



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

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66-10-111

Ms. Maureen Wilson
968 Central Street
East Bridgewater, Mass. 02333

Dear Ms. Wilson:

This is in reply to your letter of April 3, 1979 to President Carter about nuclear power. I am sorry for the long delay in responding but we have been very busy with the aftermath of the Three Mile Island accident.

With regard to the future of nuclear power, enclosed is a statement of December 7, 1979, by the President on the Kemeny Commission Report on Three Mile Island. The President said: "Every domestic energy source, including nuclear power, is critical if we are to be free as a country from our present over-dependence on unstable and uncertain sources of high priced foreign oil."

As to the development of plans for responding to radiological emergencies, enclosed is an excerpt on this subject from the 1979 Annual Report of the Nuclear Regulatory Commission. Included on the first page are directions by the President to the Federal Emergency Management Agency about such planning.

I would like to assure you that every effort is being made to protect the public health and safety at all nuclear power plants that are currently in operation or that may start operating in the future.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor
Regulation

Enclosures:
As stated

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THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

THE WHITE HOUSE

STATEMENT BY THE PRESIDENT ON THE KEMENY COMMISSION
REPORT ON THREE MILE ISLAND

Room 450, Old Executive Office Building

(AT 2:45 P.M. EST)

THE PRESIDENT: The purpose of this brief statement this afternoon is to outline to you and to the public, both in this country and in other nations of the world, my own assessment of the Kemeny Report recommendations on the Three Mile Island accident and I would like to add, of course, in the presentation some thoughts and actions of my own.

I have reviewed the report of the Commission, which I established to investigate the accident at the Three Mile Island nuclear power plant. The Commission, headed by Dr. John Kemeny, found very serious shortcomings in the way that both the Government and the utility industry regulate and manage nuclear power.

The steps that I am taking today will help to assure that nuclear power plants are operated safely. Safety, as it always has been and will remain, is my top priority. As I have said before, in this country nuclear power is an energy source of last resort. By this I meant that as we reach our goals on conservation, on the direct use of coal, on development of solar power and synthetic fuels, and enhanced production of American oil and natural gas, as we reach those goals, then we can minimize our reliance on nuclear power.

Many of our foreign allies must place much greater reliance than we do on nuclear power, because they do not have the vast natural resources that give us so many alternatives. We must get on with the job of developing alternative energy resources and we must also pass, in order to do this, the legislation that I have proposed to the Congress, making an effort at every level of society to conserve energy. To conserve energy and to develop energy resources in our country are the two basic answers for which we are seeking. But we cannot shut the door on nuclear power for the United States.

The recent events in Iran have shown us the clear, stark dangers that excessive dependence on imported oil holds for our nation. We must make every effort to lead this country to energy security. Every domestic energy source, including nuclear power, is critical if we are to be free as a country from our present over-dependence on unstable and uncertain sources of high priced foreign oil.

We do not have the luxury of abandoning nuclear power or imposing a lengthy moratorium on its further use. A nuclear power plant can displace 35,000 barrels of oil per day, or roughly 13 million barrels of oil per year. We must take every possible step to increase the safety of nuclear power production. I agree fully with the letter and the spirit and the intent of the Kemeny Commission recommendations, some of which are within my own power to implement, others of which rely on the Nuclear Regulatory Commission, or the NRC, or the utility industry itself.

To get the Government's own house in order I will take

(END)

several steps. First, I will send to the Congress a reorganization plan to strengthen the role of the Chairman of the NRC, to clarify assignment of authority and responsibility and provide this person with the power to act on a daily basis as a chief executive officer, with authority to put needed safety requirements in place and to implement better procedures. The Chairman must be able to select key personnel and to act on behalf of the Commission during any emergency.

Second, I intend to appoint a new Chairperson of the Nuclear Regulatory Commission, someone from outside that agency, in the spirit of the Kemeny Commission recommendation. In the meantime, I have asked Commissioner Ahearne, now on the NRC, to serve as the Chairman. Mr. Ahearne will stress safety and the prompt implementation of the needed reforms.

In addition, I will establish an independent advisory committee to help keep me and the public of the United States informed of the progress of the NRC and the industry in achieving and in making clear the recommendations that nuclear power will be safer.

