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Congress of the United States
House of Representatives
Washington, D.C. 20515
April 21, 1980

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Hon. John F. Ahearne
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

POOR
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Dear Chairman Ahearne:

Having had the opportunity to review the various cleanup options presented to the Nuclear Regulatory Commission and having studied the reports on the Selective Absorbtion System prepared by Dr. Gerald Pollack at the request of Commissioner Gilinsky, I felt the Selective Absorbtion System required more consideration.

On Saturday, April 19, NRC Commissioner Victor Gilinsky and I flew to the Oak Ridge Gaseous Diffusion Plant, in Oak Ridge, Tennessee, to examine the pilot plant designed to remove Krypton-85 (Kr-85) from a contained atmosphere through the Selective Absorbtion process. This process is described on pages 6-32 through 6-38 of the NRC Environmental Assessment for Decontamination of the Three Mile Island Unit 2 Reactor Building Atmosphere (NUREG-0662). Commissioner Gilinsky and I also had the opprtunity to discuss this process with the engineers who have designed and operated this pilot plant, and officials from Union Carbide which has conducted the program under contract with the Department of Energy.

The Selective Absorbtion System has been worked on at the Oak Ridge Gaseous Diffusion Plant since 1967. The system today is a third-generation process which has been operating successfully for one and one-half years. Its flow rate is 15 cubic feet per minute. With the obvious exception of venting, the Selective Absorbtion process is the least expensive of the options presented in NUREG-0662 and could be placed in operation at TMI 2 in less time than the other options. According to the engineers at Oak Ridge, assuming the availability of materials and the necessary approvals, this system can be built and tested in about three months. This contrasts with the time requirement discussed in NUREG-0662.

Because I believe that the Nuclear Regulatory Commission, and all other active parties, are moving toward approving the venting of the radioactive gases in the damaged reactor, I am concerned that adequate consideration has not been given to the Selective Absorbtion System. The Selective Absorbtion System has already been proven to be effective, and it can be put into place quickly. Passing the gases in TMI Unit 2 through the system only once would reduce the Kr-85 in containment by a factor of 100 to 1000 times. Scaling the pilot plant up from a 15 cubic feet/minute flow rate to a rate of

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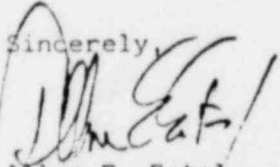
200 cubic feet/minute does not represent any significant problems. The system is not a complex one and its components are all "off-the-shelf" items which should be readily available.

We must remember in assessing this option that: the Kr-85 is already in the reactor at TMI; unless we implement the Selective Absorbtion System, the Kr-85 will be vented into the atmosphere; the worst that could happen with the Selective Absorbtion System is a failure requiring venting (an option which will be otherwise approved). In addition, it is not necessary to require that the Selective Absorbtion System be built to nuclear code construction standards. This will only delay the process and, because of the small volume of gases in the system at any one time, even a total failure would not result in any major detrimental release.

I believe that venting is unacceptable for a number of reasons. The Selective Absorbtion System appears to be a viable alternative. The longer we spend debating the various options, the more we force ourselves into a situation where venting is the only alternative because of time constraints. In accordance with our conervation, it is my understanding that a detailed analysis on this system will be prepared by Oak Ridge by this Friday. This detailed analysis should confirm the initial conclusion that this sytem should be utilized.

I am anxious to work with you in moving forward with this process and will do everything in my power to expedite its installation and operation.

Sincerely,


Allen E. Ertel
MEMBER OF CONGRESS

POOR
ORIGINAL

AEE/bh

cc: Hon. Victor Gilinsky, Commissioner, Nuclear Regulatory Commission
Hon. Peter Bradford, Commissioner, Nuclear Regulatory Commission
Hon. Joseph M. Hendrie, Commissioner, Nuclear Regulatory Commission
Hon. Richard T. Kennedy, Commissioner, Nuclear Regulatory Commission
- Hon. Charles Duncan, Secretary, Department of Energy
- Mr. George W. Cunningham, Assistant Secretary for Nuclear Energy, DOE
- Mr. Jack H. Watson, Jr., Assistant to the President for Inter-governmental Affairs
- Hon. Richard Thornburgh, Governor, Commonwealth of Pennsylvania
✓ Mr. Herman Dieckamp, President, General Public Utilities
Mr. Robert Arnold, President, Metropolitan Edison
Mr. Walter Vannoy, President, Babcock and Wilcox
Mr. R. J. Hart, Union Carbide