, Education and Welfare, and the Environmental Protection Agency. The report discusses doses to the skin (pages 66-70), inhalation doses (pages 70-74), and thyroid doses from the ingestion of milk (pages 74-77). The NRC staff reports that there have been no significant releases of noble gases since April 7, 1979. I am enclosing a copy of the report, "Population Dose and Health Impact of the Accident at the Three Mile Island Nuclear Station" (NUREG-0558), which addresses the question of health effects in greater detail.

Question 2. What is the radius in miles of traceable amounts of radioactivity which has resulted from these releases to the atmosphere?

The Population Dose and Health Impact report estimates the dose to the population within a 50-mile radius of the Three Mile Island Site. However, the distance radioactive material travels in the atmosphere from its origin depends on prevailing weather conditions, particularly the wind. Using extremely sensitive monitoring equipment, New York state officials detected minute traces of xenon-133 in Albany, New York several days after the accident.

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Question 3. How many times has contaminated water been released into the Susquehanna River, and what were the levels of radiation in each case?

Continuing releases of water containing low or nondetectable levels of radioactivity, as allowed by the Commission's Statement of May 25, 1979, a copy of which is enclosed, have taken place since the accident. Releases of TMI-2 intermediate or high level activity waste water is not permitted, even after decontamination, by the May 25 Statement. Prior to decontamination and disposal of any intermediate or high level waste water, the impact will be evaluated by the NRC and the evaluation will be made available to the public.

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 (EPA), and the Commonwealth of Pennsylvania.

Question 4. Is this contamination liable to affect the marine animals in the river and in Chesapeake Bay?

Experts from the Nuclear Regulatory Commission, the Department of the Interior, and the Environmental Protection Agency met with officials from Pennsylvania and Maryland to discuss possible effects to the Chesapeake Bay. We have concluded that Chesapeake Bay aquatic life will be unaffected by water discharges at Three Mile Island.

Question 5. Will the water in the Susquehanna still be suitable as drinking water for the millions of people that depend on this source today?

As a result of releases to date, the levels of radioactivity in the Susquehanna River are indistinguishable from existing background levels at public water supply intakes from the river. These levels have been confirmed in independent measurements made by the Nuclear Regulatory Commission, the Environmental Protection Agency, and the Commonwealth of Pennsylvania.

Question 6. What is the present plan of action to clean up the contamination, and how is the project going to be funded?

At the present time, Metropolitan Edison is preparing an action plan for the cleanup of the facility. When the plan is submitted to NRC, it will be thoroughly reviewed. Metropolitan Edison is responsible for all expenses associated with actual cleanup operations.

Question 7. In your opinion, what is the future of Atomic Power Generation, based on this accident and reports of other malfunctions which have been recently reported in the news media?

The former Atomic Energy Commission (AEC) had a congressional mandate to develop and promote nuclear energy. When the AEC was abolished in 1974, the NRC was

created by Congress for the sole purpose of regulating the commercial production of nuclear energy. The U.S. Department of Energy is now responsible for the federal government's nuclear research and development activities. Consequently, questions about the future of this energy source should be directed to that agency.

I am enclosing a copy of NRC's Annual Report which explains NRC's regulatory role and activities.

Sincerely,
ORIGINAL SIGNED BY R. G. SMITH

Lee V. Gossick
Executive Director for Operations

Enclosures:
1. NUREG-0558
2. NUREG-0591
3. NRC Annual Report 1978

702 Calvert Lane
Fort Washington, Md. 20022
15 Aug 79

United States Congressman
The Honorable
Marjorie S. Holt
House of Representatives
Washington, DC

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Dear Congressman Holt:

Since the nuclear accident at Three Mile Island there have been numerous news reports indicating that radioactive materials are being released into the atmosphere and also into the Susquehanna River. I am becoming incerasingly more concerned as time passes.

There are several questions that I would appreciate answers to. Would it be feasable for you to refer these questions to an agency that can provide specific answers to the following questions:

1. How much radioactive material has been released to the atmosphere since the Three Mile Island accident ?

2. What is the radius in miles of traceable amounts of radioactivity which has resulted from these releases to the atmosphere ?

3. How many times has contaminated water been released into the Susquehanna River, and what were the levels of radiation in each case ?

4. Is this contamination liable to effect the marine animals in the river and in Chesapeake Bay ?

5. Will the water in the Susquehanna still be suitable as drinking water for the millions of people that depend on this source today ?

6. What is the present plan of action to clean up the contamination, and how is this project going to be funded ?

7. In your opinion, what is the future of Atomic Power Generation, based on this accident and reports of other malfunctions which have been recently reportedin the news media ?

I appreciate the time that you spend in preparation of a response to the above questions and eagerly await your reply.

Sincerely,

Walter A. Arseneault

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