Third, I am transferring responsibility to the Federal Emergency Management Agency, the FEMA, to head up all off-site emergency activities, and to complete a thorough review of emergency plans in all the states of our country with operating nuclear reactors by June, 1980.

Fourth, I have directed the Nuclear Regulatory Commission and the other agencies of the Government to accelerate our program to place a resident Federal inspector at every reactor site.

Fifth, I am asking all relevant Government agencies to implement virtually all of the other recommendations of the Kemeny Commission. I believe there were 44 in all. A detailed factsheet is being issued to the public and a more extended briefing will be given to the press this afternoon.

With clear leadership and improved organization, the Executive Branch of Government and the NRC will be better able to act quickly on the crucial issues of improved training and standards, safety procedures, and the other Kemeny Commission recommendations. But responsibility to make nuclear power safer does not stop with the Federal Government. In fact, the primary day by day responsibility for safety rests with utility company management and with suppliers of nuclear equipment. There is no substitute for technically qualified and committed people working on the construction, the operation, and the inspection of nuclear power plants.

Personal responsibility must be stressed. Some one person must always be designated as in charge, both at the corporate level and also at the power plant site. The industry owes it to the American people to strengthen its commitment to safety.

I call on the utilities to implement the following changes; first, building on the steps already taken, the industry must organize itself to develop enhanced standards for safe design, operation, and construction of plants; second, the nuclear industry must work together to develop and to maintain in operation a comprehensive training, examination, and evaluation program for operators and for supervisors. This training program must pass muster with the NRC through accreditation of the training programs to be established.

Third, control rooms in nuclear power plants must be redesigned, standardized, and simplified as much as possible, to prevent

better informed decision-making among regular operating hours and, of course, during emergencies.

I challenge our utility companies to bend every effort to improve the safety of nuclear power.

Finally, I would like to discuss how we manage this transition period during which the Kemeny recommendations are being implemented. There are a number of new nuclear plants now awaiting operating licenses or construction permits. Under law, the Nuclear Regulatory Commission is an independent agency. Licensing decisions rest with the Nuclear Regulatory Commission, and as the Kemeny Commission noted, it has the authority to proceed with licensing these plants on a case by case basis, which may be used as circumstances surrounding a plant or its application dictate.

The NRC has indicated, however, that it will pause in issuing any new licenses and construction permits in order to devote its full attention to putting its own house in order and tightening up safety requirements. I endorse this approach which the NRC has adopted, but I urge the NRC to complete its work as quickly as possible and in no event later than six months from today. Once we have instituted the necessary reforms to assure safety, we must resume the licensing process promptly so that the new plants we need to reduce our dependence on foreign oil can be built and operated.

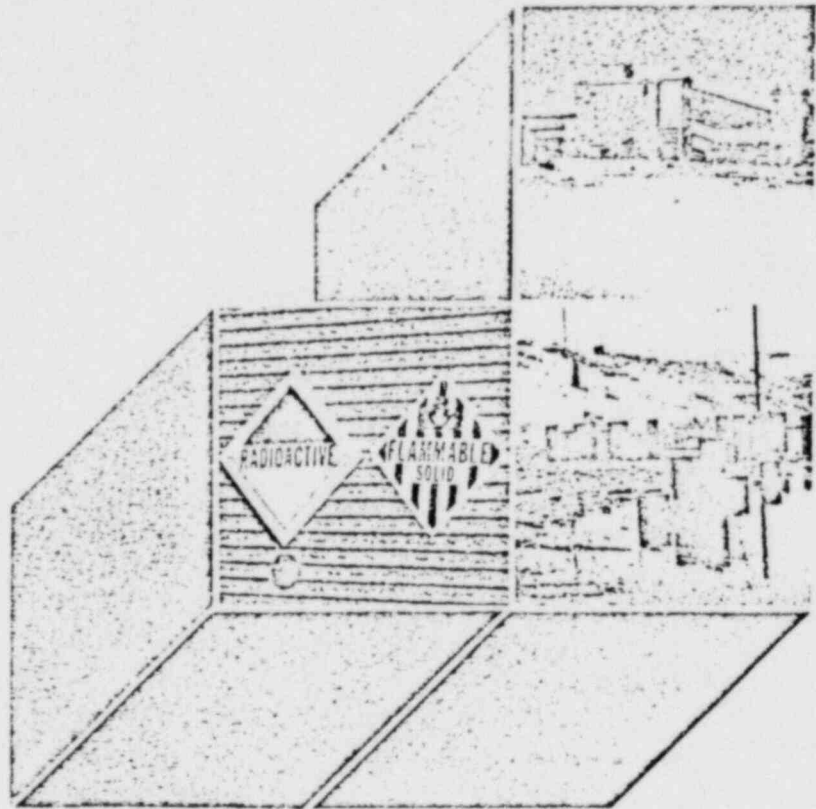
The steps I am announcing today will help to insure the safety of nuclear plants. Nuclear power does have a future in the United States. It is an option that we must keep open. I will join with the utilities and their suppliers, the Nuclear Regulatory Commission, the executive departments and agencies of the Federal Government, and also the state and local governments to assure that the future is a safe one.

