The Commonwealth of Massachusetts
Joint Committee on Energy
Room 541, State House, Boston 02133
(617) 722-2090

SENATOR
NICHOLAS J. COSTELLO
SENATE CHAIRMAN

REPRESENTATIVE
LAWRENCE R. ALEXANDER
HOUSE CHAIRMAN

July 25, 1988

Mr. William T. Russell
Administrator, Region 1
Nuclear Regulatory Commission
King of Prussia, PA 19406

Dear Mr. Russell:

The legislature's Joint Committee on Energy has jurisdiction over various energy matters, including matters related to nuclear power generation. As House and Senate Chairmen of this Committee, we have been monitoring activities at the Pilgrim nuclear power plant with some concern.

We are particularly disturbed that since 1983 Boston Edison has consistently received the worst rating given by the Nuclear Regulatory Commission in SALP reviews for radiological controls. It has recently come to our attention that part of a 110,000 cubic foot pile of radioactively contaminated dirt at the Pilgrim site has eroded into a wetland. According to NRC and Boston Edison reports, resins, dirt, asphalt and concrete containing low levels of radioactive contamination have been accumulated in this pile and as fill in a field off the Pilgrim access road.

We would appreciate an explanation of what radioactive material is stored onsite, where it came from, and why it has not been shipped to a licensed low-level radioactive waste facility for proper disposal.

More specifically, we are interested in answers to the following questions:

1. How much radioactivity is in the 110,000 cubic foot pile of dirt? What measurements were made, when were the measurements made, where were samples taken from, and how were they analysed? Has there been any additional material added to the site since measurements and samples were taken?

2. Which "small spills of contaminated liquid and resin...during the last 15 years" is Mr. Bird referring to in his letter of February 4, 1988 (enclosed) to Robert Hallisey? What amounts of radiation were in each spill and when did each spill occur? Are the original test results still available?

3. Has the dirt been protected from rain and wind? If so, what manner of protection has been used?

4. How much radiation is in the fill dirt, asphalt and concrete that filled a gulley in the "lay down" area off the Pilgrim access road? When and where did this fill come from? How much fill has been dumped here since the plant opened?

5. Have there been any efforts to measure leachate from the contaminated dirt pile or the "lay down" area?

6. Does Yankee Atomic have comparable storage piles of radioactively contaminated debris onsite?

7. Are small spills of contaminated liquid and resins inevitable in nuclear power plant operations?

8. How much radioactively contaminated debris is a licensee allowed to store onsite by the NRC? Is Boston Edison in compliance with current NRC waste disposal standards? If so, which standards? Has Boston Edison ever applied to the NRC for approval of special disposal procedures under 10 CFR Section 20.302?

We would greatly appreciate your prompt attention to these questions and look forward to your response at your earliest convenience.

Best wishes.

Yours sincerely,

Nicholas J. Costello
NICHOLAS J. COSTELLO
Senate Chairman

Lawrence R. Alexander
LAWRENCE R. ALEXANDER
House Chairman

NJC/LRA/kam

cc: Sen. Edward Kennedy
Commissioner Deborah Prothrow-Stith
Peter Agnes

BOSTON EDISON
Executive Offices
800 Boylston Street
Boston, Massachusetts 02199

Quiet flow

Ralph G. Bird
Senior Vice President — Nuclear

February 4, 1988

Robert H. Hallisey, Director
Radiation Control Program
The Commonwealth of Massachusetts
Executive Office of Human Services
Department of Public Health
150 Tremont Street, 11th Floor
Boston, MA 02111

Dear Mr. Hallisey:

In response to your letter of January 22, 1988, I first want to assure you that we at Boston Edison treat all issues regarding radiation carefully and with the health of the public and our employees as the primary consideration. I apologize for any confusion that arose from our efforts to keep you informed regarding incursion into a wetland from a pile of construction dirt on the Pilgrim site. In the future, we will make Mr. Tom Sowdon, our Chief Radiological Scientist, your point of contact on such issues. I hope the following information will clarify the present situation.

The Co-60 contained in the stored dirt is a corrosion product produced by normal operation of a boiling water reactor. There was some slight contamination in the onsite soil which was excavated during the course of construction activities associated with plant improvements. It originally came from small, measured and controlled releases from the reactor building vent and also from some small spills of contaminated liquid and resin that were confined to the site during the last 15 years.

As in the normal procedure during major construction projects, excavated soil was accumulated and stored in a controlled area onsite while the majority of construction activities were completed. A small volume (about 125 cu. ft.) of very slightly contaminated dirt subsequently intruded into the wetland.

A small amount of activity in the dirt pile is already covered by our operating license which authorizes us to possess and use quantities of radioactive material and to store such material onsite in accordance with the provisions of 10CFR20, paragraphs 101 through 409.

The fence around the dirt is not contaminated. However, if the fence were to be removed from the site area, it would be controlled until completion of surveys, as are all potentially contaminated items and materials in accordance with established station procedures.

This particular item is not a public health issue; it is a wetland issue requiring permission from the Town of Plymouth Conservation Commission to perform remedial action. Hay bales were placed around the pile to discourage further migration and the pile of dirt has been covered with weatherproof material to discourage further erosion.

As soon as we have approval from the Plymouth Conservation Commission to proceed, all of the dirt which has intruded into the wetlands will be removed in a manner designed not to damage the wetlands. Comprehensive surveys will be performed to confirm that no significant Pilgrim generated radioactivity is in the affected area of the wetlands.

In summary, in the course of normal operation, as well as during an outage, many potentially contaminated items and materials are generated. Our existing license authorizes Boston Edison to possess such materials. Such materials are always present on-site; and it is, therefore, not practical for us to notify the MDPH of every such case. However, we will continue to make every effort to keep you informed of matters of potential public interest. Additionally, members of MDPH staff have unescorted access to the Pilgrim site and they are always welcome to monitor our actions. Boston Edison will, as it does now, open its facilities, practices, and procedures to other authorized members of the MDPH.

Again, I regret the confusion over this item. We believe all appropriate actions are being taken and I hope this letter addresses your concern.

If you have any further questions, my staff and I area available to provide any additional information you require.

Very truly yours,

R. G. Bird

RGB/mg

cc: Messrs. W. J. Highfill
J. Jens
T. L. Sowdon
Ms. E. D. Robinson