



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

April 27, 1989

The Honorable Edward Markey United States House of Representatives Washington, D.C. 20515

Dear Congressman Markey:

I am writing to confirm discussions between members of our respective staffs concerning your letter of March 23, 1989. The Commission wishes to ensure that its response to your letter is as thorough, complete, and accurate as possible.

On April 14, 1989, Dr. Thomas E. Murley, Director, Office of Nuclear Reactor Regulation, requested all power reactor licensees to promptly review and report the status of implementation of TMI Action Plan items. A copy of this action has been sent to your staff.

I am enclosing copies of the responses to Dr. Murley's letter. The process of reconciling the licensees' responses with our records is underway. When this effort is complete, the Commission will respond to your letter.

We will keep your staff advised of the progress of the staff's review. This response also acknowledges the receipt of your April 20 letter requesting additional safety information from our computer systems database on commercial nuclear power plant operations. Should you have any questions on either of these matters, please call me.

Sincerely,

Lando W. Zech, J.

Enclosures: As Stated

OFOT

EDWARD J. MARKEY
7TH DISTRICT, MASSACHUSETTS

COMMITTEES

ENERGY AND COMMERCE
CHAIRMAN
SUBCOMMITTEE ON
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Congress of the United States

House of Representatives Washington, DC 20515

March 23, 1989

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The Honorable Lando W. Zech, Jr. Chairman Nuclear Regulatory Commission 1717 H Street, NW Washington, DC 20555

Dear Chairman Zech:

Thank you for responding to my questions concerning implementation of the Three Mile Island (TMI) Action Plan.

As you know, the Action Plan was issued as a result of the near meltdown at TMI 10 years ago and called for the implementation of critical safety-related changes at the nation's nuclear power plants. By the NRC's own admission, nearly a decade after the issuance of the most crucial call to action in the history of the nuclear industry, the TMI Action Plan has yet to be fully implemented. Frighteningly, many of the outstanding safety modifications were considered of such importance by the NRC that they received "priority-one" ratings back in 1980 and were originally required to be completed with one or two years.

While the NRC may be satisfied that a majority of the TMI Action Plan requirements have been implemented, I am not. In horseshoes, coming close may count. But in nuclear power, the difference between coming close and getting the job done can mean the difference between safety and catastrophe. According to the data provided to me by the NRC, since the TMI accident in March of 1979:

-88 of the nation's 112 licensed reactors, more than three quarters, have yet to complete implementation of all TMI Action Plan items.

-25 reactors have not completed TMI Action Plan requirements, but were permitted to begin operations. The NRC has allowed, or intends to allow, 9 reactors which have been shut down to restart without completing TMI Action Plan requirements.

-23 reactors allowed TMI Action Plan deadlines to pass without informing the NRC of the status of implementation.

-54 reactors will not meet TMI Action Plan requirements even by the end of 1989. Several plants do not anticipate meeting requirements until well into the 1990's.

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While the NRC counts only 264 TMI-related actions for which implementation is still required, many of these go right to the heart of preventing another TMI-type accident. Specifically, under the TMI Action Plan:

-licensed reactors are required to conduct a detailed review of their control room designs to "determine if their control room provides satisfactory information to the operators to prevent or cope with accidents." 63 reactors have yet to meet this requirement.

-licensed reactors are required to install a Safety Parameter Display System (SPDS), a console designed to provide reactor operators with "a concise display of critical plant variables...to aid them in rapidly and reliably determining the safety status of the plant." This was a priority-one item which was to be completed by January 1, 1982. 11 reactors have begun operations since the TMI accident without completing the SPDS requirement. 23 reactors have not completed implementation and 14 of these have not even completed their descriptions of the SPDS console to be installed.

-licensed reactors are required to install proper instrumentation to detect adequate core cooling. Had this instrumentation been in place at TMI, the severity of the accident could have been greatly lessened. This was given top priority by the NRC, with an implementation deadline of January 1, 1981. 13 reactors have yet to meet this requirement.

-licensed reactors are required to conduct testing and analysis of relief and safety valves, block valves and associated piping in the reactor coolant system to ensure that the equipment is "qualified for the full range of operating and accident conditions." This was a priority-one item with an implementation deadline of July 1, 1981. 11 reactors have yet to meet this requirement.

-licensed reactors are required to install instrumentation that will accurately and reliably inform them of the conditions inside the containment vessel. This was a priority-one item, with full implementation scheduled for January 1, 1980. 9 reactors have yet to meet this requirement.

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-licensed reactors are required to establish to establish Emergency Operations Facilities, the center of all emergency planning activity at a plant where emergency personnel can direct evacuations and other emergency response measures. 2 plants, representing 5 reactors have yet to meet this requirement.

The TMI Action Plan was a major test of the commitment of the NRC to public health and safety. It is a test which the NRC has clearly failed. This raises a number of troubling questions to which I would like the NRC respond:

- 1) What priority does the NRC place on completing implementation of TMI Action Plan items? Please explain how and why reactors which have not met TMI Action Plan requirements were permitted to begin operation or, in the cases of Pilgrim and Rancho Seco, to restart.
- 2) What is the NRC's system for monitoring and tracking the implementation of TMI Action Plan Items? How often are TMI Action Plan item requirements updated? Are resident inspectors required to ensure that deadlines are met? Have any penalties been assessed for failure to meet deadlines?
- 3) Of the 88 licensed reactors which have not completed implementation of all TMI Action Plan items, how many extensions of deadlines were given. What was the length of these extensions?
- 4) By the NRC's own admission, the deadline for TMI Action Plan requirements at 23 reactors passed without the NRC receiving confirmation of implementation. Please explain why the NRC was not informed of the status of these requirements. What were the dates of these deadlines?
- 5) In NUREG-1355, "The Status of Recommendations of the President's Commission on the Accident at TMI," the NRC states that "a Safety Parameter Display System has been installed in all nuclear power plant control rooms, except for three systems scheduled for installation and one licensee granted an authorized exemption.' Please explain why, in the information provided to me by the NRC, there are 23 reactors listed which have not completed installation of such a system. Please also explain why in your 3/17/89 response to me you did not include this "authorized exemption" in the list of plants given exemptions from the Action Plan. Are there additional exemptions which were not included?

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6) What is the status of TMI Action Plan requirements at the Seabrook nuclear power plant?

I ask that you respond to these questions within 10 working days or by April 6, 1989. If for any reason the NRC is unable to fully respond by this deadline, please provide an interim response indicating when a full and complete response will be provided.

It is clear that the NRC has been unable or unwilling to bring facilities into compliance with the TMI Action Plan requirements. If, the NRC doesn't have the resources to make facilities comply, it is your responsibility as Chairman to come forward and make that known. You recently had the opportunity, during numerous appearances before the Congressional Committees charged with oversight of the NRC, to do so. If, as it appears, the NRC has simply been unwilling to require full implementation of the TMI Action Plan, then you have not only failed to serve the public interest, but have contributed to an undermining of the public health and safety for which you should be held responsible.

With best wishes,

Sincerely,

Edward J. Markey Member of Congress

EJM/awc