Now Dr. Frank Press, Stu Eizenstat, and John Deutsch will be glad to answer your questions about these decisions and about nuclear power and the future of it in our country. Frank?

END

(AT 3:00 P.M. EST)

1979 Annual Report



EXCERPT

U.S. NUCLEAR
REGULATORY COMMISSION

Two of the occurrences reported from Agreement States took place in the first quarter of fiscal year 1979 and are covered in the quarterly report to Congress, NUREG-0900, Vol. 1 No. 4. One of these involved the overexposure of a radiographer's assistant in Louisiana and the other the transportation of a package of radioactive material whose radiation emission after packaging exceeded limits set out in the license of the sender.

During the third quarter (covered in NUREG-0900, Vol. 2, No. 2), two more events were reported from Agreement States as abnormal occurrences. On March 9, 1979, the Arizona Atomic Energy Commission found several items of noncompliance in the operations of a State licensee engaged in making and distributing to authorized persons various signs and devices using tritium as an activating agent. An unannounced inspection on May 7 revealed continued noncompliance and also the presence of tritium in food prepared in a facility near the licensee for a number of schools in the area. The level of tritium exceeded the EPA standard for tritium concentration, in liquids by 180 percent. The company was directed by the State to decommission operations, the tritium on the premises was sealed up and, by order of the Governor, removed to a U.S. Army facility leased for the purpose.

In California, a State licensee was conducting radiography activities at a manufacturing plant on May 22, 1979. The radiographer failed to notice that the radioactive source in his instrument had become disconnected. It was found on the floor by a plant employee who put it in his hip pocket. He later passed it on to another employee of the plant and a number of others also handled the source before it was retrieved by the radiographer. The radiographer did not inform the nine people who had been exposed to the source of its radioactivity and the attendant dangers, nor did he report the incident to either his own or the client's management. The employee who had picked up and pocketed the source was later hospitalized and required surgical repair of ulcerated skin. It is estimated that he had received a dose on the skin surface of 1.5 million rem. Others exposed to the source received radiation doses in the thousands of rem to their hands, and several incurred radiation burns. The State suspended the radiography firm's license and instituted a State Board of Inquiry to investigate the matter. NRC alerted all radiography licensees to the event and to the importance of the training of radiographers, of their performing radiation surveys, and of their promptly notifying responsible management in the event of accidental exposures to radiation.

EMERGENCY PREPAREDNESS

Emergency Response Planning

The accident at Three Mile Island (TMI) has greatly intensified interest in emergency preparedness on the part of the public, the Congress, and the NRC. In the

past, State and local government efforts in this field have been largely voluntary. There was no requirement that States do such planning either by law or by rule, and no sanction could be visited upon a State or locality which chose to neglect or ignore the subject. In the wake of TMI, there has been widespread recognition that too little attention had been paid to emergency preparedness in the past and that much more time, effort and money must be devoted to it in the future by NRC, other Federal agencies, State and local governments, and the nuclear utilities. In the future, the present voluntary system for reviewing State and local plans may well, and probably will, be replaced by a more formal system, based on legislation or regulations, or both.

The Procedure. The responsibilities of Federal agencies for assisting State and local governments in developing plans for responding to radiological emergencies were outlined in a *Federal Register* notice of December 24, 1975, promulgated by the former Federal Preparedness Agency (FPA) of the General Services Administration. The notice, entitled "Radiological Incident Emergency Response Planning; Fixed Facilities and Transportation," gave the "lead agency" role to NRC, while assigning specific support responsibilities to the Environmental Protection Agency (EPA); the Department of Energy (DOE); the Department of Transportation (DOT); the Department of Health, Education and Welfare (HEW); the Defense Civil Preparedness Agency (DCPA); and the Federal Disaster Assistance Administration (FDAA) of the Department of Housing and Urban Development. Under powers granted him by the Congress, President Carter combined three of these agencies (FPA, DCPA and FDAA) into a new Federal Emergency Management Agency (FEMA) on July 15, 1979.

