



MICHAEL S. DUKAKIS  
GOVERNOR

THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE DEPARTMENT

STATE HOUSE • BOSTON 02133

October 7, 1990

The Honorable Kenneth Carr  
Chairman  
Nuclear Regulatory Commission

Dear Chairman Carr

I have enclosed a copy of the Southeastern Massachusetts Health Study which was released today by the Massachusetts Department of Public Health. The study, which is the first of its kind in the nation, explored the relationship between leukemia incidence in 22 Massachusetts communities and potential for exposure to the Pilgrim Nuclear Power Plant. The major findings were:

1. Overall, individuals with the highest potential for exposure to Pilgrim emissions (i.e., those who lived and/or worked the longest and closest to the plant) had almost four times the risk of leukemia as compared with those having the lowest potential for exposure (i.e., those who live and/or worked the least amount of time and farthest from the plant).
2. No apparent relationship with the plant was observed for cases diagnosed between 1984 and 1986.
3. Among those cases diagnosed before 1984, a dose-response relationship was observed in that the relative risk of leukemia increased as the potential for exposure to plant emissions also increased.

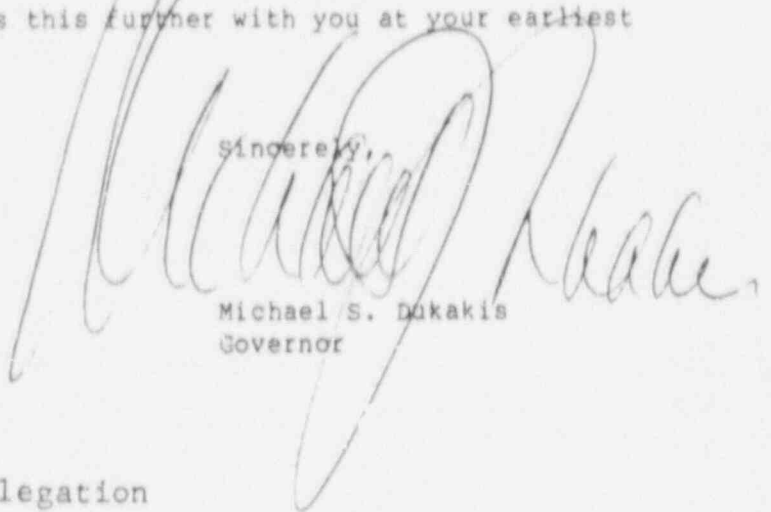
Based upon these findings, the state of Massachusetts is implementing changes in our radiation monitoring program. Two major initiatives will be undertaken. The first is to significantly intensify radiological monitoring efforts around Massachusetts nuclear power plants beginning with the Pilgrim Plant by implementing a real-time (i.e., continuous) monitoring system. This real-time monitoring system must include stack emission monitoring capability. The second initiative is to establish emissions based on dose limits at the fence line of the plant. This guidance is presently set at 25 millirem/year by the EPA. Massachusetts proposes a standard of 10 millirem/year.

9012130099 901203  
PDR ADOCK 05000293  
P PNU

The Nuclear Regulatory Commission should take steps to require offsite radiological monitoring programs at each and every nuclear power plant in the country. Further, the Massachusetts study strongly favors adoption of the EPA recommended emission standard for nuclear power plants. Finally, consideration should be given to replicating the methodology of the Massachusetts Department of Public Health Study at other selected sites around the country.

I would be happy to discuss this further with you at your earliest convenience.

Sincerely,



Michael S. Dukakis  
Governor

cc: Mass. Congressional Delegation