June 22, 1980

J. Sam Miller Northwood Narrows NH 03261

Mr.R. Wayne Houston, Chief Accident Analysis Branch Div. of Site Safety and Environmental Analysis US Nuclear Regulatory Commission Washington, DC 20555

Dear Mr. Houston,

Last Friday there was a public hearing regarding the application for a new permit to discharge once-through cooling water at the Vermont Yankee plant. The application is being made to the State of Vermont Dept. of Water Resources. At the hearing, I raised the question of accidents involving leakage of large amounts of primary coolant water into the secondary coolant system; would there be significantly greater contamination released to the environment during open cycle operation? The accident at TMI, particularly from the standpoint of the unexpected dump of some 200,000 gallons of primary coolant into the auxillary building, has prompted the industry and the NRC to take another look at various accidnt scenarios involving leakage of primary coolant into the environment, and I would ask if any of these studies are applicable to the Vermont Yankee permit application.

Specifically, could you summarize the types of accidents that could lead to contamination of the secondary cooling system at Vermont Yankee, particularly the case of a rupture in the steam condenser? What would be the effects of a large dump running closed cycle versus open cycle? If the system were running closed, would the cooling tower system have to be shut down, and the emergency core cooling system used! Have there ever been any accidents of this nature, and what were their effects? What about minor leakage paths to the secondary system, and how soon are the detected! The answers to these questions will help to allay the fears of some area residents and also will aid the State officials in the review of such applications and in preparing for such emergencies.

Please direct your reply to Mr. Brendan J. Whittaker, Secretary
Agency of Environmental Conservation
State of Vermont

Montpelier, Vermont 05602
With a copy to the Vermont Yankee Decommissioning Alliance
127 Main Street

Brattleboro Vermont 05301.

along with copies of any related reports. Thank You.

Cordially Yours,

J. Sam Miller

cc Mr. Whittaker