In his statement of December 7, 1979, responding to the report of the President's Commission on the Accident at Three Mile Island, President Carter directed that FEMA: "(1) take the lead in off-site emergency planning and response; (2) complete by June 1980 the review of State emergency plans in those states with operating reactors; (3) complete as soon as possible the review of state emergency plans in those states with plants scheduled for operation in the near future; (4) develop and issue an updated series of interagency assignments which would delineate respective agency capabilities and responsibilities and clearly define procedures for coordination and direction for both emergency planning and response; (5) assure that DOE resources and capabilities for responding to radiological emergencies are made available and augmented as needed to service civilian related radiological emergencies; and (6) assure the development of programs to address the recommendations for additional research and public education needs."

NRC is cooperating fully with all of these efforts of the new agency (see Chapter 1 and Chapter 2).

Concurrence in State Plans. Six State plans received NRC concurrence in 1979, bringing to 14 the number of State plans so approved.

Planning Guidance to States

NRC has been working with the EPA to determine the types of accidents for which radiological emergency plans should be developed by State and local governments. A draft report on this subject (NUREG-0396/EPA 520/1-78-016) was completed by the NRC/EPA Task Force on Emergency Planning and issued for public comment in December 1978. The task force concluded there was no specific accident sequence that could be used for emergency planning because each accident could have different consequences, both in nature and degree. Instead, the task force developed recommendations in an alternative form which would provide State and local governments with a basis on which to formulate emergency plans. The planning basis selected involves a variety of accident consequences. The planning distances, time characteristics, and radiological release characteristics specified in the report provide guidance that scopes the emergency planning effort.

The fundamental recommendation in the NRC/EPA task force report is that Emergency Planning Zones (EPZs) be established around each nuclear power plant for purposes of emergency planning, and that an EPZ of about 10 miles in radius be established for the plume exposure pathway and a second concentric EPZ of about 50 miles in radius be established for the ingestion exposure pathway (milk and agricultural products).

The final report was published for public comment on December 15, 1978. The original 90-day comment period was extended to May 15, 1979 as a result of the Three Mile Island accident. The task force recommendations were submitted to the Commission in July 1979, and Commission action is expected early in fiscal year 1980.



At DOE's Nevada Test Site, NRC sponsors training in radiological emergency response operations for State and local government personnel who are or may be members of response teams during emergencies. Above, students conduct a survey of contamination resulting from a simulated ground spill, while a faculty member acts as a news correspondent. Below, students "suit up" before entering a contaminated area.

Training Program for States

Several years ago, in cooperation with the States and other Federal agencies, NRC identified a number of areas where training was needed for State and local government personnel involved in radiological emergency planning and preparedness. Three training courses are now being offered. Courses dealing with radioactive materials in transit will be developed by DOT during fiscal year 1980, and courses in the medical area are being considered. FEMA is planning courses for "first-at-the-scene" personnel.

The following training is offered free of charge to qualified State and local government personnel:

- (1) *Radiological Emergency Response Operations:* This course is now conducted routinely at DOE's Nevada Test Site. It is designed for personnel who are, or will be, assigned to State or local radiological emergency response teams. Sixteen sessions were conducted during fiscal year 1979 for 320 State and local government employees. Eighty Federal employees received training in the same program.



- (2) *Radiological Emergency Response Coordination*: This course is designed to help the State radiological emergency response coordinator make decisions on what protective actions to take in the event of an accidental release of radioactive material to the environment from a nuclear facility. The course is conducted on request by the States.
- (3) *Radiological Emergency Response Planning*: This course was developed to provide training needed for State and local radiological emergency response planners, and is conducted on request.
- (4) *Handling Radioactive Material in Transportation Accidents*: Through the interagency program described in the December 24, 1975 *Federal Register* notice, and in cooperation with NRC, the DOT developed an 8-hour training course on handling radioactive material in transportation accidents. The course is a self-contained package consisting of slides and taped narratives and a student workbook. One package will be made available free of charge to all States by DOT, and NRC and DOT plan to make it available to many local jurisdictions.

Field Assistance Program

NRC continues to lead and coordinate Federal interagency field reviews of State radiological emergency response plans and critiques of exercises to test these plans. During fiscal year 1979, the regional advisory committees made 35 field review and assistance visits and critiqued 12 radiological emergency response exercises.

TMI Activities

Like many offices within NRC, the Office of State Programs' staff spent considerable time on Three Mile Island (TMI) activities and subsequent followups. In the early stages of the TMI accident, six health physicists from the Agreement States Program went to the site to assist in a variety of tasks, including environmental sampling, communications, and direct health physics technical support to the State of Pennsylvania. This entire NRC activity is covered in Chapter 2 and in other reports. It is important to note that, as a result of the accident, many States which previously were not actively pursuing concurrence in their radiological emergency response plans are now actively seeking such concurrence. Many meetings were held with States; office personnel testified at several State and Congressional hearings on the subject; and plans and schedules were made to concur in plans of 16 additional States by May 1980. To help

with this new workload, personnel were temporarily assigned to the Office of State Programs from the Office of Nuclear Reactor Regulation, and temporary employees and consultants were acquired.

GAO Report

The General Accounting Office (GAO) published a report March 30, 1979, entitled "Areas Around Nuclear Facilities Should be Better Prepared for Radiological Emergencies." The report made recommendations to the Secretaries of Defense and Energy, the Director of the Federal Emergency Management Agency, and the Chairman of the NRC.

The GAO recommended that no nuclear power plant be allowed to begin operations until State and local emergency response plans contain all the Commission's essential planning elements, and that licensees make arrangements for State and local agency participation in annual emergency drills. The Commission responded that NRC is committed to having effective, tested emergency plans wherever needed and as early as possible, and that the proposed licensing requirement dealing with plans and exercises will be included in an expedited NRC rulemaking procedure.

The GAO recommended that NRC establish the 10-mile emergency planning zone around all nuclear power plants. The Commission has endorsed this concept, as previously mentioned.

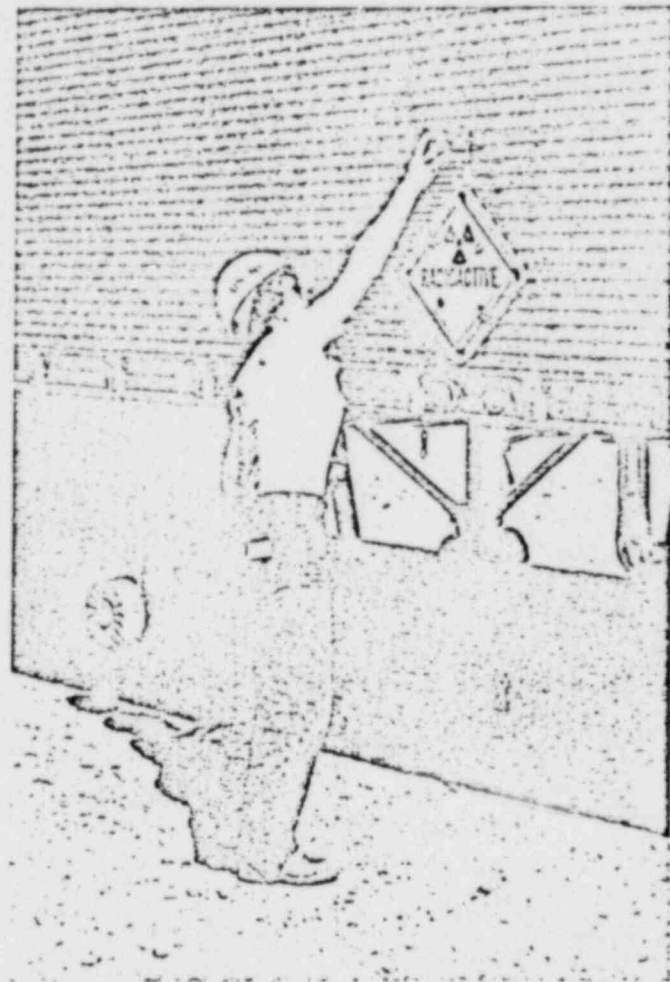
The GAO recommended that there be a requirement for people living near nuclear facilities to be given information about the potential hazard, the emergency actions planned, and the proper course of action in case of a radiological release. The Commission response said that action will be taken to implement this recommendation in connection with NRC's ongoing assessment of regulatory requirements.

Other Emergency Response Activities

- (1) Under a contract with DOE, Sandia Laboratories is developing a set of accident scenarios which can be used to test nuclear facility, State and local government emergency plans.
- (2) To answer the need for improved emergency planning guidance in the event of transportation accidents involving radioactive materials, an NRC/DOT task force will be established in early 1980 to deal with the subject.
- (3) A large step was taken in 1979 to provide more uniformity in reviewing and concurring in State/local plans. At a national meeting of Federal regional personnel involved in the

review process, acceptance criteria were developed for each of the essential elements required for concurrence. These criteria will be used to judge the adequacy of individual elements. Such a system eliminates much of the subjectivity involved in differing interpretations of what constitutes acceptability. The criteria are intended for use by both planners and reviewers.

- (4) A draft report called "Beyond Defense In Depth" (NUREG-0553) was published in March 1979. It is a study of the costs of developing and implementing State and local emergency response plans, which are particularly acute at the local government level. It also discusses several methods of funding such plans and recommends that additional funds for emergency planning by State and local governments be raised through the imposition of additional fees on licensees and on applicants for NRC licenses. The final report will be published for public comment. The NRC staff plans to make formal recommendations to the Commission and to the new FEMA concerning the funding problem and possible solutions to it.



An NRC radiation specialist checks a trailer carrying low-level radioactive waste materials. Shipments such as this one from Three Mile Island are checked frequently to ensure that radiation is within safe limits.

LIAISON AND COOPERATIVE ACTIVITIES

Transportation Surveillance

During fiscal year 1979, seven States participated in the NRC/DOT program for the surveillance of radioactive material transported into, within or through their borders. Georgia, Illinois, Michigan, and South Carolina completed 2 years of monitoring. The first-year results of the Illinois program (for the period June 1977 to June 1978) and the Georgia program (August 1977 to September 1978) were published as NUREG/CR-0756 and -0931, respectively. Kentucky will complete its first year of monitoring in December 1979. Washington and Florida began their programs in September.

The program contributes valuable data concerning all aspects of transportation in the respective States; promotes greater familiarity with Federal and State regulations on the part of shippers, carriers, and State personnel; and results in closer adherence to the regulation, thus safeguarding the health and safety of transportation workers and the general public.

Memorandums of Agreement

In January 1976, NRC and EPA entered into a second memorandum of understanding regarding their respective responsibilities under the Federal Water

Pollution Control Act Amendments of 1972 (FWPCA). NRC encourages agreements with States to whom EPA has delegated the National Pollutant Discharge Elimination System (NPDES) permitting authority under section 402 of the FWPCA.

In the recent past, NRC entered into understandings with Virginia, New York, South Carolina and Washington. During fiscal year 1979, NRC concluded memorandums of understanding with Indiana and Nebraska. Discussions continue with several other States.

State Liaison Officers Program

The Governors of all States have appointed liaison officers to maintain direct communication with NRC. There are now a total of 51 State liaison officers to the NRC, from the 50 States as well as the Commonwealth of Puerto Rico.

Regional State Liaison Officers' meetings were held in NRC Region I in October 1978 in King of Prussia,

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NRC

968 Central Street
East Bridgewater, Mass.
April 3, 1979.

President Jimmy Carter
White House
1600 Pennsylvania Avenue
Washington, D.C

Dear Mr. President,

I just wanted to commend you on your concern about the nuclear power crisis in Pennsylvania. I think it was very thoughtful that you personally went to the plant to inspect it. Because this recently occurred, many people have questions that deserve careful consideration and a factual answer.

I have a few of my own. First, I'd like to know what would happen to the human race if the levels of radiation ever grew to dangerous proportions? How could the country cope with a problem such as this? Are there any facilities to deal with this possible problem, if there are any facilities at all?

I have some other questions about nuclear power. Will the country be converting to it or are people more hesitant because of this week's leakage? Will it be expensive to switch?

You are trying your hardest at the toughest job in country.
Good luck.

Thank you for your consideration.

Sincerely,

Handwritten signature